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What Is an Evidence -Based Behavior Intervention?
Choosing and Implementing Behavior Interventions That Work

Webinar Transcript

Moderator: Welcome and thank you so much for joining our Webinar today. What is an evidence-based behavior intervention, choosing and implementing behavior interventions that work? I'm pleased to have with me today our presenters. Doctor Chris Riley Tillman of the University of Missouri and Doctor Allison Gandhi of the National Center on Intensive Intervention and my name is Laura Magnuson and I'm from the National Center on Intensive Intervention as well and I'll be moderating today's Webinar. But first let me introduce our presenters.

Doctor Chris Riley Tillman is a Professor at the University of Missouri. Doctor Riley Tillman provides training and assessment, intervention and consultation and is also a trainer for the National Center on Intensive Intervention. His research interests and expertise involve Social Behavioral Assessment, Applied Behavior Analysis, Academic Assessment and Intervention, the development and validation of Assessment and Intervention Methodology and Single Case Design and Consultation.

Doctor Allison Gandhi is a Principal Research Analyst at the American Institutes for Research and she currently serves as the Coordinator for Knowledge Development for the National Center on Intensive Intervention. In this role she manages and oversees activities related to developing and synthesizing knowledge on intensive interventions through the Center's tools chart. This includes managing procedures related to the submission of interventions from vendors, expert review of interventions and communication of review results to consumers. For the past five years, Doctor Gandhi has served in a similar role for the National Center on Response to Intervention. And Doctor Gandhi will talk about the newest behavior intervention tools chart today which was just released.

[Slide 2 – A Note about Questions]:So I want to make you aware of a few things as we start the Webinar. First, please note that your audio is muted so we would love it if you shared your questions through the chat boxes and we have pictures of these on the screen. So in order to help us best address any questions that you might have, we would ask that you type your questions related to technical issues or general questions into the chat box and we'll respond as soon as we can. And then we would ask that you type questions related to Webinar content in the Q and A box so that we can save those and answer them as we're able and we can also share those with the presenters.

So please, use those boxes on the screen. And just to note, this Webinar will be recorded and the recording, the Power Point slides, the transcript and the question and answer document will all be posted to our Webinar after today.

[Slide 3 – In Today's Webinar]:   So in today's Webinar we'll start with framing the need for evidence-based interventions in behavior and why this is so important. Then Doctor Gandhi will share the National Center on Intensive Intervention behavior interventions tools chart which as I mentioned was just released. She'll walk through some of the features of the chart and how to use it. And then Doctor Riley Tillman will discuss selecting appropriate evidence behavior; evidence-based behavior interventions or EBIs and he'll share some examples of EBIs. And then we'll end with relevant resources that can help you in selecting and using appropriate evidence-based interventions for behavior. So now, I'll turn it over to Doctor Gandhi.

Dr. Gandhi (Presenter 1):   Thanks Laura and thanks everyone for joining in this afternoon. So we're going to present today about behavior interventions and more specifically about evidence-based behavior interventions and what you should be thinking about when you're selecting interventions for students of very intensive behavioral needs.

[Slide 4 – Behavior Intervention Challenges]:   Okay, so we wanted to start just by sort of framing how the current education policy context translates into challenges on the ground when you're implementing behavioral interventions. So first of all, we know that there are just more and more kids who are being identified as in need of intervention. And that's both in academics and behavior but, we're going to think about behavior for today.

And a very common model of intervention delivery currently is what we call a problem solving model. So essentially, that's a model where pretty much any child who is not responding to what would be considered typical or core classroom instruction or to a school wide behavioral program, any of those students who are not responding would be considered in need. So, hence you have more and more cases of these children who are in need.

Then at the same time, we're facing high levels of accountability. So you have No Child Left Behind and IDEA both of which mandate accountability. So basically, we need to be able to demonstrate that the interventions that we are providing are effective for our kids.

And then finally, the methods that we're using to do this kind of problem solving. So basically just the real deep digging into the assessment data that you have to really figure out what a student's needs are and what interventions might be appropriate for that student. These methods assume that we have a lot of time and we know that in reality teachers really don't have a lot of time in their day to devote to this kind of work.

[Slide 5 – Selecting Interventions Quickly: "the Reasonable Hypothesis"]: So, what should we do? So we know that time is a precious commodity and so educators really need to be efficient when they're doing their problem solving. So we would argue that under most circumstances the most efficient thing to do is to test the easiest hypothesis first. Implement an intervention based on that hypothesis. And then monitor and evaluate outcomes. If that approach fails to improve student performance then you can go on and try something that's more intensive. And you can do that progressively until the probable cause of failure is identified.

And really just the basic idea is that you don't want to throw everything into the kitchen sink in terms of intervention possibilities right away. But rather try one thing first, something that's relatively simple and that aligns with your hypothesis about what the student needs. And then if that doesn't work, you can go on to something that's a little bit more complicated. And a benefit to doing it this way is that really an easier solution is more likely to be implemented consistently while solutions that are more time consuming or more technically difficult for teachers and support personnel are less likely to be implemented correctly. You want to be careful when you're moving ahead with something more complex.

[Slide 6 – NCII's Approach: Data-Based Individualization (DBI)]: So this reasonable hypothesis method that I just explained. It aligns with the overarching framework for intensive interventions that NCII uses and that is called Data-Based Individualization or DBI. And so for those of you who have attended previous Webinars or maybe you've seen presentations from our staff or looked at our resources you will be familiar with this. But we also know that some of this may be new to some of you. So, I'm just going to give a quick overview of what we mean by DBI.

The most important thing to understand is that DBI is a process, it's not an intervention. It is a systematic way to use data to guide decisions about iterative, small changes and modifications that you will make to an intervention in order to individualize it so that it targets a student's very unique intensive needs. And on this slide, we've shown the five steps of the DBI process.

So I want to point out first is that the first step of this process, that we put here is to start with a secondary intervention program. And in behavior we often don't hear the term secondary intervention program. What we really mean when we're thinking about behavior is that it's important to start with an evidence-based intervention or EBI, so that's the term that we're going to use from here on out throughout this Webinar today.

So you would start when you're implementing DBI by delivering the evidence-based intervention with more intensity. So for example, if you are using Check-In, Check-Out and I think Chris will talk a little bit more about Check-In, Check-Out later today. But if you were using that maybe you want to build in more check-in times throughout the day. Something like that to make it a little bit more intensive. Then you're going to be gathering progress monitoring data and you're using the data to determine if the child is responding to this more intensified version of your evidence-based intervention.

If they're not responding, then you want to collect informal diagnostic assessment data. These are data that's going to tell you more about why a student is not responding to the EBI. And then you will use what you've learned from these data to start the process of adaptation. You're going to change components of your EBI bit by bit each time looking at data to see if your change is working until you get to a point where you've come up with a very individualized version of the EBI that works for that particular student.

[Slide 7 – Adapting Behavior Interventions]: Okay so one important point to make is the difference between intensifying an intervention and actually changing an intervention. Both of which you might do within the DBI context. So intensifying the intervention when we say that, we really just mean doing more of something so, building in more time to something that you're

already doing, maybe building in more staff support or something like that. And you want to do that if you have data showing that actually the intervention that you started with is having some progress but slow progress. So, that's represented in this graph on the left of your screen right now.

On the other hand, if your data is showing that your intervention is yielding no progress at all, that's an indication to you that you should be thinking about changing the intervention. And that's reflected on the graph on the right.

