# Conjoint Behavioral Consultation in Rural Schools

17

Shannon R. Holmes, Amanda L. Witte, and Susan M. Sheridan

More than 10% of youth experience significant and impairing mental health difficulties each year (Merikangas et al., 2010). In fact, behavioral and emotional difficulties are among the most widespread and chronic problems faced in childhood (Pastor, Reuben, & Duran, 2012). Proportionally, a greater number of children living in rural communities experience these problems than children living in urban settings (Leonardson, Ziller, Lamber, Race, & Yousefian, 2010), hindering their functioning across the key settings in which they develop (i.e., home, school; Achenbach, McConaughy, & Howell, 1987) and making them vulnerable to several negative outcomes later in life (Bradshaw, Schaeffer, Petras, & Ialongo, 2010). Children with emotional and behavioral difficulties are at risk of dropping out of school (Kokko, Tremblay, Lacourse, Nagin, & Vitaro, 2006), engaging in delinquent activity (Fergusson, Horwood, & Ridder, 2005), and having mental health problems that persist into adulthood (Reef, Diamantopoulou, van Meurs, Verhulst, & van der Ende, 2011).

The necessity for interventions to address childhood behavioral and emotional difficulties is obvious; however, the majority of children in need will not receive mental health services (Strein, Hoagwood, & Cohn, 2003). The contextual (e.g., inadequate mental health infrastructure) and cultural (e.g., stigma) characteristics of rural communities make these disparities much more pronounced in geographically remote areas (The President's New Freedom Commission on Mental Health, 2003). To address the mental health concerns in rural communities, there is a clear need for services that utilize natural treatment agents (e.g., parents, teachers) and are provided across the settings in which problems arise (e.g., home, school). Conjoint behavioral consultation (CBC; Sheridan & Kratochwill, 2008 also known as Teachers and Parents as Partners, TAPP; Sheridan, 2014), a family-school partnership intervention, represents a model of service delivery that may address some of the barriers associated with access to services in rural settings. The purpose of this chapter is to describe CBC as an intervention to alleviate rural children's mental health difficulties by (1) describing the empirical support for family-school partnership interventions; (2) explaining challenges

**Author Note** Preparation of this chapter was supported in part by grants awarded to Susan M. Sheridan by the Institute of Education Sciences (IES; Award #s R324A100115 and R305C090022).

S.R. Holmes, Ph.D. (✉)
Department of Educational, School, & Counseling Psychology, University of Missouri-Columbia, Columbia, MO, USA
e-mail: holmessr@missouri.edu

A.L. Witte, Ph.D. • S.M. Sheridan, Ph.D.
Nebraska Center for Research on Children, Youth, Families and Schools, University of Nebraska-Lincoln, Lincoln, NE, USA
e-mail: awitte2@unl.edu; ssheridan2@unl.edu



K.D. Michael, J.P. Jameson (eds.), *Handbook of Rural School Mental Health*,
DOI 10.1007/978-3-319-64735-7_17

associated with service delivery in rural schools; and (3) establishing CBC as a method to address the identified barriers. The chapter concludes with a discussion of implementing CBC in rural schools and associated areas for future research.

## Family-School Partnerships in Rural Communities

Children's learning and development occur across many settings and contexts. Maximizing the extent to which home and school systems work together on behalf of children can enhance student success. By sending children consistent messages about academic and behavioral values and expectations, parents and teachers can positively impact students' mental and behavioral health. To create optimal developmental conditions and to alleviate mental health concerns, parents and teachers should capitalize on what happens both in school and out of school, and create seamless and mutually supportive connections and continuities across the home and school systems.

Methods to engage families and schools to work together to support children's development and learning have been associated with positive academic (e.g., improvements in standardized test scores and homework completion) and behavioral (e.g., reductions in disruptive behaviors and fewer school-related disciplinary actions) outcomes for children (for review see Fan & Chen, 2001). In fact, families can be involved in their children's education in a variety of ways, ranging from parental engagement practices that emphasize parents' efforts to support what schools do to promote learning to collaborative practices that focus on building positive working relationships between families and schools to address students' academic and behavior difficulties (i.e., family-school partnerships). Parental engagement has been conceptualized as multidimensional construct consisting of six broad categories of activities: parenting (e.g., creating home environments that support student learning and development), communicating (e.g., home-school communication about students' progress and school programs), volunteering (e.g., parents helping at the school), learning at home (e.g., parents helping with homework), decision making (e.g., including families in making school-level and student-level decisions), and collaborating with the community (e.g., being involved in community activities; Epstein, 1995, 2001). Whereas engagement activities emphasize what families and schools do in isolation to support learning and development, family-school partnership models emphasize the bidirectional relationship between families and schools, and intend to enrich student outcomes through coordinated and consistent cross-system supports (Albright & Weissberg, 2010; Downer & Myers, 2010; Lines, Miller, & Arthur-Stanley, 2011).

Documented positive effects for schools are evident when both family-school partnership and parental engagement practices are infused into school policies and procedures. In fact, data from 300 US schools' practices revealed that schools with high-quality family engagement programs had greater numbers of parent volunteers and greater levels of parent participation in school decision-making committees (Sheldon & Van Voorhis, 2004). Moreover, schools with parental engagement programs demonstrate greater levels of student performance and achievement. For example, data analyzed from 113 urban elementary schools serving primarily low-income student bodies uncovered a significant relationship between efforts to build relationships with all families in the school (e.g., through clear communication with families, providing families with information when they are unable to attend school meetings, providing opportunities to volunteer at school) and student scores on the Maryland School Performance Assessment Program standardized tests of reading, writing, language usage, math, science, and social studies (Sheldon, 2003). Furthermore, in an investigation of 47 elementary and secondary schools' family and community involvement practices, it was shown that high-quality home-school connections (e.g., conducting workshops or meetings for parents about school procedures, involving parents and community members to improve school safety and make decisions about

school policies, providing interactive homework assignments) were linked to fewer disciplinary problems (i.e., a lower percentage of students sent to principal's office) and significant decreases in detentions and in-school suspensions (Sheldon & Epstein, 2002).

