Using causative qualitative methods to delineate factors driving the use of evidence-based practices among systems using independent contracting

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Roadmap

- Autism Evidence-Based Practices
- Public Early Intervention Systems
- Causative Qualitative Methods
- Implications of Independent Contracting



Autism

- 1 in 36 school-age children have autism.
- Early access to evidencebased is important.
 - Social communication skills
 - Educational placement
 - Overall quality of life
- Early access to high-quality services is not easy.



Parent-Mediated Intervention



(Brian et al., 2022; Nevill et al., 2018; Yoder et al., 2021)

The Strategies that Caregivers are Taught

- <u>Developmental strategies</u> emphasize teaching caregivers how to build their child's engagement by following their lead and responding to and expanding their natural communication.
- <u>Naturalistic behavioral strategies</u> are those that use a child's interests and natural environment to prompt and reinforce a new and developmentallyappropriate skill.



Common Manualized Parent-Mediated Interventions







Part C Early Intervention Systems

Early Intervention Systems



Federally mandated to provide services to children 0-3 years with developmental delays under Part C the Individuals with Disability Education Act (IDEA)

Provides funds to each State to implement systems of coordinated, comprehensive, multidisciplinary, interagency programs to make early intervention services available.

Funds may be used for any allowable purpose under Part C of the IDEA, including the direct provision of early intervention services, and implementing a statewide, coordinated, multidisciplinary, interagency system to provide early intervention services.

Early Intervention Systems for Autism

- Approximately 400,000 children are served in El systems
- <u>10 percent</u> of children in El systems have an increased likelihood of having autism.
- <u>About half</u> of autistic children were served in Part C systems prior to age three.
- An autism diagnosis is not required to receive Part C services.







Increasing access to to autism EBPs in Part C systems is not straightforward

Implementation Challenges within El Systems

- Providers report inconsistent knowledge and use of evidence-based practices.
- Provider participation in EBP training initiatives is low.
- Providers increase their fidelity to parent-mediated interventions, but their fidelity is inconsistent or lower than specified benchmarks.
- El systems are under-funded, experience significant workforce turnover, and some states use independent contracting models

It Important to Unpack Complexity

- Implementation determinants at the provider, organization, and system levels are important to consider together.
- Having a good understanding of determinants can be used to home in on implementation strategies to enhance the impact of implementation efforts.



But Causal Relationships are Important to Distill

- The goal is not just to understand which determinants matter.
- Instead, we want to know how the determinants act and why they have the impact they do.
- This helps to make hypotheses about implementation mechanisms.
- <u>Although there are many ways to generate</u> <u>hypotheses about mechanistic pathways, theory</u> <u>and specificity are important</u>.

Project to Examine Drivers of EBP Use in a Public El System



What does EI providers' participation currently look like in EBP training initiative?



What factors are perceived to causally drive provider's participation in EBP training (and thus EBP use)?



What are the perceived processes or mechanisms by which these factors operate?



Babies Can't Wait

Georgia's Early Intervention system, which is housed within the Department of Public Health

Serves about 20,000 children each year, about 3,000 of whom screen as having a high likelihood to have autism

System includes approximately 750 providers, including speech language pathology, occupational therapy, physical therapy, and special instruction

Uses an independent contracting model by which individuals contract directly with the state.

Quantitative Survey Data

N=100 Babies Can't Wait providers

- 97.0% female with *M*=9.40 years in El systems
- Mostly independently contractors (87.0%)
- Provider disciplines represented:
 - 41.0% special instructor
 - 28.0% speech language pathologist
- Also collected information on provider attitudes towards EBPs, organizational support, implementation climate, and reported use of autism EBPs.





What did the survey tell us?

- 1. Providers report using some evidence-based strategies.
- 2. Provider attitudes predicted the extent to which they reported using strategies.
- 3. Organization-level support did not predict reported EBP use - which was not necessarily surprising given what we know about the structure of Georgia's El systems.
- 4. Given limitations, we felt that the survey gave us an incomplete picture and could not help understand why certain factors were or were not impacting EBP use.

Causation Coding

- Is an adaptation of attributional coding
- An attribution being something that a person believes about an event and their causes.

"Attribution theory concerns the everyday causal explanations that people produce when they encounter novel, important, or unusual or potentially threatening behavior and events. According to attribution theorists, people are motivated to identify the causes of such events because by doing so they render their environment more predictable and potentially more controllable"

Causation Coding

- Extracts attributions of causal beliefs from participant data, including how and why particular outcomes come about.
- Uses a coding process that looks for antecedent conditions and mediating conditions that lead to a particular outcome.
- Can serve many purposes including preparatory work to diagram or model processes.