[Slide 8 – Selecting EBIs for Behavior]: Okay, so this graphic represents what the DBI process looks like when designing and delivering an intensive intervention for behavior. So when we use the DBI process to address academic challenges we want to make sure that the EBI or Evidence-Based Intervention is an appropriate fit for the student's specific academic needs. And so similarly in behavior, it's crucial to make sure that the EBI is an appropriate match for the student.

So in this Webinar, we're going to be discussing the importance of selecting appropriate EBIs in behavior by identifying the function of a child's behavior. We're also going to share guidance for selecting relevant EBIs and resources that can help in the selection. And we'll discuss a few examples of EBIs in behavior.

Before moving on though, it is also important to note that when we say evidence-based what we mean is a little bit different when it comes to a child with intensive needs. So, for an individual child with intensive needs, we don't really know if something is evidence-based until we have evidence that it works or is effective for that particular child. These students that we are talking about, typically receiving Tier III services; they are receiving Tier III services because they have been resistant to interventions at Tier I and Tier II. And those are the interventions that we typically might understand as evidence-based for most kids.

So, it's just important to keep in mind that it's likely that these kids will be resistant to interventions or strategies at Tier III as well. However, the hope is that the resistance is only in the beginning and that over time you will eventually find something that works for that kid. So, it's critical that when you're at the initial stages of selecting, an EBI for an intensive intervention that you're choosing ones that do have some existing evidence for effectiveness. They're related to function and they are likely to work given what you know about the child and the purpose and general effectiveness of the intervention.

[Slide 9 – NCII Tools Chart on Behavioral Interventions]: So, Chris, Doctor Riley Tillman; he's going to spend so time during this Webinar talking about function and how you think about EBIs as they relate to function. But, before I turn it over to him I want to talk about a new resource that we have at NCII which was actually just released this morning. And that is the Behavior Intervention Tools Chart.

So, many of you may be familiar with our Academic Intervention Tools Chart. This is essentially the same thing but it's for behavior. So we have an external committee of experts who we call our Technical Review Committee or our TRC that has developed standards of quality for evaluating the research based on behavioral interventions. And then they actually review

interventions that are submitted to us by developers using those standards of quality. And then the results of those reviews are posted on the Tools Chart.

So on this slide, this is kind of just a screen shot of what it looks like and then on the bottom is the link to go to the live chart which again as I said was just released this morning. And this is really a great resource that you can use as a start. We don't recommend that you go to the chart and pick any old intervention off of the chart just because it got good ratings. But we do recommend that you look here to get recommendations about interventions that have some evidence of effectiveness at the Tier II level. And then you can use these as a starting point for designing more individualized interventions for those students who have these more intensive needs.

So on the next, set of slides, I'm just going to go through the structure of the Tools Chart just to give you a sense of the kind of information you can get from it. And then I'll turn it over to Chris who is going to talk more broadly about selecting EBIs for students with intensive needs. And the first thing I just wanted to point out is that there are actually four pages of information on the interventions that we review. And they are represented by the four tabs that you can see on this screen shot of the Tools Chart.

So you have information on study quality, information on study results. You have program information and then additional research. Each row on the chart represents a study or a particular behavioral intervention that was reviewed. And then the columns represent the different standards that they were evaluated. In each cell you have bubbles that represent the rating that they received. So, a full bubble means convincing evidence, a half bubble means partially convincing evidence, an empty bubble mean unconvincing evidence and then a dash means that no evidence was submitted.

[Slide 10 – Implementation Table]: Okay, so one of the really nice features of the Tools Chart is what we call pop ups. Essentially, this refers to additional information that will basically pop up on your screen when you click on different cells on the chart. So for example, here on this slide this shows what happens when you click on the name of the intervention. And you get what is called an implementation table.

This is just basic descriptive information about the intervention. How much does it cost? How is it administered? Where do you to go get training and things like that? So on the slides coming up, I'm just going to show you all the different pop ups that you can access that will give you a really rich set of information about each of the interventions on the chart.

I'm not going to go into any real detail on any of them. Some of them are fairly technical but, I won't spend a lot of time on that because we don't have time during this Webinar. But I do encourage you when you have a chance to look at the Tools Chart and you can reach out to me if you have specific questions.

[Slide 11 – Study Citation]: So this slid just shows how you can see the full citation title for the study that was evaluated.

[Slide 12 – Study Quality: Participants]: Okay, here there are four dimensions of study quality that are evaluated for each study. And you can find out more about how those dimensions are

defined and the rating rubric that the TRC uses just by clicking on these column headers. So this shows you the rating rubric for participants for example.

[Slide 13 – Study Quality: Design]: This is the rating rubric for design. And you can see that the rating criteria are different depending on whether it's a group design or a single subject design study.

[Slide 14 – Study Quality: Fidelity of Implementation]: This is the rubric for fidelity of implementation

[Slide 15 – Study Quality: Measures]: This is the rubric for measures.

[Slide 16 – Pop-Up Data: Participants]: Okay, so now in addition to these pop ups that show you the rating rubrics you can also click on any of the actually ratings within the individual cells and you will come to a pop up that will show you the actual data that were submitted by the vendor. So here for example, these are data on participants that were submitted for this particular study for the CW Fit intervention.

[Slide 17 – Pop-Up Data: Design]: You can do the same thing for design. When you click on a bubble for design you'll actually see, some specific questions that the reviewers evaluated and you can see why a study was rated the way, that they were based on the rubric.

[Slide 18 – Pop-Up Data: Fidelity of Implementation]: For fidelity of implementation again, you'll just see the data that was submitted by the vendor.

[Slide 19 – Pop-Up Data: Measures]: And then again, the same thing for measures.

[Slide 20 – Study Results]: The next section of the chart is for the study results. So this is where you get information on what the study actually found. What were the outcomes of the study? What were the results? Were they positive or were they negative and for what type of outcomes. And there are two ways that we report outcomes and that depends on the type of study design.

[Slide 21 – Study Results: Effect Size]: So if it's a group design study, we report outcomes using speck sizes. Again, this is fairly technical so I won't go into detail. But this pop up here tells you a little bit more about effect sizes, what they are and how to interpret them.

[Slide 22 – Study Results: Visual Analysis]: If it's single subject study design then we report on them using a method called Visual Analysis and you can read about that here on this pop up.

[Slide 23 – Effect Size "Pop-Up"]: And then again if you want to see the details in terms of what the actual results actually were you know what the vendors submitted to us then you click on the cell. So here, for example you can see the effect size for each of the individual outcome that was analyzed in this particular study.

[Slide 24 – Visual Analysis "Pop-Up"]: And the same for a single subject study. You can click on the cell and read more about the visual analysis that was completed and described by the vendor in their submission.

[Slide 25 – Program Information]: So the next section of the chart is called program information and this provides some descriptive information related to how you would implement the program. So this is not something where our TRC provides ratings it's really just extra information for you to consider when you're selecting an intervention. And I want to just point out one thing.

[Slide 26 – Program Information "Pop-Up" Data]:   For some of the interventions they will have what is called a Fidelity of Implementation Checklist. This is just things that you should be paying attention to when you're implementing the program to make sure that you're implementing it correctly. And that's available to you as well through a pop up.

[Slide 27 – Additional Research]:   Okay and then finally, the last section on the chart is called additional research. And it's important to point out that not all studies in a particular intervention are always reviewed. So, we used this section to let you know if there are additional studies that have been conducted on the intervention that we have not yet had a chance to review.