In addition to the school-level outcomes of family engagement, when families and schools work together, students benefit emotionally, academically, and behaviorally. Using qualitative case study data to evaluate the value of home visits by school social workers, Allen and Tracy (2004) found that students with strong home-school connections simply liked school more. Moreover, various studies have shown that family-school partnership interventions are associated with positive academic outcomes for children, including significant gains in kindergarten students' math and reading achievement (Galindo & Sheldon, 2012), fewer grade retentions for preschool and kindergarten students (Miedel & Reynolds, 1999), and a substantially lower likelihood of dropping out of high school (Barnard, 2004). Family-school partnership interventions have also shown to contribute to reductions in children's disruptive behaviors, such as fewer maladaptive emotional outbursts in a small group of students identified with various mental health difficulties (e.g., bipolar disorder, attention-deficit hyperactivity disorder, oppositional defiant disorder, depression, autism spectrum disorder; Pearce, 2009), and significant decreases in elementary and middle school students' (117 kindergarten through sixth grade) attention-deficit hyperactivity disorder (ADHD) symptoms (Owens, Murphy, Richerson, Girio, & Himawan, 2008).

Findings are consistent. Quality connections between families and schools result in positive outcomes for students regardless of ethnicity, language, disability status, and socioeconomic status (SES). In fact, family-school partnerships are especially important in rural schools. Individual studies focused on rural schools highlight the benefits of family-school partnerships in these communities. In a study of high-performing, high-needs rural schools, supportive relationships with families and communities were among the most important factors associated with school success (Barley & Beesley, 2007). Strong parent involvement was identified as one of the six key components that influence rural school success (Bauch, 2001). In a study of 90 rural African-American youth between the ages of 9 and 12, maternal involvement in children's education was linked directly to academic competence (e.g., reading and math grades) and mediated the relationship between low education and SES and students' self-regulation and academic skills (Brody, Stoneman, & Flor, 1995). Similarly, a longitudinal investigation of 50 rural migrant, primarily Hispanic families revealed that family involvement training resulted in higher language scores relative to students in the control group (i.e., families not participating in the parent involvement training program; St. Clair, Jackson, & Zweiback, 2012). Moreover, in a study examining factors of rural Appalachian students' college enrollment, successful school efforts to involve parents were identified as among most influential factors in students' decisions to attend college (King, 2012).

Rural schools that fail to effectively partner with parents not only risk diminishing their ability to serve students but also risk wasting a valuable and abundant resource—parents. In a study of rural school involvement, Smith, Stern, and Shatrova (2008) found that even though Hispanic parents care about their children's education and want to be involved, they often feel alienated by their rural community schools. The result is schools, already suffering from a lack of resources, underutilize a significant segment of the community that represents a valuable human resource.

## Challenges to Delivering Services in Rural Schools

Family-school partnership interventions appear to be promising treatments for rural students with mental health concerns. However, creating quality relationships between families and schools in rural settings is often challenging. Interrelated factors, such as geographic isolation, a lack of family and school resources, and stigma, can make it difficult for families and schools to collaboratively meet rural students' needs.

## Isolation and Limited Resources

By definition, rural communities are geographically isolated, creating a unique set of challenges for parents and educators to appropriately address students' mental health difficulties (Johnson & Strange, 2007). Often specialized mental health services are simply unavailable in rural communities. For example, of all the U.S. Department of Health and Human Services' (2011) designated mental health-care shortage areas, 60% are located in rural regions. Moreover, recent school consolidations have increased the distance from homes to schools for many rural families (Phillips, Harper, & Gamble, 2007). In fact, in a study of Florida's rural schools, long distances between home and school, lack of transportation, and limited access to child care were found to reduce parents' involvement in school activities (Weiss & Correa, 1996).

Limited resources in rural communities further complicate issues related to geographic isolation. Rural families are more likely to experience poverty than non-rural families. Nineteen percent of rural school children live in poverty (Afterschool Alliance, 2004) and 31% of rural elementary school students are eligible for free or reduced lunches (Smith & Savage, 2007). Poor rural families—those most in need of mental health and other services—are less likely to own a reliable vehicle than non-poor rural families. Poor rural families who do own a vehicle are constrained by the rises in gasoline prices because they must travel greater distances to access basic needs and have fewer choices in gas stations (Brown & Stommes, 2004).

In rural schools, geographic isolation creates structural challenges, including a lack of professional development opportunities, limited on-site support (Monk, 2007), and limited facilities (Malhoit, 2005). Teacher turnover is high in rural school and as a result these schools are more likely to have a lower than average share of highly trained teachers (Lowe, 2006; Monk, 2007). Specialized school staff, including school psychologists and special educators, tend to work across several districts making them unavailable on a regular basis (Curtis, Hunley, & Grier, 2004; McLeskey, Huebner, & Cummings, 1986). Moreover, rural schools generally lack integrated, systemic methods for addressing students' behavioral and emotional disabilities (Thornton, Hill, & Usinger, 2006). As a result, rural educators are often the only readily available mental health resource, yet they are less equipped to provide mental health services than their non-rural counterparts (Arnold, Newman, Gaddy, & Dean, 2005; Howley & Howley, 2004).

## Lack of Privacy and Stigma

Some researchers have speculated that multiple relationships among rural community members and a lack of privacy contribute to the mistrust of rural mental health professionals (Sawyer, Gale, & Lambert, 2006). Rural communities have closely connected professional and social networks, which enable personal information to spread quickly among community members. Individuals considering mental health services for themselves or their children may fear that family members, friends, and colleagues will discover their situation (Larson & Corrigan, 2010). Moreover, rural community members typically have multiple relationships with each other (e.g., serve together on committees, attend the same church) making it difficult to maintain privacy. Even when mental health services are available, rural mental health providers cannot avoid contact with their clients beyond the therapeutic environment (Osborn, 2012), yet individuals seeking mental health services outside the local community in order to preserve privacy face difficulties associated with cost, transportation, and travel time.

