



National Center for **Research** on  
**Rural** Education (R<sup>2</sup>Ed)

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## **Rural Education and Specialized Services: An Introduction to Conjoint Behavioral Consultation via Distance Delivery (CBC-D)<sup>1</sup>**

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## **Introduction**

- Children from rural communities experience a number of educational difficulties (Lenardson et al., 2010).
- Specifically, rural children experience more problems transitioning to kindergarten and display lower self-control behaviors relative to children from urban settings (Rimm-Kaufman et al., 2000; Bender et al., 2011).
- Children experiencing behavior problems early in their education are at an increased risk for negative long-term academic, behavioral and social-emotional outcomes (Bub et al., 2007; Lopes, 2007).
- Unfortunately, rural communities face unique challenges accessing specialized intervention services for children (Owens et al., 2008).
  - Lack of availability (e.g., lack of specialized service providers).
  - Lack of accessibility (e.g., geographic or financial barriers to seeking outside services).
  - Lack of acceptability (e.g., low trust of service providers from other communities, stigma associated with services).
- Tele-education, specifically web-based videoconferencing, holds promise as a cost-effective method of service delivery by:
  - Increasing accessibility to service providers from across the world.
  - Decreasing distance and costs associated with travel.
  - Allowing for personalized and confidential services.

### **Conjoint Behavioral Consultation via Distance delivery (CBC-D)**

- CBC-D is an adaptation of Conjoint Behavioral Consultation (CBC; Sheridan & Kratochwill, 2008). See Figures 1 and 2 for a graphical depiction of the two models.
- CBC is an indirect, cross-system problem-solving intervention wherein parents and teachers work as partners and share responsibility for promoting positive and consistent outcomes related to child development with the help of a behavioral consultant.
- CBC is an evidence-based indirect intervention for addressing common childhood educational problems.

- Preliminary results of an ongoing randomized controlled trial of CBC in rural settings are promising (Sheridan et al., 2013); however, the costs of implementation are high and may not be feasible for rural schools without external funding.
- There are three overarching goals of CBC:
  - To promote academic, social-emotional and behavioral outcomes for children through conjoint, collaborative problem-solving.
  - To promote meaningful caregiver and teacher participation and engagement in their children's education.
  - To establish and strengthen family-school partnerships.
- The four stages of CBC-D are conducted over computers using web-based videoconferencing software in a split-screen fashion so all parties remain visible while allowing for documents to be shared.
- Rural parents and teachers meet at the child's school and the CBC consultant joins the meeting from another location.

### **CBC-D Stages and Objectives**

- Stage 1: Conjoint Needs Identification Interview (CNII)
  - Identify the student, family and teacher strengths.
  - Prioritize, select and define a target behavior(s) and setting.
  - Establish a procedure for the collection of baseline data.
- Stage 2: Conjoint Needs Analysis Interview (CNAI)
  - Review collected data to inform decision making.
  - Establish jointly determined goals.
  - Develop a shared understanding of behavior function.
  - Collaboratively design effective strategies across settings that are sensitive to setting-specific variables.
- Stage 3: Plan Implementation

- Provide direct instruction, modeling and opportunities for consultees to practice plan steps and receive feedback.
- Provide individual, brief fidelity support meetings consisting of web-based observation of plan implementation at home or school and additional instruction, modeling and feedback.
- Stage 4: Conjoint Plan Evaluation Interview (CPEI)
  - Examine collected data to determine if student behavior goals have been met.
  - Evaluate what about the plan worked and what did not.
  - Discuss next steps for the behavior plan (e.g., continuation, termination, generalization to other settings).
  - Discuss continuation or termination of consultation.

### **Practical Considerations**

- A number of practical issues must be considered prior to delivering services using tele-education technology such as videoconferencing software (Bischoff, 2004; Gibson et al., 2010).
- Quality of Transmission
  - The hardware (e.g., web-cams), software (e.g., WebEx) and internet connectivity of all parties must be up to minimal standards to allow for quality, uninterrupted teleconferencing.
  - Procedures should be developed for how to handle technological troubles (e.g., connection difficulties).
- Financial Cost
  - Costs to service providers and those receiving services must be considered.
  - Technology hardware continues to improve; however, costs remain relatively low and affordable.
  - Other potential expenditures to consider include increased bandwidth to support the technology as well as additional technological assistance.
- Selecting the Right Equipment

- Service providers should carefully consider all possible objectives they plan to meet and ensure that the hardware and software will allow them to meet those objectives
- In CBC-D, software such as WebEx are needed because the consultant and consultees need to share documents and review data graphs
- Confidentiality
  - It is possible for telecommunications to be intercepted by outside parties, increasing the risks of confidentiality being breached.
  - Secure software that guarantees telecommunications are encrypted should be used to deliver services.
  - Given the added risks and novelty of distance delivery, service providers should ensure that confidentiality is thoroughly discussed and time be given to address questions.
- Ethical and Legal
  - Local and district policies regarding internet and videoconferencing usage should be consulted prior to accessing or providing services.
  - Consultants should be familiar with the technology prior to service delivery.
  - Professional standards and ethics from relevant organizations (e.g., American Psychological Association, American Telemedicine Association) should be reviewed and followed.

### **Implications**

- Identifying effective methods of using tele-education to deliver specialized services to rural areas has great implications for the future of rural service delivery.
- Specifically, rural educators would have access to a wide array of specialized services that are not typically available due to distance or the need for specialized training.
- By gaining access to a greater number of services, rural educators can better meet the diverse needs of their students by individualizing each student's treatment.
- Rural educators can increase their involvement in research practices through distance partnerships with universities interested in assessing interventions within rural populations.

- The following section provides an example of how rural educators can take advantage of research partnerships.

### **Future Research**

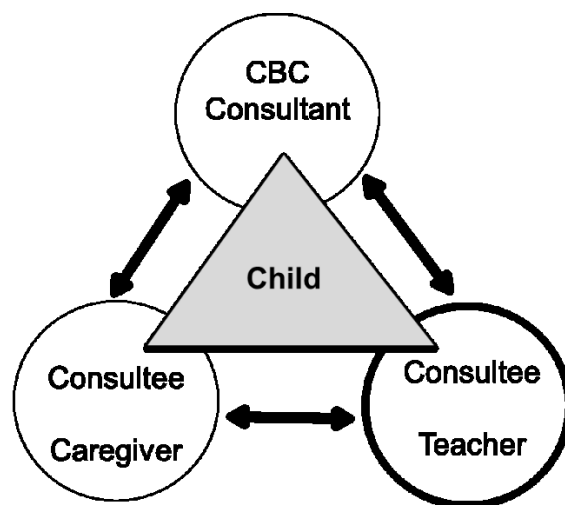
- A concurrent multiple baseline across participants design will be used to evaluate the efficacy of CBC-D on rural students' noncompliant behavior.
- The social acceptability of CBC-D to rural parents and teachers and effect of CBC-D on the caregiver-teacher relationship will be also evaluated.
- Participants will be six parent-teacher pairs sharing concerns about a student's noncompliant behavior.
- CBC will be conducted through WebEx videoconferencing software.
- Results will provide preliminary information on the efficacy of CBC-D as a potential method of service delivery for at-risk children in rural communities.

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**Figure 1.** Traditional CBC Model



**Figure 2.** CBC-D Distance Model