[Slide 28 – Additional Research "Pop-Up" Data]: And we will also let you know if the intervention has been reviewed by the What Works Clearinghouse which some of you may be familiar with. It's another source of information that can be helpful to you and it includes a more exhaustive list of research studies. And we would include all of those studies on the pop up here if it is available.

[Slide 29 – NCII Tools Chart: Cautions]:   So before I turn it over to Chris, just a couple of cautions that I wanted to raise. The first is that this Tools Chart is not an exhaustive list of every, behavior intervention that's out there. t does include some of the more well-known and commonly used interventions but there are many that are not yet on the chart. Our hope though is that over time we will be able to add more and more. If there are particular interventions that you are interested in and you want us to review, you can let us know and we would try to reach out to the developer. But we also encourage you to reach out to developers of interventions and ask them to submit to our; our review process.

The second caution that I would make is that everything that is submitted to us does get reviewed and their results are posted on the chart regardless of what the results say. So, just because something is on the chart does not mean that we are endorsing it or approving it. In fact there are interventions on there with studies that have poor ratings. So, it's important to review the information carefully and not just assume that because it's up there that it must be a good intervention.

Third, when you are reviewing the chart and you are selecting an EBI that might be right for you, consider your population of students and the function of the behavior that you're addressing. And I know that Chris is going to talk more about that. And then finally again, the Tools Chart is not supposed to be a definitive source of information but, it is a very good place to start.

So I'm going to turn this to Chris not. And again, please feel free to contact me directly if you have any questions. Or if we have time at the end of this Webinar I can address them then as well.

Dr. Riley-Tillman (Presenter 2):   Thanks Allison. Alright, so what I'm going to do over the course of the next thirty or forty minutes is try to step through, a framework for how one would go about selecting an Evidence-Based Intervention for a particular case. How we would, go about implementing it and where we can find those interventions.

[Slide 30 – What Are EBIs in Schools?]:   What I'd like to do is start off with a quick overview about what Evidence-Based Interventions actually are and the main reason I do that is that, within the field of education it seems like Evidence-Based Intervention is one of those things that if you go back to the nineteen nineties it doesn't really exist in the literature.

It's not talked about all that much and by two thousand five, two thousand six and two thousand seven it's a term which is used all the time. And there's almost an assumption that everybody in the field has taken a course and understands exactly what Evidence-Based Interventions are and what they're not. And unfortunately there seemed to be very little discussion between, really laying the framework for; for education professionals to use Evidence-Based Interventions effectively.

And as a result it seems; in a lot of practices in the school, EBIs are being used, in somewhat in appropriate ways. And often teachers who are doing Evidence-Based Interventions are told that they're not doing Evidence-Based Interventions which is; which is quite unfortunate. What this first slide is trying to illustrate is that Evidence-Based Intervention across the Tiers. And so the approach to Evidence-Based Intervention at Tier I or Tier II or Tier III, really consist of a different approach to intervention.

At Tier I, we're looking at whole school best practices. And the best example of this within behavior is probably PBIS. At the Tier I level what we're really trying to do is design a system that gets as many students behaving appropriately as possible. But, we understand that the five or ten or fifteen or twenty percent and it really just depends on the population that you're working with. Of the students are not going to succeed at that level and so the goal at Tier I is to never have everyone succeed. We might say it but in reality, it's not. You should try to get as many people succeeding as possible but we understand that some people will not.

At Tier II, we move in to capture that group of kids that didn't respond to Tier I. And again at this level the idea is to cluster groups of kids that have relatively similar behaviors. Throw an Evidence-Based practice in at them. See if that resounds and it should be effective for about eighty-five percent of that population. Again, we're not trying to get everybody solved at that particular level. We understand that some kids will be more resistant. But we want to limit the number of kids that we are really doing an individual intervention with.

By Tier III we have to stop playing the game of okay we want it to be effective eighty-five percent time and they'll be another Tier or another level; another level that's going to capture these kids. And so at Tier III, Evidence-Based Intervention is really defined by; as being effective for that individual target child. So now all of a sudden, it has to be effective for Johnny. Johnny has to start behaving appropriately based on; in the intervention in order for it to be Evidence-Based. And so the evidence shifts from being something that's out there across a group to something that exists within the child themselves.

What this means is that while Evidence-Based Interventions at Tier III are often going to come from lists. That list is going to be a suggestion point that we're going to start from. And we're going to have to collect outcome data on the target child to see how it works and customize it for the target child. Effectively Evidence-Based Interventions at Tier III are very different than they are at Tier I and Tier II. And so they're going to look different in practice and they're going to look different in selection.

I think one break here with this is that if we look at this as like gun control. If we look at gun control and how that works at Tier I you're looking at large scale national programs. At Tier II you're looking at gun safety. Training people who have guns to use those effectively and at Tier III we're dealing with actual impacts of guns; so, a gunshot wound or something like that. Att the top level you're talking about public health. At the bottom level you're talking about an individual intervention and in practice, those; they're just really, really different things.

What I want to focus on today is the Tier III. What are we doing with the kids that didn't respond PBIS and didn't respond to the Tier II group based intervention?

[Slide 31 – Tiers Two and Three – EBI Fine Print I]:   What that brings us to is a series of; of what I like to call the fine print of Evidence-Based Intervention. And I like to think of this as kind of one of those commercials where they go through the whole thing and then at the end really quickly the lawyer goes through the; all of the specifics on what makes it work and what makes is doesn't work. There are three things that I think people have to truly embrace with Evidence-Based Interventions to understand how they work.

And the first piece is that every Evidence-Based Intervention is validated for a specific purpose and to be used with a specific population. And so these are developed on target groups and target places and they were developed to solve a particular problem. We're going to call that function. On the academic side it's easy to think of this as whether there are Reading interventions or Math interventions and then even more focused if there are interventions on Reading Fluency and there are interventions on Reading Acquisition or; I don't know something at that level.

Often in the behavior arena, people like to treat these interventions as if they are effective for everything. And in reality these interventions are designed to work with kids trying to escape or kids that need attention or kids that have skill deficits. And if you take one of these interventions that was designed for say an attention seeking child and you use it for a child who is engaging in escaping behavior, not only is it not Evidence-Based Intervention for that problem but in fact can be something that would make the problem much more of an issue. And it can also exasperate a problem.

Number two is you know these are; almost all are validated in particular places. And so simply because an intervention was effective outside of Nashville or Columbia or wherever these are done doesn't mean that that's going to necessarily generalize to another region or location or another school type. I mean with behavior intervention context it is incredible important. The school is important. The teachers involved are important. And it's critical that we make it; that we understand that the types of populations that these have been validated on are going to be important for the framework for the EBI.

The simple thing that I like to use to think of this is a hammer. A hammer is certainly an evidence-based tool and we have tons of evidence that shows it's effective when used with a nail for a fastener, and to hold things together. But if you've got a screw, a hammer isn't an evidence-based tool anymore. It's not going to be effective with that particular, with that particular fastener. And in fact if you start wailing away at a screw with a hammer you're likely to; to not only be ineffective but, you could actually damage it.

[Slide 32 – Tiers Two and Three – EBI Fine Print II]:   Point two on this fine print is this implementation integrity issues. And of course this is one that everybody jumps up and down on. And if were to talk about this ten years ago I would probably say you know, it's critically important that everybody implement the interventions the way that the researchers designed the intervention. And at some point about four or five years ago it dawned on me that you know nobody implements these exactly the way that they were done in a research study.