The cultural emphasis on self-reliance in rural communities can also discourage individuals from seeking help for mental health difficulties (Osborn, 2012). Stigma, a perceived flaw resulting from a personal characteristic viewed as socially unacceptable (Blaine, 2000), is often associated with the identification of and treatment for mental health needs. Rural communities are particularly susceptible to the negative impact of stigma (Beloin & Peterson, 2000;

Owens, Richerson, Murphy, Jageleweski, & Rossi, 2007). For parents of children with mental and behavioral health concerns, stigma may influence whether or not to pursue treatment for their children if doing so might result in feelings of shame about themselves (e.g., being judged as a bad parent) or shame for their children (Dempster, Wildman, & Keating, 2012). Generally, the lower the degree of stigma perceived by parents the more likely they are to seek mental health treatment for their children (Corrigan, 2004). However, the severity of child symptoms may influence this relationship. There is some evidence to indicate that parents may weigh the perceived stigma of having a child with behavior problems against the perceived stigma of receiving mental health treatment (Dempster et al., 2012). In rural communities, parents must often choose the lesser of two evils—being judged for raising a "difficult" child or being judged for seeking mental health services.

## Conjoint Behavioral Consultation

Despite the challenges faced in rural communities, rural school staff tends to be dedicated to partnering with parents, have flexible attitudes about the role of schools, and are prepared to creatively meet the needs of students. Furthermore, rural parents often have a strong work ethic and a commitment to working as a team for mutual benefit (Wright, 2003). In fact, services delivered through formal community sources, such as primary health care or schools, are viewed as more acceptable than specialized mental health services in rural settings (Girio-Herrera, Sarno Owens, & Langberg, 2013). Methods that incorporate rural communities' strengths and are sensitive to challenges faced in rural communities are particularly promising to address students' emotional and behavioral needs. One model that may bypass some of the identified challenges by building on rural parents' and educators' strengths, promoting skill development and collaboration, and using acceptable and convenient meeting places (i.e., home, school) is conjoint behavioral consultation (CBC; Sheridan & Kratochwill, 2008; also known as Teachers and Parents as Partners; TAPP; Sheridan, 2014).

CBC is a structured indirect intervention focused on reducing childhood behavior problems, increasing adaptive skills, and enhancing family-school partnerships to promote continuity and collaboration in support of student functioning across systems. CBC is predicated on Bronfenbrenner's (1986) ecological-developmental theory. The theory posits that the home and school systems (i.e., microsystems) and the relationships between them (i.e., mesosystem) are primary sources of influence on children's development. As such, children's social and behavioral competencies are a function of not only immediate sources and settings, but also of the relationships between those systems.

## CBC Features, Objectives, and Stages

Through CBC, parents and teachers, as key partners in educational decision making, actively participate in behavioral intervention planning for children via collaborative home-school interactions. During the CBC process (lasting approximately 8 to 12 weeks) parents and teachers serve as joint consultees and attend meetings facilitated by CBC consultants. Under the guidance of the consultants (i.e., trained specialists), parents and teachers identify, define, analyze, and treat students' social-behavioral problems with the goals of (1) effectively addressing children's behavioral concerns and promoting prosocial skills; (2) supporting consultees' meaningful engagement and participation in children's development; and (3) establishing and strengthening family-school partnerships.

Structurally, CBC is conducted via a four-stage process operationalized by semi-structured conjoint (i.e., parent and teacher) meetings. The CBC stages are *Building on Strengths* (needs identification and analysis), *Planning for Success* (cross-system plan development), *Plan Implementation*, and *Checking and Reconnecting* (plan evaluation). See Table 17.1 for a summary of individual CBC stages and corresponding objectives and Sheridan and Kratochwill (2008)

**Table 17.1** Objectives of conjoint behavioral consultation stages

| Stage | Objectives |
|---|---|
| Building on strengths (needs identification/ analysis) | • Determine target behavior for initial intervention |
| | • Mutually develop achievable goals across home and school |
| | • Discuss antecedents and consequences of the target behavior, as well as setting patterns, during the identified time and setting |
| | • Collaboratively establish procedures to collect baseline data across settings |
| Planning for success (plan development) | • Jointly develop plans at home and school that build on students' strengths and address the target behavior |
| | • Teach parents and teachers to implement plans |
| Plan implementation | • Parents and teachers implement interventions |
| | • Assess immediate changes in student's behavior and make modifications based on student's response |
| Checking and reconnecting (plan evaluation) | • Determine if the goals have been met |
| | • Evaluate elements of the plan |
| | • Discuss continuation, modification, or termination of plan and schedule additional interviews when appropriate |

for a detailed description of the model and supplemental materials.

During the first CBC stage, the consultant conducts the *Building on Strength Interview* to (a) discuss family, school, and child strengths; (b) specify behavioral targets and goals; and (c) establish data collection procedures for parents and teachers to use in collaborative problem solving. Target behaviors are operationally defined in a collaborative, mutually agreeable manner. Systematic data collection procedures are used by parents and teachers throughout the CBC process allowing for repeated, functional behavioral information to be available for treatment planning and monitoring. Parents and teachers also note patterns (e.g., common antecedents and consequences, situational events) associated with children's mental and behavioral health. Behavioral data contributed by parents, teachers, and consultants are used by the team to determine the function and patterns of behavior, inform relevant and effective behavioral plan development (determined in the second stage), and guide the team in data-based decision making.

During the second stage, the consultant conducts the *Planning for Success Interview*. In the meeting, the consultant, parent, and teacher (a) review data collected; (b) conduct a functional assessment to determine the functions of the problematic behaviors and setting conditions influencing them; and (c) develop behavioral plans grounded in evidence-based practice and linked to functions and setting conditions. Plans are individualized for each child to include (1) components to address the function of the targeted behavior; (2) a potent reward system; and (3) a procedure for maintaining frequent contact between home and school.

During the plan implementation stage, parents and teachers implement the behavior plan at home and school. Closely monitoring and supporting consistent and accurate implementation of plan protocols is a critical component of this CBC stage. If plan protocols are not implemented with fidelity, the effectiveness of CBC will be compromised. Support for behavioral strategies is integrated into CBC to monitor and support the fidelity with which behavioral plans are implemented by parents and teachers. Specifically, consultants provide in-home and in-classroom support to parents and teachers through direct instruction, modeling, and performance feedback regarding parents' and teachers' use of the intervention strategies. Monitoring fidelity allows consultants to work with parents and teachers to overcome barriers to effective plan implementation and either provide targeted support or training for individual plan strategies, provide motivation for effective implementation, or modify the plan to make it more acceptable.

During the fourth stage of CBC, the consultant conducts the *Checking and Reconnecting Interview* wherein the CBC team reviews and analyzes behavioral data collected by parents and teachers.