Interviews and Focus Groups

	El Providers (N=36)	EI Coordinators (N=9)
Mean Age in Years (SD)	50.6 (11.0)	48.3 (11.12)
Mean Years in El System (SD)	8.9 (7.3)	16.0 (8.0)
Race		
White	75.0%	66.7%
Black / African American	25.0%	16.7%
Latinx	0.0%	16.7%
Education Level		
Bachelor's	19.5%	16.7%
Master's	72.2%	83.3%
Doctorate	8.3%	0.0%
Independent Contractor (Yes)	83.3%	0.0%

(Pickard et al., in press)

Emphasis was on Causal Factors Related to Infrastructure

Questions centered on:

- Factors impacting the uptake and use of best practices
- Experiences with independent contracting
- Workforce issues
- Leadership support for EBP use
- Funding capacity
- Strategies that may support providers in using EBPs

Emphasis on why



Fig. 1 Ecological model identifying the factors that affect EBI scale-up in five public systems

Methods

- The codebook was developed based on conventional content analysis.
- Two authors independently applied the codebook to one interview.
- Their coding was reviewed by a third author, who facilitated consensus coding and revision of the codebook to include relevant new codes.
- This process continued across 11 additional interviews or focus groups, until saturation was reached.



(Hsieh & Shannon, 2005)

Causative Coding

- All 146 statements that included a causal inference were flagged.
- Examples of causal inference included:
 - Sentences with the word "because" (e.g., "I don't attend training *because* I don't get paid),
 - If-then statements (e.g., "if there was more peerto-peer connection, I would feel more supported to use EBPs),
 - Statements using "so" or "that" to make directional linkages (e.g., "the paperwork is so high that I don't have time to attend training").
- Causal statements were broken down, when possible, into three parts.
- Casual statements were organized to help categorize key drivers of training participation and supervision.
- All qualitative data were member checked with study participants and other stakeholders.



General Description of Training and Mentorship



Causal Factors Impacting EBP Adoption and EBP Use



Independent Contracting

Operational Demands



Turnover and Recruitment Issues



Inconsistent Priorities



Lack of Peer-Peer Support

Independent Contracting

"But it's the unpaid time because face to face is one thing but then it's all the [non-billable] paperwork outside of that. And most trainings are not reimbursed. And so they start saying, 'I'm not making enough money to do this,' and go out and do a different job."



Independent Contracting

So even though I have that many special instructors, a lot of them are part-time, so they only see children between, let's say, four and six o'clock during the week. That is just part a contracting that makes it hard to require anything (EBP adoption/use) from them so they won't do those things.



Cost of Being an Independent Contractor

"And for some of the private providers, it was not worth the money they were paid for versus them being able to see kids during that hour to two hours [at training]. So I don't think it was financially a benefit. And they don't attend [trainings] because they're losing money and they're losing time being there."



Operational Demands

"Because of the contracting process, there is lots of documentation required that makes bringing people on a very cumbersome process. That's probably why the quality assurance doesn't happen because we're just trying to get the basics down."

Operational requirements and demands

Impact of Turnover

"I've been here four years and I think there has been three directors at the state office. So, the turnover is humungous. And honestly, it's almost as if Babies Can't Wait is a moving target. Just when you think, 'okay, I've got this,' or that we're prioritizing this thing, no, we have a new leader so we're switching."



Need for Incentivization and Leadership

"We had funding issues and limited funding dedicated to training... Some districts don't put on many workshops. It takes a lot of manpower and if you're short-staffed or don't have an [Interagency Coordinating Council] that's active, you just don't have the ability to do it."



Provider Networks

"The disadvantage [of contracting] is we don't always know who to call for support and we have to search if we want it. Even then it's hard. You feel like you're bothering them and you're interrupting them and their day."



Steps that Followed Data Collection

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Presented data back in a series of round tables with 50 providers and 10 admin Meeting with state leadership to discuss implications and next steps Presented the data at the State Interagency Coordinating Council Currently distilling into brief summary to share with the Department of Public Health

Summary of Findings

- Independent contracting structures, federal reporting priorities, and funding drove high operational demands, high costs associated with training, and limited peer-to-peer support especially for independent contractors.
- These costs and limited support structures fuel burnout and turnover in the system.
- Workforce turnover caused shifting priorities and limited sustainability of training initiatives.
- These costs and shifting priorities contribute to low provider engagement in training and uptake of EBPs.
- Together, these processes may reduce access to highquality care for families seeking EI services.



Using Causal Coding Summaries to Diagram



Implications

- Findings are consistent with workforce development models, which indicate the role of operational demands, costs, and support on turnover.
- With so many independently contracted providers, we need to think about ways to incentive and build social networks to increase EBP adoption and se.
- Opportunities for collaboration consistently emerged as a way to increase EBP adoption in the absence of funding or contracting changes.



Social Networks

- Social networks enhance opportunities for collaboration and facilitate information sharing across providers to increase the adoption and implementation of EBPs.
- Based on Roger's diffusion of innovation theory, provider social networks are an essential element of adoption processes.
- Lots of work has demonstrated that social networks influence EBP implementation, possibly through their role in shaping an individuals' attitudes, perceived norms, and self-efficacy around a given practice.



Network Building in Systems that Use Independent Contracting

- Some of our preliminary work has shown that independently contracted providers have very small social networks for both social support and also related to the use of certain practices.
- Given their role in facilitating the adoption of EBPs, perhaps network building could be an implementation strategy by which to increase provider-provider collaboration and information sharing, and thus increase the impact of implementation efforts.

(Bunger et al., 2023)



Questions

"Especially if you are brand new to home visiting, to have someone you can call up and say, "Hey, I just had this experience, what do I need to do?"

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