And there's lots of reasons for that. To some extent you know research studies are built to do things in very consistent ways and the educational environments you know aren't. But perhaps more importantly teachers and education professionals I mean they teach and part of teaching is customizing your curriculum and your interventions for the population that you know far better and for the children that you know far better than the researchers. And so if a teacher has a particular theme, if they have a particular skill set they're going to change interventions in ways that make sense for them as a teacher. And they're going to change interventions in a way that logically make sense for the students that they're working with and that they know so well.

And so that leads me to a point that when we look at these interventions; these interventions are composed of a series of steps. Some of these steps are critical and meaningful and just incredibly important for the intervention to be effective. For example, most behavior interventions have a re-enforcer attached to them. Well, it's really important to that the re-enforcer is actually reinforcing to the child. So if a child is; has a peanut allergy giving a child peanut M&Ms isn't going to be reinforcing to that child. And so I mean it's critically important that we get the re-enforcer correct.

But there are other aspects of these interventions that aren't critical components. There are things that hold the intervention together. And so if I take an academic example of repeated readings; it's really important that the intervention is repeated. It's an aspect of repeated reading that's important. It's important that the reading materials are at the child's current instructional level. It's not too hard for them. Frankly, it can be in some instances too easy but it just can't be too hard.

There's going to be some dosage level that's important the number of times and the amount of time that you do that particular intervention. But what the child reads, I mean exactly what format that they read it in, I mean whether it's a book or it's a website or if it's a comic book; that might not be important. That might be something that the teacher can manipulate and customize. What that means is that when we select these interventions we have to be very careful and think.

What is the critical thing that drives the function that makes it work and what are the things that we can customize? And give that information to the educational professional so that they're not

changing something that invalidates the evidence-base behind the intervention. They're only changing things that make it more effective for the particular population that they're working with.

[Slide 33 – Tiers Two and Three – EBI Fine Print III]:   The third piece of fine print gets a little technically and this really aligns with the Tools Chart really well. And that's the idea that Evidence-Based Interventions are always validated; it's not typically. But, they're always validated with large group research or a series of single case studies and they're almost always ends up being effect sizes. So, this intervention when done with fidelity results in a one point two effect size.

Well within any of those effects let's say a group of five hundred or a thousand kids and it might have been effective for four hundred of those five hundred kids. But, there's a group of kids in every effective intervention that it's not effective for; it has absolutely no effect for. It might also make a particular child's behavior problems even worse. With group research the non-responders are overwhelmed by the responders and as a result we get this idea that these are Evidence-Based Interventions. But they were never built or thought of as universally effective interventions.

We have to understand that these interventions don't work with some kids. And of course at the Tier III level we're talking about the kids that were non-responders at Tier I. They were non-responders at Tier II. And might have been non-responders to other interventions at Tier III and there's some likelihood that they'll be non-responders to some of these interventions that we're looking at.

[Slide 34 – Implications of the Fine Print]: And so that brings us right back to that point that while Evidence-Based Interventions is an incredibly nice place to start, they're just a place to start. It's simply a list of good ideas to try out. But in addition to this, it's incredibly important that you collect outcome data and find out if the interventions are indeed effective for the target child.

Every intervention ends up being a unique dyad between that teacher of the educational professional and the child within an established context. And that is a unique setting and you never know if that unique combination is going to work until you actually try it out which is why it's so important that we collect outcome data and make this work.

[Slide 35 – General Goal of Intervention Selection]:   Now if we layout the idea that even with a great list of Evidence-Based Interventions and I think we're starting to collect those lists. That we're going to have to try these out. We're often going to be wrong and we're going to have to collect a lot of outcome data. What that means is that we're going to have to make sound decisions about the interventions very quickly. Simply put, we can't be having hour long meetings on every single case every time we want to change an intervention.

Particularly with child that have behavior problems where we might be shifting that intervention tons of times. I mean these behavioral interventions may work for two or three weeks and then stop working and then you may have to change the intervention again. And so in one of these settings where we're going to constantly have to re-examine these interventions we need to

spend more time intervening with the child, collecting outcome data and looking at the data and very little time up front deciding what interventions to use.

We should waste time doing the interventions and looking at if they're effective and not in trying to figure out the perfect intervention considering how much error is in that; in that model. And so to do that, that means we have to have a really quick and easy method of vetting these interventions and trying to align the right intervention to the right child. So that we can try to select an intervention, evaluate it quickly and then recycle or escalate as Allison was talking about, if necessary.

[Slide 36]:   To do that, I'd like to go back a little bit to the idea of functional assessments and functional analysis and really school based versions of that. Back in '98 and anybody who was in the educational industry in the late nineties to early two thousand saw what happened when we introduced functional assessments into schools. First off, it became functional assessments and somehow the functional analysis component seemed to disappear. So it all you know became about assessing what the function of the behavior problem was. Or in many instances they would consider what the function; what the problem with the child was which doesn't even make sense with this particular term.

But, there was very little discussion about actually trialing interventions and doing the analysis component which is really the beautiful aspect of functional analysis. These resulting in these very long intensive functional assessment procedures where you would have teams go in and then do these really elaborate FA procedures and identify what was going on with the particular child. And unfortunately if the child changed setting or you know the child has change a little bit all of those results became relatively worthless when identifying what you could do with a particular child.

[Slide 37 – Let's Talk About "Functional Assessment"]: What we want to look at here is a little bit different than the traditional term of functional assessment and so instead of looking at this in practice and instead of looking at these long term versions.

[Slide 38 – School-Based Functional Assessment in 2012]: We want to talk about something that's a high incidence approach. And so this idea is a little bit more flexible and prescriptive. We've focused much more on intervention effectiveness rather than just documentation of what's going on with the child and understanding that many of these kids are going to be multi-function in nature. And particularly, as we get higher functioning children much of the functional assessment literature was based on very low functioning children. As we get higher functioning children we're going to find kids who are attention seeking and escape you know back and forth just between a few minute period of time, not one particular function continuously.

I have a colleague at the University of Missouri, Wendy Reinke who likes to use the term "functional thinking" instead of functional assessment or functional analysis. I really like that term in this particular framework because I think it gives an idea of we need to think functionally but not get really tied down to the specifics. And that gives us an idea of trying to come up with a relatively common set of reasons why kids misbehave.

[Slide 39 – Common Reasons Why Students Misbehave]: In trying to think how do they fit within this model. What we use; or what I use in most of my work is a very simple set of five pieces of why kids misbehave. And luckily, this ties extremely well into Evidence Based Interventions. The first piece is class-wide problems. I mean if I've got a class where fifteen kids are misbehaving then I don't have an individual student problem I have a class problem. This is no different than on the academic side. If I've got a class where fifteen of the kids are failing in Reading you don't do an individual intervention with a target kid you do an intervention with the group.

Point two; or the second common reason that we want to look at is this idea that students haven't learned the proper behavior. If a student can't do the target behavior or if they don't know how to engage in the appropriate social behavior, if they don't know how to do the academic tasks that you're asking them to do then they're not going to be able to do that activity. And I think that we often assume that kids can do it or that they're won't do kids and that they're choosing not to do it. But unless we've seen consistent documentation that a child can fluently engage in the appropriate social behavior we shouldn't assume that they can engage in the appropriate social behavior.

That second becomes very important for kids that have specific difficulties which provide weakness. If you give me a child with real significant social competence issues, well they have a problem doing social competence behavior. And if you're demanding socially competent behavior in an environment then you're going to have behavior problems. And so you're going to have to design interventions around that particular issue.