Progress toward goals is evaluated in relation to baseline levels of performance. Decisions regarding modifications to the plan are made based on the student's response to the intervention as reflected in the data collected during plan implementation. For children whose goals have not been met, or for whom little to no progress is noted, additional analyses of the behavioral observation and plan fidelity data are performed. Individualized modifications to intervention plans are made until attainment of goals is achieved. For children whose goals have been met, the CBC team may decide to identify new target behaviors or extend intervention plans into other times of the day. Alternatively, the CBC team may decide to continue to implement strategies to maintain the progress already made, or to gradually withdraw the plan and encourage maintenance of effects.

Throughout the entire CBC process, consultants use relationship-building strategies to foster collaboration, mutual decision making, and joint responsibility among the consultation team (Sheridan, Rispoli, & Holmes, 2014). To help develop working relationships between parents and teachers, consultants encourage active participation and cooperation among parents and teachers (e.g., by providing supportive, affirming, and validating statements), demonstrate sensitivity and responsiveness to information shared by consultees (e.g., by working to understand family and school culture), and reinforce consultees' skills and competencies. Consultants ensure that the consultation team communicates effectively by using clear, inclusive language and nonverbal communication to establish a welcoming and supportive atmosphere, share information with consultees that is relevant to the child's development, and establish methods and procedures by which parents and teachers can communicate consistently. Moreover, consultants establish shared responsibility for promoting positive and consistent outcomes related to child development among the team by discussing and defining each team member's role at the outset of consultation, emphasizing the contribution of all participants, and encouraging parents and teachers to share their perceptions throughout the process.

## CBC Research Support

Decades of experimental single case, group design, and randomized controlled trial research supports CBC as an efficacious treatment to alleviate children's mental and behavioral health concerns *and* build the capacity for families and schools to collaboratively address these concerns. In a review of family-school and parent consultation interventions, Guli (2005) identified CBC as an evidence-based intervention, which holds promise for ameliorating students' problems. Through the use of single-case methodology, CBC has been found to outperform other consultation interventions, including teacher-only consultation (Sheridan, Kratochwill, & Elliott, 1990) and self-training manuals (Galloway & Sheridan, 1994), in reducing young children's (e.g., prekindergarten through third-grade students) social (e.g., withdrawal and internalizing difficulties) and learning problems (e.g., homework completion and accuracy difficulties). Moreover, in an experimental investigation examining the effect of CBC procedures with kindergarten and first-grade students with ADHD, CBC was also found to be superior to a psychoeducational parent support group with participating teachers reporting significant reductions (ES = 0.84) in students' ADHD and oppositional defiant disorder (ODD) symptoms (Mautone et al., 2012).

CBC has been shown to remediate academic performance deficits (i.e., improvements in homework completion for students at risk of academic failure; Weiner, Sheridan, & Jenson, 1998) and internalizing concerns (i.e., sleep problems; Sheridan & Colton, 1994). Using a noncurrent multiple baseline design, Wilkinson (2005) reported the positive effects of CBC for two students with disruptive behavior concerns. Teachers reported a significant increase (i.e., 64% mean behavioral improvement) in rates of student academic engagement and compliance from baseline to treatment and the positive treatment effects maintained at 4 weeks following the intervention.

A large-scale randomized trial testing the efficacy of CBC for promoting behavioral competence and decreasing problem behaviors of students with behavioral concerns found that, relative to

the "business-as-usual" control group (i.e., students receiving traditional school support or services solicited outside of the school), students who received CBC demonstrated greater increases in teacher-rated adaptive skills ($d$ = 0.39) and social skills ($d$ = 0.42 for parent-reported social skills, $d$ = 0.47 for teacher-reported social skills; Sheridan, Bovaird et al., 2012).

In addition to student outcomes, CBC is associated with improvements in parent-teacher relationships. Pre- to post-test analyses of the parent-teacher relationship revealed that CBC significantly improved parent perceptions of the quality of parent-teacher relationships when used to address various academic (e.g., reading skills, math skills, language skills) and behavioral difficulties (e.g., noncompliance, tantruming, anxiety) in 48 Head Start students (Sheridan, Clarke, Knoche, & Edwards, 2006). In a randomized clinical trial investigating a family-school intervention that included a CBC component for treating 199 students with ADHD, Power et al. (2012) found that when compared to the control group (i.e., parents in a psychoeducational support group), parents and teachers who received CBC reported significant increases in the quality of the family-school relationship (ES = 0.28) three months following participation in the intervention. Similarly, Sheridan, Bovaird et al. (2012) found that teachers who received CBC reported significant improvement in their relationships with parents ($d$ = 0.47). In fact, in that same study, the parent-teacher relationship partially mediated the effect of CBC on children's adaptive and social skills (Sheridan, Bovaird et al., 2012).

## CBC in Rural Communities

Our research team recently completed a randomized controlled trial examining the efficacy of CBC specifically in rural communities. Results suggest promising effects of CBC for students with behavioral challenges in rural schools (Sheridan, Witte, Holmes, Coutts et al., 2017). For the 267 kindergarten through third-grade students and their parents and teachers, analyses revealed that rural children who received CBC demonstrated better behavioral outcomes, including significant reductions in teacher reports of school problems ($d$ = 0.45) relative to students who did not participate in CBC, but had access to traditional supports to address their behavior concerns (i.e., business-as-usual control group; Sheridan, Witte, Holmes, Coutts et al., 2017). Classroom observations revealed that relative to the control group, students whose parents and teachers participated in CBC demonstrated gains in on-task ($d$ = 0.43), and appropriate social behavior ($d$ = 0.28), as well as declines in off-task behavior ($d$ = 0.46) and motor movement ($d$ = 0.37) that outpaced their control group counterparts (Sheridan, Witte, Holmes, Coutts et al., 2017).

Rural students' behaviors at home also improved (Sheridan, Witte, Holmes, Wu et al., 2017). Parents reported significant improvements in adaptive ($d$ = 0.22) and social skills ($d$ = 0.56) for students in the CBC group relative to controls. Rural parents' daily reports of their children's behavior revealed decreases in aggressive behavior ($d$ = 0.29), noncompliance ($d$ = 0.33), and temper tantrums ($d$ = 0.34) that significantly outpaced children in the control group.