The two; the next two are relatively typical. The inappropriate behavior removes students from what they don't want to do and these are kids that we often call escape kids. Escape kids can break down into can't do and won't do kids. Some kids escape because they literally can't do the task that you're asking them to do. And so they want to get away from that as quickly as possible. And some kids choose to escape because they prefer not to do that particular task. They prefer escape kids are much easier to work with than they can't but we'll have to talk about both of those.

The fourth is that the inappropriate behavior gets the student something. Typically is attention. It's not always attention and it certainly is not always adult attention. As we start talking about middle school and high school kids they're often looking for peer attention, and not adult attention. I've seen a lot of times where you can look at functionally and a child is trying to get peer attention and the intervention that; that is designed is to systematically give the child adult attention for appropriate behaviors.

And when you get to middle school and high school, kids often; sometimes these kids don't necessarily like the adults that are around them. And in that instance, you're designing an intervention which is going to systematically punish the child for doing the appropriate behavior because it's giving them adult attention that they don't want. When what they really want is the peer attention.

The last piece here is one which is important within the behavioral community. I think it's not one that a lot of people have complaints about but, it's the idea that sometimes kids haven't had

to do the behavior in that way before. That they can do it in one environment but that they can't necessarily do it in another environment. And in that instance, there's a number of generalizations and program interventions that can be really effective for kids.

[Slide 40 – Selecting EBIs That Align With Function]: If you use that common framework and what I have teams do when I have them work on behavior intervention is hypothesize which one of these is most likely the root of the common problem. This works well for relatively lightly intensive problems all the way to very intensive problems. I mean if we look at lower functioning Autistic children we see escape behavior and attention seeking behavior and inability to communicate you know and so on and so forth.

If you can identify those core functions then you can align those up with interventions to test them out. And so if a team decides that they think a child is doing a particular problem because he or she wants out of a particular environment and it's an escape behavior. Then we can look at antecedent modification as an intervention which can address the escape behavior. Now at this stage all we've done is develop a hypothesis that the team believes that the child's behavior is maintained by escape. By doing the antecedent modification with the child which is an Evidence-Based Intervention with this particular function we can test out that particular idea and see if it is actually effective or not.

I've got some examples of this in this presentation. At the end of this we're going to talk about a couple of locations where you can go to get lots of these examples of different Evidence-Based Interventions. I know that some models out there really pitch that schools should learn one or two Evidence-Based Interventions and learn them well. I'm not as big of a believer on that. I would prefer that teachers have a whole bunch of intervention options that they can utilize particularly on the social behavior side and I believe that for a couple of reasons. Number one sometimes teachers just won't like an intervention for whatever reason. Sometimes it just doesn't fit their personality. And you know if a teacher doesn't really enjoy doing an intervention then it's very hard for them to do it effectively and give it the oomph that's going to make it effective. Number two is that we've already stated lots of these interventions are not going to be effective for a particular child for whatever reason. And so as a result, you need a whole bunch of interventions to be able to cycle through to find something that really resonates with that educational professional and that child dyad and works in a particular setting.

And so we're going to give a whole list of options that teams and teachers can try out. What I'm going to quickly go over here today is five of them. Good Behavior Game, Check-In Check-Out which is a real common one, Non-Contingent Reinforcement which is probably my favorite, Antecedent Modification and Instructional Match.

[Slide 41 – Class-Wide Problems]: I highlight the Good Behavior Game because it's a great example of a class-wide Evidence-Based Intervention that really does have a pretty nice literature base. It's been done for a long time, created by a teacher in Kansas in fact I believe it was back in 1969. But, it can be a very effective way particularly in middle school levels to get a group of kids to essentially use peer to peer behavior to modulate appropriate behavior in the classroom environment.

When we go on a little bit I'm going to introduce you guys to something called an EBI Network and here's a; there's a link there. On the EBI Network, I've got a number of briefs that give a three or four page overview of these interventions. How you do them and all that kind of stuff. There's a great overview of the Good Behavior Game on that particular site for people to take a look at.

[Slide 42 – Selecting EBIs That Align With Function]:   Stepping forward to individualized interventions. You know Check-In Check-Out is at least in my experience tends to be the most utilized intervention. I think it's a really nice intervention. It's got real strong empirical support for reducing problem behavior particularly with attention seeking kids. And with attention seeking kids, I mean kids that are seeking adult attention.

I also find that it's one of those interventions in many locations is used with all kids. And not used based on functional match. And in this instance, it can really be misapplied. So let me give you for example. Let's say a child was trying to get out of a classroom environment because they can't read. And we set up Check-In Check-Out and don't address the core issue which is escape behavior. I mean the child is escaping the punishment of being asked to read in that particular environment.

If they engage in "X" behavior for "X" amount of time they get a good mark. The good mark on the Check-Out is going to result in adult attention. Well essentially we're setting up an intervention which is required; requiring them to engage in a significant amount of punishing behavior to get; to get a reinforce but it's not addressing the core concern that the child is being asked to do a task which is instructionally inappropriate for the child to do. That's not an effective use of Check-In Check-Out.

A child who is using attention seeking behavior to get the adult attention, Check-In Check-Out can be a really effective and quick intervention. It's got the right structure, and can be an effective model to really help teachers consistently give those; give the kids, that nice positive adult feedback.

[Slide 43 – Selecting EBIs That Align With Function]:   This is good for kids with externalizing problems. You shouldn't be doing this for a huge percentage of kids. I mean fifteen percent is and I mean even that would be a relatively high number. But these are good for people that have multiple referrals; you know you can see the whole list.

[Slide 44 – Michigan's Integrated Behavior and Learning Support Initiative]:One of the things that I would like to highlight here is Michigan's Integrated Behavior and Learning Support Initiative. They have an amazing Check-In Check-Out overview and they've got some tools there. If you want an overview of Check-In Check-Out this is a great place to go to; to get the tools for this. On the EBI Network, I actually don't have a brief on Check-In Check-Out specifically because there's this; just between this and the PBIS Technical Center, there's just some wonderful resources for Check-In Check-Out out there. And there's not use for recreating the wheel when people have got great materials out there available.

[Slide 45 – Selecting EBIs That Align With Function]:   Moving forward I would like to talk about Non-Contingent Reinforcement. Non-Contingent Reinforcement is a wonderful Evidence-

Based strategy that's been used with a whole range of populations. From very low functioning children to high functioning children. In one of my local Districts we've got; we've got a school that they call this puking praise. Which is; they get a kick out of it and I get a kick out of it.

But the idea is that when a child walks in, they hit them with as much attention as they possibly can. And we're talking about fifteen two twenty units of attention in the first five or six minutes of class. I mean eye contact, a touch on the shoulder, a smile. All of this active attention and it's non-contingent on the child being good. This is the type of attention that many of us get in our homes. You know I get it from my spouse and my child.

You know this is they're happy to see me. You're happy to see the child when they walk in the room. And for a child who is essentially an attention needy child; I mean they walk into school for whatever reason and they need adult attention. They want adult attention. This essentially ensures that they get that dose of adult attention before they have to engage in a behavioral strategy of their own to get the adult to strategy to get the adult attention.

Now for children who engage in those strategies pro-socially it's fine. But for children who misbehave will engage in really abhorrent behavior just to get an adults attention. By giving that to them before they engage in that.

[Slide 46 – Selecting EBIs That Align With Function]:   That particular behavior, that antecedent modification gets rid of the problem behavior and gets rid of the reason why we have to react to the problem behavior on all of those different things. This is something that I really strongly suggest that all teams do with all attention seeking kids before they try a reactive intervention.