The preliminary effects appear to extend beyond student outcomes to promote positive changes in the adults responsible for children's well-being (Sheridan, Witte, Holmes, Coutts et al., 2017; Sheridan, Witte, Holmes, Wu et al., 2017). That is, parents and teachers who collaborated via CBC reported greater improvements in their home-school relationship than the parents and teachers in the control group ($d$ = 0.51 and $d$ = 0.46 for parent and teacher reports, respectively). Additionally, CBC parents and teachers reported significant improvements in their ability to engage in structured problem solving to address their children's behavior concerns at a rate that outpaced those in the control group ($d$ = 0.84 and $d$ = 1.05 for parent and teacher reports, respectively; Sheridan, Witte, Holmes, Coutts et al., 2017; Sheridan, Witte, Holmes, Wu et al., 2017). Teachers also demonstrated improvements relative to controls in their self-reported use of appropriate strategies in the classroom ($d$ = 0.69), and observations of their use of positive attention ($d$ = 0.51) and delivery of

tangible consequences ($d = 0.72$; Sheridan, Witte, Holmes et al., 2016). These encouraging findings add to the growing evidence base that CBC is an effective intervention for children, families, and schools across different settings (e.g., rural, urban) and are consistent with previous research (Sheridan, Bovaird et al., 2012) that shows that CBC has a positive effect on children's behavior and relationships between families and schools.

The unique challenges associated with service delivery in rural schools may be partly addressed through the relational and structural features of the CBC process (Sheridan, Holmes, Coutts, & Smith, 2012). That is, relational partnership-building strategies used by CBC consultants, such as frequent communication, constructive problem solving, and mutual input toward shared solutions, may increase trust and alter negative attitudes between families and schools. Structural features, such as teaching parents and teachers to be effective interventionists, improving their use of evidence-based strategies and practices, and facilitating the process in natural meeting places (e.g., home, school), may help to provide rural students with access to consistent and reliable services.

## Future Research Directions

Children living in rural communities are uniquely positioned to benefit from mental and behavioral health services through CBC. Determining the most useful methods for delivering CBC in diverse rural communities is necessary to advance the effectiveness of CBC. Certain issues related to the use of outside providers, training, and cost create challenges that need to be considered to uncover techniques for rural schools to successfully implement CBC. As a result, we believe that future investigations should explore at least three lines of research: (1) empirically examine the transportability of CBC in rural schools when the model is taken to scale; (2) discern unique features of rural schools and families that influence the implementation of CBC; and (3) explore alternative methods of delivering CBC services.

For the past several years, our research team has been testing the efficacy of CBC in rural communities. By nature, this type of research has relied on highly controlled and rigorous experimental methods. Despite the evidence supporting the utility of CBC in rural schools, issues related to the resources required to implement CBC will likely create challenges when practitioners within schools attempt to implement the model. Currently no research has examined CBC when it is taken to scale, that is, when CBC is handed over to natural treatment agents (i.e., school personnel) to implement without researcher support. Such research is particularly important in rural settings where accessible and available specialized services are scarce (DeLeon, Wakefield, & Hagglund, 2003). This line of research can empirically determine whether CBC can be adopted and executed with fidelity by rural school staff and infused within existing school cultures and procedures (e.g., pre-referral teams). Further, this line of research allows for investigations into the unique features of rural settings that impact the implementation of CBC. It is likely that contextual and cultural characteristics of rural areas will influence the manner in which CBC is put into practice. Discerning the distinct attributes of rural schools and families will allow researchers to determine the mechanisms through which CBC operates in these settings (i.e., the operative elements of CBC that lead to producing desirable child, parent, and teacher outcomes in rural areas; Sheridan et al., 2014).

Another issue associated with the transportability of CBC concerns the training required for implementation. Previous CBC research has relied on research institution staff, trained in the CBC model, to serve as consultants in rural schools. CBC consultants have knowledge of collaborative problem-solving procedures, functional assessment, evidence-based interventions, and data-based decision making and, as a result, effectively implementing the model requires extensive instruction. CBC consultants working on research projects complete a rigorous, criterion-based training program. Consultants attend didactic training sessions where they receive instruction in building collaborative, partnership-oriented consultation teams; facilitating CBC meetings; supporting intervention

plan delivery; and monitoring student progress. During training, consultants practice CBC skills by completing several role-plays where they receive feedback from veteran consultants and CBC researchers. Continued supervision is provided after consultants complete training and begin casework. However, outside of grant-funded research programs, specialized CBC consultants are often unavailable to rural schools and families. The natural treatment agents who organically reside in rural communities (e.g., teachers, school counselors) hold promise as CBC service providers; however, rural school staff often have multiple roles within the school (e.g., teachers and coaches). To date, little is known about the extent to which school personnel in rural schools can be trained in and implement CBC in a manner that does not overtax the school system's capacity.

Cutting across all the concerns are the costs associated with delivering CBC services. By definition, CBC requires a series of meetings and ongoing interactions between consultants and parents, teachers, and students. As a result, consultants visit students' schools and homes throughout the process to support individual intervention implementation and monitor progress. High costs associated with travel to and from schools and homes in rural areas make implementing CBC in its current form difficult. Alternative methods of service delivery (i.e., in addition to using natural treatment agents), such as tele-health systems, may provide low-cost methods to deliver CBC services in rural communities. However, the utility of such procedures for providing CBC services has not been explored. A worthy line of research would examine the effectiveness, feasibility, and acceptability of using tele-health approaches to implement CBC.

## Conclusion

Family-school partnership programs provide well-established methods for remediating social and behavioral problems for children. Cultural traits (e.g., flexible attitudes, commitment to working together) of rural communities make them uniquely positioned to benefit from such services; however, certain contextual (e.g., isolation) and relational (e.g., lack of privacy) characteristics create challenges to delivering services in rural schools. Recent evidence suggests that CBC is effective for addressing the mental health challenges of rural students (Sheridan, Witte, Holmes, Coutts et al., 2017). In fact, particular features of CBC (e.g., partnership-oriented strategies, use of natural treatment agents) may build on the strengths of rural parents and teachers and circumvent some of the issues associated with service delivery in these areas (e.g., lack of resources). Several promising lines for future research in this area can help to further discern the most effective methods for utilizing CBC in rural communities to support the mental and behavioral health of children.