A reactive intervention requires kids to stop doing "X", "Y" and "Z" before they get what they want rather than giving them what they want before they have a chance to engage in their behavior. Which has a behavioral history of engaging in a relatively negative behavior and so this is a very effective Evidence-Based Intervention that works across a range of populations. It can work with very intense needs kids and so it's a really nice tool to have out there.

[Slide 48 – Selecting EBIs That Align With Function]:   Moving forward a little bit to escape kids. I mean escape kids are an interesting group. These kids start off at a young age engaging in a relatively minor behavior to escape stuff that they don't want to do. Escape behavior kids are sometimes; most of the times are academic. But I mean there's some; some internalizing kids or withdrawing kids are great examples of escape behavior.

They're you know shying away from social situations or playground situations or so on and so forth. As these kids behavior becomes more problematic teachers often crack down. And so they say well, you're not going to not be; you have to do what it is that I want you to do. And so the teacher raises the bar a little bit and forces it a little bit more with the kids. And the kids do what people normally do with an extinction burst.

Their behavior becomes more abhorrent. It becomes more problematic. They explode. Teachers often have to give in because the child increases the behavior and they have to attend to it. The child is not doing Math now. They're dealing with the behavior problem. And this cycle kind of

continues over and over again until we see kids engaged in a really complex, really outburst, really problematic behaviors when they're asked to do a particular activity.

[Slide 49 – Selecting EBIs That Align With Function]:   Essentially, the problem behavior is working for students by allowing them to escape something that they don't want to do. And in many instances with these kids, they really can't do it. I mean if you give me a child who's a functional illiterate and we're trying to put sixth or seventh grade text in front of them he or she can't read that. And so it's not an issue of not wanting to do something, it's that they can't do something and they're going to engage in really terrible behaviors around that.

I've suggested a number of approaches for people and honestly I cringe to think of what I've suggested in many instances. You can do interventions like Wait Time. You can do interventions like Pass Cards and give kids a break and then require them to do the activity. But, fundamentally the problem with most escape behaviors resides in whatever the task demand was. We have to ask the question "what is it that we were asking the child to do" and "why is it exactly that the child is reacting"; when we're talking about intensive cases, so violently to that particular request.

In so many instances it's because they don't have that skill. It's because they can't do that behavior. Because they're going out to the playground and difficult things are happening on that playground activity. And the simplest way to solve most of these problems is to instead of giving them at task which is resulting in escape behavior. Give them a task that they can be successful at. Give them a task where they're not going to engage in those problematic activities.

[Slide 50 – Selecting EBIs That Align With Function]:   Essentially engage in an antecedent modification. Try to deal with something or give them an alternative task so that they can be more successful. Any other activity, any other way of dealing with the escape, or working with the escape or writing up the escape is simply going to increase this in the long term. This could lead to social skills training, it could lead to modification and that's; that's the last one that I really want to end here with behavior problems.

[Slide 51 – Selecting EBIs That Align With Function]:   That's people talking about behavior cases and behavior problems.

[Slide 52 – Selecting EBIs That Align With Function]:   They are often surprise that I most often suggest academic interventions, but so many of the behavior cases that we see out there are; are kids that have absolutely no chance to succeed academically. They're frustrated, they're angry; they've gone through years and years and years of essentially being put in a cage, the classroom where they know they're going to be systematically punished. We know what happens when this occurs. It's called learned helplessness.

And when you put somebody in that situation where they're consistently punished over and over and over again at first they withdraw and eventually they start to progress and act out. The simplest way to deal with these kids in most instances is to put a book in front of them that they can read. Make sure that they have prerequisite skills for every one of those activities. And put them into activities where they have ninety-seven, ninety-eight or ninety-nine percent success rates. Not fifty and sixty percent success rates.

If anybody that is on this call, if we were dealing with fifty or sixty percent success rates we'd be incredibly frustrated and get incredibly angry. We need these kids to be put in situations where they can be academically successful, socially successful on any of those things. And continually putting kids in situations where they're going to fail, it's not surprising that they get as angry as they do and they act out as much as they do. And so; so often we're looking at academic interventions having an effective behavioral outcome because academic success can be a real effective; or social can be really effective tool at working with behavior problems.

[Slide 53 – Selecting EBIs That Align With Function]:   Here are some examples and you can look at these different pieces.

[Slide 54 – NCII Tools Chart]: But I want to get into a little bit of kind of where to get these interventions. Allison has already done an overview of the Tools Chart. And the Tools Chart is in its first iteration and we're going to continue to put more and more things on the Tools Chart. What's wonderful about the Tools Chart is that the only example I know of; of interventions which are specifically being vetted in a targeted framework by a professional panel.

And what's great about that is that you get an independent group saying what these interventions can do and what they can't do. Rather than researchers telling you that they're effective or publishing companies telling you that they're effective or so on and so forth. I would strongly suggest that individuals go to the NCII Chart, look at it. There will obviously be updates as we put more and more of them out. And we're trying to put more effective tools out there.

[Slide 55 – The Evidence Based Intervention (EBI) Network]:   As a secondary place that you guys can go look in the meantime. Since about two thousand and seven I've developed a site call the Evidence Based Intervention Network. This was developed in response to the part of No Child Left Behind which specifically requires that people do Evidence-Based Interventions when there were no Evidence-Based Interventions lists out there.

What the EBI Network is a group of faculty at; well, all over now, the University of Missouri, East Carolina University, Indiana University, Vanderbilt, University of Texas, the University of Virginia now, and Duquesne. And what we do is we take, interventions, common EBIs and we review them and write up evidence briefs on them. This is all done within the functional framework on the behavior side which I just described and a similar functional framework on the academic side.

[Slide 56 – EBI Network]: We have Math, Reading and we have Behavior on this particular site.

[Slide 57 – EBI Network Main Page]: You can go through these different pieces. These are just screen shots of the site. And this is at ebi.missouri.edu if you want to go and check it out.

[Slide 58 – EBI Network Academic Interventions Page]: But essentially what you do is you go to the site you click on what particular academic problem or behavior problem that you believe a child has and for example these are academic problems. And so, this child hasn't had to do an academic problem like this before, they haven't spent enough time doing it and so it's a fluency issue. Or, the task is just too hard for the child or behavior problems. And again, it's that same deal.

[Slide 59 – EBI Network Behavioral Interventions Page]: This is actually an old slide. I don't have the positively punish version up there. I have the common problems version up that I presented on an earlier slide up there.

[Slide 60 – EBI Network Sample Intervention Brief]: But once you select that, what it's going to do is it's going to take you to a series of interventions that are associated with that problem and give you an intervention brief for this. And this is a very fuzzy version of a PDF here but they are cleaner on the site.

What that, each one of these briefs will have is a very short description of the intervention. What common problem it addresses and so in other words, what was this EBI designed to fix? What are the procedures? And then two things, what are the critical components? So what do you have to do to make this EBI work? What are the critical assumptions? On many of these the critical assumptions are that the re-enforcer has to be reinforcing.

This Mystery Motivator Brief is an interesting one. For Mystery Motivator to work effectively, teachers have to have a really wonderful sense drama. They have to really play up and kind of ham up the aspect of the lottery format to it and to make it effective, if a teacher is good at that then that's awesome. If they're not good at that then that's not a particularly great intervention for the teacher and so then we should look at other interventions for them.

But these briefs are all two to three pages. Some of them get to four pages if there are materials. But we want to keep them brief. We want to keep this as a reference that you can put on an educational professional's desk so that they can look at and remember what the different steps are for doing a particular intervention.

[Slide 61 – EBI Network Sample Interventions Modeling YouTube Video]: We also have videos of many of the different interventions. I will say that the EBI Network has been perpetually unfunded. It's just kind of been something that we've just had fun doing and so these are just Webcam videos of people doing interventions. And there's some nice ones there and we've also got links to some really videos of some nice interventions that people are doing all around the United States in different school Districts and those are really some of the best videos there. But they give an idea on how you use them.

[Slide 62 – Additional Resources]: So another reason, so that gives a quick overview of the EBI Network and I'm happy to, you know have anybody; and if anybody has any questions about the EBI Network, you can e-mail me individually and I'm happy to answer any questions about it. But all of the stuff there is pretty user friendly and I think it makes an awful lot of sense.

There is also a couple of resources here in terms of the DBI Training Modules. There's one on using functional behavior assessments for diagnostic assessment in behavior. And there's one on designing and delivering intensive intervention in behavior. These are really nice embedded training modules that the NCII offers.

[Slide 63 – Additional Resources]: And then the last one, we've got some short videos up there. I've got a short one on how Evidence-Based practices work and how does it; how do you work with more sever kids. And what looks different with more severe kids? Lee has got a great one on why it's important for schools to focus on intensive interventions. And it seems like the

staff of the NCII is doing a whole bunch of these expert videos. These are short, quick three, four or five minutes and I think they're really nice for kind of a short Professional Development and to get some nice answers for questions.

[Slide 64 – Questions]: And so what I'm going to do at this point is; is wrap-up. I think I'm going to shift the ball over to another individual so that they can move this stuff and that will give us another opportunity to just; to answer some questions.

Moderator: Thank you very much Chris and Allison. We've receive a lot of great questions from people about your session. So, I'm going to try to ask as many as we can in the next fifteen minutes of the Webinar and if you could just provide a brief answer to some of these so that we can get through as many as possible. And I'll kind of pose it to both of you and you can see who would like to respond.

Dr. Riley-Tillman (Presenter 2):   Okay

Moderator: We received a few questions about involving families and using families as a partner in behavioral interventions.

Dr. Riley-Tillman (Presenter 2):   Yeah

Moderator: Do you have any thoughts about that? Or do you know of any research or evidence related to involving families as partners?

Dr. Riley-Tillman (Presenter 2):   Yeah, I mean no. I mean there's great research; there's great research and I might want to address this in three ways. Number one, it; we want, we want families who are going to be partners. And families that are going to be partners with interventions are going to be very important in implementing the interventions. And so there are models like Counseling Consultation on trying to develop those partnerships and obviously the more the school and the more the school staff develop relationships with families within particular school settings the more effective those families are going to be.

What I would like to do is just talk about technically what families need to do to be effective when using Evidence-Based Interventions and I would like to use Check-In Check-Out as an example. We had a case in one of our model schools where we had a really great Check-In Check-Out system that had an at home component. So, the report card was going home.

And the child was only supposed to be getting specific attention on days where he was getting effective ratings. And what was happening was; was that the teacher at the school was being great. If the child had had a difficult day, she would really; she would withdraw attention. The child very much wanted the attention. But unfortunately he went home and then the father would yell at him. And so, for having a bad say; and so, he didn't get the teacher attention but, he got his dad's attention. And when he had good days, he would get the teacher's attention but, the dad would ignore him and basically say well, "I'm glad that you behaved, you should behave."

And so in that instance, the school actually had to say "you know if you're not going to; if you're not going to respond to this consistently with the intervention the way that the intervention is set up then we're just not going to send home the report card." Because, the family behavior was

unfortunately undermining the Evidence-Based Intervention which was destroying the functioning of the intervention which was to give specific adult attention based on appropriate behavior.

They explained it to the; particularly the father in this instance. He got it and he was willing to try it out. He adapted his response and it ended up being a much more effective intervention. But if you're going to use families and you're going to explore this through a functional pathway you have to really share those functional pathways with the families so that they can effectively do the interventions.

Moderator: Thank you Chris.

Dr. Gandhi (Presenter 1):   Can I add? Can I? I just wanted to add that this is something that you can find out a little bit more about on the Tools Chart too. So, some of the tools do have a parent component with them and there's information on them on the studies that they've submitted that report results of how effective they were when they were using the parent component versus not using the parent component.

Moderator: Great, thank you. We receive another question about people wondering where you can find more information about implementing specific interventions that are on the Tool's Chart that are non-commercial interventions so that they don't necessarily have a link to a vendor that you can contact.

Dr. Riley-Tillman (Presenter 2):   That's; that's actually, that's a really great question. And it's one that we; we've struggled with a lot. All of the interventions on the EBI Network are non-commercial. So, we; we take a lot of like different re-enforcement or non-contingent re-enforcement and that kind of stuff and we put those on the EBI Network and we have briefs for those and tools for those. In terms of specific ones that individual researchers have developed I would e-mail the researcher and ask them if they've got protocols for the research studies. Many of those; many of them will have it.

But honestly non-commercial interventions on the behavior side are the bulk of; I don't want to say that there's a bulk. But, there's an awful lot of effective intervention tools that we have. And of course, there's no publishing company that builds pretty materials and to market and to try to push it out there. And so one of the catch twenty-two's is how do you get that information across? And so, I would check the EBI Network, I would contact the researchers and that would be my suggestion. Allison, do you have anything?

Dr. Gandhi (Presenter 1):   Yeah, no, I was going to say the same thing. I think the EBI Network is great because it's a great sort of complementary kind of source to the Tool's Chart. Because, for those interventions that we have on our chart where there's not really you know a lot of implementation information from the developer chances are that they're going to be on the EBI Network website where you can get more information. If you still feel like you're not getting enough, I think you should just contact the Center and we can probably give you a little bit more information or put you in touch with a Consultant who can give you a little bit more information.

Moderator: Thank you. And someone is also wondering will the chart review analytic interventions in the future? And they mentioned examples of Fading and Extinction.

Dr. Gandhi (Presenter 1): Um hum

Moderator: And they mentioned more traditional ABA tactics.

Dr. Riley-Tillman (Presenter 2): Allison can answer that question.

Dr. Gandhi (Presenter 1): Yeah, I did see that question. Yes. The idea is that each year to review some of these what we're calling non-commercial interventions such as some of the strategies that you just spoke about. So we have to sort of choose each year which ones we want to review. So, just having that question right now on the Webinar is helpful because we could talk about prioritizing reviewing those types of techniques in our next cycle. So, thank you.

Moderator: Great, thank you. We also received some questions about secondary aged students. So in general, can you speak a little bit to how Evidence-Based Behavior Interventions might look different across different age or grade levels and specifically if there are different types of interventions that might be more effective for secondary aged students or if the same interventions are effective?

Dr. Riley-Tillman (Presenter 2): This is a great question and I think I mean I always approach this from a behavioral standpoint and to a large extent function is function. And so, people engage in behavior to get something, to escape something you know because of a particular lack of skill etcetera. I think the things that change at the secondary level are a number of pieces. I think number one, much of the attention seeking behavior shifts from attention seeking from adults to attention seeking to peers. And as a result using adult attention seeking, based intervention strategies is just not going to be effective with the population.

Number two is we have a ton of environments. And so we're not now looking at a child in two or three environments in a day or two or three primary environments in a day. We're looking at a child being in eight or nine primary environments in a day, with also just a lot less of an understanding. I think strategically one real difficulty that we have at the secondary level is that the concept of a grade level team or a group of people who really understand kids it just doesn't exist in the same way. Subject level might do that but, that's just going to be there.