## References

Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin*, *101*, 213–232. doi:10.1037/0033-2909.101.2.213

Albright, M. I., & Weissberg, R. P. (2010). Family-school partnerships to promote social and emotional learning. In S. L. Christenson & A. L. Reschly (Eds.), *Handbook of school–family partnerships* (pp. 246–265). New York, NY: Routledge.

Allen, S. F., & Tracy, E. M. (2004). Revitalizing the role of home visiting by school social workers. *Children and Schools*, *26*, 197–208. doi:10.1093/cs/26.4.197

Alliance, A. (2004). Afterschool programs meet the needs of youth in rural America. *Afterschool Alert Issue Brief*, *4*, 1–2. Retrieved from http://www.statewideafterschoolnetworks.net/afterschool-programs-meet-needs-youth-rural-america

Arnold, M. L., Newman, J. H., Gaddy, B. B., & Dean, C. B. (2005). A look at the condition of rural education research: Setting a difference for future research. *Journal of Research in Rural Education*, *20*, 1–25.

Barley, Z. A., & Beesley, A. D. (2007). Rural school success: What can we learn*? Journal of Research in Rural Education*, *22*, 1–16.

Barnard, W. M. (2004). Parent involvement in elementary school and educational attainment. *Children and Youth Services Review*, *26*, 39–62. doi:10.1016/j.childyouth.2003.11.002

Bauch, P. A. (2001). School-community partnership in rural schools: Leadership, renewal, and a sense of

place. *Peabody Journal of Education*, *76*(2), 204–221. doi:10.1207/S15327930pje7602_9

Beloin, K., & Peterson, M. (2000). For richer or poorer: Building inclusive schools in poor urban and rural communities. *International Journal of Disability, Development and Education*, *47*, 15–24. doi:10.1080/103491200116101

Blaine, B. (2000). *The psychology of diversity: Perceiving and experiencing social difference*. Mountain View, CA: Mayfield.

Bradshaw, C., Schaeffer, C., Petras, H., & Ialongo, N. (2010). Predicting negative life outcomes from early aggressive-disruptive behavior trajectories: Gender differences in maladaptation across life domains. *Journal of Youth and Adolescence*, *39*, 953–966. doi:10.1007/s10964-009-9442-8

Brody, G. H., Stoneman, Z., & Flor, D. (1995). Linking family processes and academic competence among rural African American youths. *International Journal of Disability, Development and Education*, *47*, 15–24. doi:10.2307/353913

Bronfenbrenner, U. (1986). Recent advances in research on the ecology of human development. In R. K. Silbereisen, K. Eyferth, & G. Rudinger (Eds.), *Development as action in context: Problem behavior and normal youth development* (pp. 287–309). New York: Springer-Verlag.

Brown, D., & Stommes, E. (2004). Rural governments face public transportation challenges and opportunities. *Amber Waves*, *2*, 1–2.

Corrigan, P. W. (2004). How stigma interferes with mental health care. *American Psychologist*, *59*, 614–625. doi:10.1037/0003-066X.59.7.614

Curtis, M. J., Hunley, S. A., & Grier, E. C. (2004). The status of school psychology: Implications of a major personnel shortage. *Psychology in the Schools*, *41*, 431–442. doi:10.1002/pits.10186

DeLeon, P. H., Wakefield, M., & Hagglund, K. J. (2003). *The behavioral health care needs of rural communities*. Washington, DC: American Psychological Association.

Dempster, R., Wildman, B., & Keating, A. (2012). The role of stigma in parental help-seeking for child behavior problems. *Journal of Clinical Child and Adolescent Psychology*, *42*, 56–67. doi:10.1080/15374416.2012.700504

Downer, J. T., & Myers, S. S. (2010). Application of a developmental/ecological model to family-school partnerships. In S. L. Christenson & A. L. Reschly (Eds.), *Handbook of school–family partnerships* (pp. 3–29). New York, NY: Routledge.

Epstein, J. L. (1995). School/family/community partnerships: Caring for the children we share. *Phi Delta Kappan*, *76*, 701–712.

Epstein, J. L. (2001). *School, family, and community partnerships: Preparing educators and improving schools*. Boulder, CO: Westview.

Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, *13*, 1–22.

Fergusson, D. M., Horwood, L. J., & Ridder, E. M. (2005). Show me the child at seven: The consequences of conduct problems in childhood for psychosocial functioning in adulthood. *Journal of Child Psychology and Psychiatry*, *46*, 837–849. doi:10.1111/j.1469-7610.2004.00387.x

Galindo, C., & Sheldon, S. B. (2012). School and home connections and children's kindergarten achievement gains: The mediating role of family involvement. *Early Child Research Quarterly*, *27*, 90–103. doi:10.1016/j.ecresq.2011.05.004

Galloway, J., & Sheridan, S. M. (1994). Implementing scientific practices through case studies: Examples using home-school interventions and consultation. *Journal of School Psychology*, *32*, 385–413. doi:10.1016/0022-4405(94)90035-3

Girio-Herrera, E., Sarno Owens, J., & Langberg, J. M. (2013). Perceived barriers to help-seeking among parents of at-risk kindergarteners in rural communities. *Journal of Clinical Child and Adolescent Psychology*, *42*, 68–77. doi:10.1080/15374416.2012.715365

Guli, L. A. (2005). Evidence-based parent consultation with school-related outcomes. *School Psychology Quarterly*, *20*, 455–472. doi:10.1521/scpq.2005.20.4.455

Howley, C. B., & Howley, A. A. (2004). School size and the influence of socioeconomic status on student achievement: Confronting the threat of size bias in national data sets. *Education Policy Analysis Archives*, *l2*, 1–35. doi:10.14507/epaa.v12n52.2004

Johnson, J., & Strange, M. (2007). *Why rural matters 2007: The realities of rural education growth*. Rural School and Community Trust: Washington, DC.

King, S. B. (2012). Increasing college-going rate, parent involvement, and community participation in rural communities. *Rural Educator*, *33*, 20–26.

Kokko, K., Tremblay, R. E., Lacourse, E., Nagin, D. S., & Vitaro, F. (2006). Trajectories of prosocial behavior and physical aggression in middle childhood: Links to adolescent school dropout and physical violence. *Journal of Research on Adolescence*, *16*, 403–428. doi:10.1111/j.1532-7795.2006.00500.x

Larson, J. E., & Corrigan, P. W. (2010). Psychotherapy for self-stigma among rural clients. *Journal of Clinical Psychology*, *66*, 525–536. doi:10.1002/jclp.20679

Leonardson, J. D., Ziller, E. C., Lamber, D., Race, M. M., & Yousefian, A. Y. (2010). Access to mental health services and family impact of rural children with mental health problems. *Rural Health Research & Policy Centers*, *45*, 1–15.