That all being said, the same fundamental interventions are going to be effective. And so what I mean by that is non-contingent reinforcement is going to be effective. The question is where are you going to get the reinforcement? And so how are you going to find a peer who is going to be able to facilitate that? Differential reinforcement, antecedent modifications for escape based behaviors are going to be; are still going to be effective. But how you instrumentalize and proceduralize is going to be quite different than when you're working in you know with a; you know a lower functioning Autistic child in an environment you know versus a child in a high school History class or something of that nature. So, the same general functional framework but it's got to be built in a way that it makes sense in those environments.

I think the last piece I would say and I think this is where we have the hardest problem. In our experience, one of the most difficult things to doing an intervention particularly in high school is

a real difficulty in getting the educational staff to buy in to doing the interventions. Middle school can kind of go both ways. But I think at the elementary level there's an understanding or a belief that it's really important to do these interventions and that it's the teacher's responsibility to do these interventions.

At the high school level, all of a sudden there is this belief that it is a fourteen year olds responsibility to behave. And you know I'm not going to get into a debate over whether that's you know right. Well it's not right but whether; however that's going to work. But you know really having staff buy in and understand that if they don't, effectively reinforce appropriate behaviors in the classrooms, the kids are going to continue to misbehave. I think that's the largest challenge out there. It's not the interventions it's the staffing of the interventions.

Moderator: Thank you. And kind of related to that, someone else asked. How long does it take and how much training or consultative model is needed for maybe teachers that are more non-behavior minded?

Dr. Riley-Tillman (Presenter 2):   Um hum

Moderator: To really master the idea of thinking functionally about behavior?

Dr. Riley-Tillman (Presenter 2):   I mean yeah; that's an amazing question and all I can do is give clinical experience on this. They're; I don't know of any research out there that; that truly documents what it takes to move a school. You know and how long it takes to move a school. I think the NCII and our Model Demo Schools is really working on this and we're really looking at what you do with environments.

In my clinical experience the first thing that I do is; is I try to hide behavior as much as possible. I think when; one of the reasons we moved to the common problem framework and if you look on the EBI Network, we specifically talk about proficiency interventions. We talk about acquisition interventions and you know escape makes some sense. But, what we're trying to get at are terms that are similar to academic.

We're trying to make teachers think of social behavior as something which is trained just like Reading is trained. And so we try to get out of; for a long time, I wanted to get teachers to talk about positive punishment, negative punishment and positive reinforcement and negative reinforcement. And it was just banging my head against the wall. I mean you could get in a debate about those terms.

So once we get teams or groups into this idea that there's a logical reason why kids are engaging in these, whether it's to get attention and this and that. We find that teams move quite effectively. But in any instance that I've worked in, it's been several years and it's been every single problem solving meeting has a leader in the problem solving meeting who is going to push that agenda. Anytime that I've gone into schools and worked for a month or two and then left, that was not effective, essentially the elements that weren't supportive of that particular approach.

So in the schools that I've seen this done the best, and I'm actually going to come to D.C. in a couple of days to talk about some of these schools, there's been a person there who has championed it consistently. And in almost every instance, the first year is pretty ugly and it's the

year two, year three where you start seeing; people start seeing effective results and people are getting excited about it.

Moderator: Thank you. I think we have time for one or two more and if you don't see your question answered today, please check out website because we will post a Q and A document with some common questions from this Webinar. And someone had asked about the success of or the value of involving students in creating interventions or solutions collaboratively and they mentioned specifically the Ross-Green Collaborative and Proactive Solutions Model. And maybe whether similar interventions or similar kind of broad models for involving students collaboratively are effective or count as Evidence-Based Intervention?

Dr. Riley-Tillman (Presenter 2):   Well, I don't know about that particular model. And so, I can't speak to that intelligently. What I can do is say a number of interventions that we utilize particularly as children get older have a self-rating and a self-assessment component that can be very effective Evidence-Based strategies. My other area of interest is something called Direct Behavior Rating or Daily Behavior Report Card. And those have been used as intervention tools for self-monitoring particularly with ADHD kids and have shown very effective results helping children better understand their behavior through consistent rating of their behavior and then in comparison of that rating with teacher ratings, and then reinforcement for being consistent.

Not necessarily reinforcement for being good but reinforcement about being accurate with the understanding of their behavior. Really training kids to understand how their behavior looks to other people. There are a whole range of interventions that involve kids that can be really effective. And so while I can't talk about that model, there are absolutely approaches that are Evidence-Based that include students in the process.

Moderator: Thank you and one last question. We received a question about younger students taking it to the different end of the spectrum with students ages four through seven. If there are particular behavior interventions that work better with younger students or if there are ways of; if there is specific consideration that should be thought of for that population of students?

Dr. Riley-Tillman (Presenter 2):   Yeah, I think; I think interestingly if you go back to the nineteen nineties I really; there was some really effective work going on with pre-school, you know young kids. And one of the things that I've seen recently which is really concerning to me is that as we've accelerated our demands on kids we've seemed to kind of assume that these kids are older than they are. So, I'm starting to see a lot of the kindergarten classrooms where teachers are putting kids on twice a day Check-In Check-Out. Or you know once an hour Check-In Check-Out. And I mean these are really young kids.

And they're not built to go an hour to get a particular reinforcement. And so I think one of the things that I try to harp on in terms of using Evidence-Based Interventions with young kids is that they've got to be developmentally appropriate. And that means that the timelines that we ask kids to behave in the task demands that we ask them to do, you know you can't just; you know you can't base this on the ten kids in the room that are kind of advanced in terms of their development. The kids that experience weakness at those levels very likely might need attention every two or three minutes. They're not going to go these long periods of time. So you know when we look at something like Non-Contingent Reinforcement or Check-In Check-Out or any

of these things, they've got to be built in a developmentally appropriate framework that is going to be effective for those groups.

There was one question that I was just looking at now and I don't know if I have a second to hit it. It's the one about, what about academic behaviors and having multiple interventions for academic behaviors? And specifically if I read this; Dr. Tillman mentioned to try to have multiple interventions for teachers to choose from for behavior how about in academic interventions? Is there a PD problem with this?

I think to some extent with academic interventions you can have a slightly lesser or smaller slate than on the behavior side mainly because we do academic interventions for longer than social behavior interventions. Social behavior interventions tend to cycle a little bit more. But I do believe that one of the most important aspects of an intervention is that the teacher is excited to do it. That they're just jacked up and they think this is going to work and that enthusiasm is a major component of making these interventions effective.

And so if you can give a teacher two or three functionally similar option's to deal with a Reading Fluency problem or Math Fluency problem or Reading Acquisition problem. The choice aspect is reinforcing. And so if the teacher has the option to choose what they think is going to work then they are more invested than the school District that says we're an "X" school and we do "X" for this problem.

And so I absolutely believe that it's important with you know; to have multiple opportunities for academic interventions. Now they have to be functionally similar and they have to be Evidence-Based but we want teachers to be able to have options to say I really like that version and I want to do that version so that they truthfully give it the enthusiasm and you know; that it deserves.

Moderator: Well thank you so much Doctor Gandhi and Doctor Riley-Tillman. This concludes our Webinar for today and as a reminder, the Power Point slides are already posted to our Website so you can download those at any time. And we post a recording of this Webinar and some common questions and answers that were discussed. So, thank you so much for joining and we would encourage you to please take our survey.

[Slide 65]:   To give us feedback on this Webinar so that we can improve in the future.

[Slide 66 – NCII Disclaimer]:   Thank you and have a nice day.

[End of Transcript]