Lines, C., Miller, G. E., & Arthur-Stanley, A. (2011). *The power of family-school partnering (FSP): A practical guide for school mental health professionals and educators*. New York, NY: Routledge/Taylor & Francis Group.

Lowe, J. M. (2006). Rural education: Attracting and retaining teachers in small schools. *The Rural Educator*, *27*, 28–32.

Malhoit, G. C. (2005). *Providing rural students with a high quality education: The rural perspective on the*

*concept of educational adequacy*. Arlington: Rural School and Community Trust. Retrieved from http://www.ruraledu.org/articles.php?id=2057

Mautone, J. A., Marshall, S. A., Sharman, J., Eiraldi, R. B., Jawad, A. F., & Power, T. J. (2012). Development of a family-school intervention for young children with attention deficit hyperactivity disorder. *School Psychology Review*, *41*, 447–466.

McLeskey, J., Huebner, E. S., & Cummings, J. A. (1986). Rural school psychology in the United States: Practitioners' perspectives from selected states. *School Psychology International*, *2*, 20–26.

Merikangas, K. R., He, J., Burstein, M., Swanson, S. A., Avenevoli, S., Cu, L., … Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: Results for the national comorbidity study-adolescent supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, *49*, 980–989. doi:10.1016/j.jaac.2010.05.017

Miedel, W. T., & Reynolds, A. J. (1999). Parent involvement in early intervention: Does it matter? *Journal of School Psychology*, *37*, 379–402.

Monk, D. (2007). Recruiting and retaining high-quality teachers in rural areas. *The Future of Children*, *17*, 155–174. doi:10.1353/foc.2007.0009

Osborn, A. (2012). Juggling personal life and professionalism: Ethical implications for rural school psychologists. *Psychology in the Schools*, *49*, 876–882. doi:10.1002/pits.21642

Owens, J. S., Murphy, C. E., Richerson, L., Girio, E. L., & Himawan, L. K. (2008). Science to practice in underserved communities: The effectiveness of school mental health programming. *Journal of Clinical Child and Adolescent Psychology*, *37*, 434–447. doi:10.1080/15374410801955912

Owens, J. S., Richerson, L., Murphy, C. E., Jageleweski, A., & Rossi, L. (2007). The parent perspective: Informing the cultural sensitivity of parenting programs in rural communities. *Child & Youth Care Forum*, *36*, 179–194. doi:10.1007/s10566-007-9041-3

Pastor, P. N., Reuben, C. A., & Duran, C. R. (2012). Identifying emotional and behavioral problems in children aged 4–17 years: United States, 2001–2007. *National Health Statistics Reports*, *48*, 1–17.

Pearce, L. R. (2009). Helping children with emotional difficulties: A response to intervention investigation. *The Rural Educator*, *30*, 34–46.

Phillips, R., Harper, S., & Gamble, S. (2007). Summer programming in rural communities: Unique challenges. *New Directions for Youth Development*, *114*, 65–73. doi:10.1002/yd.213

Power, T. J., Mautone, J. A., Soffer, S. A., Clarke, A. T., Marshall, S. A., Sharman, J., … Jawad, A. F. (2012). A family–school intervention for children with ADHD: Results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology*, *80*, 611–623. doi:10.1037/a0028188

President's New Freedom Commission on Mental Health. (2003). *Executive summary*. Rockville, MD: Authors.

Reef, J., Diamantopoulou, S., van Meurs, I., Verhulst, F. C., & van der Ende, J. (2011). Developmental trajectories of child to adolescent externalizing behavior and adult DSM-IV disorder: Results of a 24-year longitudinal study. *Social Psychiatry and Psychiatric Epidemiology*, *46*, 1233–1241. doi:10.1007/s00127-010-0297-9

Sawyer, D., Gale, J., & Lambert, D. (2006). Rural and Frontier mental and behavioral health care: Barriers, effective policy strategies, best practices. *National Association for rural Mental Health* (NARMH). Retrieved from http://www.narmh.org/publications/archives/rural_frontier.pdf.

Sheldon, S. B. (2003). Linking school-family-community partnerships in urban elementary schools to student achievement on state tests. *The Urban Review*, *35*, 149–165.

Sheldon, S. B., & Epstein, J. L. (2002). Improving student behavior and discipline with family and community involvement. *Education and Urban Society*, *35*, 4–26. doi:10.1177/001312402237212

Sheldon, S. B., & Van Voorhis, F. L. (2004). Partnership programs in U.S. schools: Their development and relationship to family involvement outcomes. *School Effectiveness and School Improvement*, *15*, 125–145. doi:10.1076/sesi.15.2.125.30434

Sheridan, S. M. (2014). *The tough kid: Teachers and parents as partners*. Eugene, OR: Pacific Northwest Publishers.

Sheridan, S. M., Bovaird, J. A., Glover, T. A., Garbacz, S. A., Witte, A., & Kwon, K. (2012). A randomized trial examining the effects of conjoint behavioral consultation and the mediating role of the parent-teacher relationship. *School Psychology Review*, *41*, 23–46.

Sheridan, S. M., Clarke, B. L., Knoche, L. L., & Edwards, C. P. (2006). The effects of conjoint behavioral consultation in early childhood settings. *Early Education and Development*, *17*, 593–618. doi:10.1207/s15566935eed1704_5

Sheridan, S. M., & Colton, D. L. (1994). Conjoint behavioral consultation: A review and case study. *Journal of Educational and Psychological Consultation*, *5*, 211–228. doi:10.1207/s1532768xjepc0503_2

Sheridan, S. M., Holmes, S. R., Coutts, M. J., & Smith, T. E. (2012, August). *Preliminary effects of conjoint behavioral consultation in rural communities*. Orlando, FL: Poster presented at annual meeting of the American Psychological Association.

Sheridan, S. M., & Kratochwill, T. R. (2008). *Conjoint behavioral consultation: Promoting family-school connections and interventions*. New York, NY: Springer.

Sheridan, S. M., Kratochwill, T. R., & Elliott, S. N. (1990). Behavioral consultation with parents and teachers: Delivering treatment for socially withdrawn children at home and school. *School Psychology Review*, *19*, 33–52.

Sheridan, S. M., Rispoli, K., & Holmes, S. R. (2014). Treatment integrity in conjoint behavioral consultation:

Conceptualizing active ingredients and potential pathways of influence. In L. Sanetti & T. Kratochwill (Eds.), *Treatment integrity: Conceptual, methodological, and applied considerations for practitioners* (pp. 255–278). Washington, DC: American Psychological Association.

Sheridan, S. M., Witte, A. L., Holmes, S. R., Coutts, M., Dent, A., Kunz, G., & Wu, C. (2017). A randomized trial examining the effects of conjoint behavioral consultation in rural schools: Student outcomes and the mediating role of the teacher-parent relationship. *Journal of School Psychology*, *61*, 33–53. doi:10.1016/j.jsp.2016.12.002

Sheridan, S. M., Witte, A. L., Holmes, S. R., Wu, C., Bhatia, S. A., & Angell, S. R., (2017). The efficacy of conjoint behavioral consultation in the home setting: Outcomes and mechanisms in rural communities. *Journal of School Psychology, 62*, 81-101. doi: 10.1016/j.jsp.2017.03.005

Sheridan, S. M., Witte, A. L., Holmes, S. R., Dent, A. L., Angell, S. R., Bhatia, S. A., & Wu, C. (2016, February). *CBC in rural communities: Lessons learned and future directions*. New Orleans, LA: Paper presented at the annual meeting of the National Association of School Psychologists.

Smith, J., Stern, K., & Shatrova, Z. (2008). Factors inhibiting Hispanic parents' school involvement. *The Rural Educator*, *28*, 8–13.

Smith, K., & Savage, S. (2007). *Fact sheet on food stamp and school lunch programs alleviate food insecurity in rural America*. Durham: Carsey Institute of the University of New Hampshire. Retrieved from http://www.carseyinstitute.unh.edu/publications/FS_foodinsecurity.pdf.

St. Clair, L., Jackson, B., & Zweiback, R. (2012). Six year later: Effect of family involvement training on the language skills of children from migrant families. *School Community Journal*, *22*, 9–19.

Strein, W., Hoagwood, K., & Cohn, A. (2003). School psychology: A public health perspective I. Prevention, populations, and systems change. *Journal of School Psychology*, *41*, 23–28. doi:10.1016/S0022-4405(02)00141-3

Thornton, B., Hill, G., & Usinger, J. (2006). An examination of a fissure within the implementation of the NCLB accountability process. *Education*, *127*, 115–121.

United States Department of Health and Human Services. (2011). *Designated health professional shortage areas* (HPSA) *statistics*. Retrieved from http://datawarehouse.hrsa.gov/HGDWReports/RT_App.aspx?rpt=HM.

Weiner, R., Sheridan, S. M., & Jenson, W. R. (1998). Effects of conjoint behavioral consultation and a structured homework program on math completion and accuracy in junior high students. *School Psychology Quarterly*, *13*, 281–309. doi:10.1037/h0088986

Weiss, K. E., & Correa, V. I. (1996). Challenges and strategies for early childhood special education services in Florida's rural schools: A DELPHI study. *Journal of Research in Rural Education*, *12*, 33–43.

Wilkinson, L. A. (2005). An evaluation of conjoint behavioral consultation as a model for supporting students with emotional and behavioral difficulties in mainstream classrooms. *Emotional and Behavioral Difficulties*, *10*, 119–136. doi:10.1177/1363275205054163

Wright, E. (2003). Finding resources to support rural out-of-school time initiatives. *The Finance Project Strategy Brief*, *4*, 1–2. Retrieved from http://www.financeproject.org/Publications/ruralost.pdf

**Shannon R. Holmes, Ph.D.,** is a Postdoctoral Fellow with the Institute of Education Sciences Interdisciplinary Postdoctoral Research and Training Program at the University of Missouri. Dr. Holmes' research and clinical interests center on the prevention and intervention of youth social, emotional, and behavioral problems through school-based mental health services. With the aim of advancing the effectiveness of these mental health practices, her work focuses on methods to improve the implementation and dissemination of evidence-based services in schools, including the identification of critical intervention components; development of constructive partnerships between families, schools, and communities; and effective assessment and monitoring of services. Dr. Holmes has contributed to several publications and presentations on these and related topics. Dr. Holmes currently helps coordinate clinical services for a regional coalition implementing a countywide public health model of risk to inform schools mental health prevention and intervention efforts.

**Amanda L. Witte, Ph.D.,** is a Research Project Manager at the Nebraska Center for Research on Children, Youth, Families and Schools (CYFS) housed in the College of Education and Human Sciences at the University of Nebraska-Lincoln. Witte focuses her research on family-school partnerships, behavioral and mental health, early learning, and rural education. She is the project manager for Learning Frontiers: PreK to Grade 3, a study investigating factors that promote early learning. Witte is also the principal investigator on a pilot project for family-school partnership intervention training for rural educators. Witte has contributed to publications and presentations to promote understanding of the benefits of family-school partnerships. She delivers workshops on family-school partnerships to educators and service providers across North America. Witte has also led teams conducting large-scale educational research in communities across three states. She has collaborated with approximately 70 school districts to create mutually beneficial research partnerships.

**Susan M. Sheridan, Ph.D.,** is Director of the Nebraska Center for Research on Children, Youth, Families and Schools (CYFS), and a George Holmes University Professor of Educational Psychology at the University of Nebraska-Lincoln. Dr. Sheridan's

research is focused on parent-teacher relationships; the development of meaningful home-school partnerships; early childhood education and interventions; rural education; and interventions promoting children's social skills, social-emotional development, and behavioral competencies. Dr. Sheridan has published more than 100 books, chapters, and refereed journal articles on these and related topics. Noteworthy awards include the American Psychological Association's Division 16 (School Psychology) Lightner Witmer Award (1993) for early career accomplishments and the Senior Scientist Award (2015) for distinguished career-long scholarship, the 2005 Presidential Award from the National Association of School Psychologists, and the 2014 University of Nebraska's Outstanding Research and Creativity Award.