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Consultants' Perceptions of School Counselors' Ability to Implement an Empirically-Based Intervention for Adolescent Social Anxiety Disorder

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Abstract

Social anxiety is highly prevalent but goes untreated. Although school-based CBT programs are efficacious when delivered by specialized psychologists, it is unclear whether school counselors can implement these interventions effectively, which is essential to promote sustainable school programs. We present an initial consultation strategy to support school counselor implementation of group CBT for social anxiety and an evaluation of counselors' treatment fidelity. Counselors were highly adherent to the treatment, but competence varied based on measurement. Counselors and consultants demonstrated good agreement for adherence, but relatively modest correspondence in competence ratings. We discuss future directions for school-based implementation efforts informed by these initial findings.

Keywords

Implementation; Anxiety; School; Fidelity; Consultation

There is a significant public health concern regarding the sizeable gap between youth who are in need of mental health services and those who actually receive treatment (Kataoka et al., 2003; Society for Research in Child Development [SRCD], 2009). This failure to access care is particularly pronounced for youngsters with internalizing disorders, relative to externalizing conditions (e.g., ADHD), likely because they are less observable to parents and teachers (Masia, Klein, Storch & Corda, 2001). Also alarming is that of the children who do receive community-based treatment, most do not show clinical improvement (Manteuffel, Stephens, Sondheimer, & Fisher, 2008; Warren, Nelson, Mondragon, Baldwin, & Burlingame, 2010). Such lack of treatment effectiveness has been attributed to the limited use of empirically-based treatments (EBTs) (i.e., treatments supported by scientific evidence) in community settings (SRCD, 2009).

Implementing interventions in schools has gained considerable attention as a means to address the unmet mental health needs of youth (Beidas et al., 2012; Herzig-Anderson, Colognori, Fox, Stewart, & Masia Warner, 2012; Lyon, Charlesworth-Attie, Vander Stoep,

& McCauley, 2011). School-based treatments reduce common barriers to community mental health services (Husky, Sheridan, McGuire, & Olfson, 2011) and increase access to care in a cost-effective manner (Mufson, Dorta, Olfson, Weissman, & Hoagwood, 2004; President's New Freedom Commission on Mental Health, 2003; U.S. Department of Health and Human Services, 2000). In fact, the educational sector is the most common site for the delivery of mental health services to children and adolescents (Burns et al., 1995). However, school services are typically not evidence-based and little is known about their quality (Mufson et al., 2004). Therefore, improving the provision of services in schools has the potential to greatly impact access to and quality of mental health treatment for youth.

An important step in making evidence-based approaches more readily available in the educational sector is to use the schools' existing resources (Atkins, Graczyk, Frazier, & Abdul-Adil, 2003; Atkins et al., 1998; Shediach-Rizhallah & Bone, 1998). Front-line school practitioners (e.g., school psychologists and social workers) and school guidance counselors are key providers of services for youth (Lyon, Charlesworth-Attie et al., 2011; Lyon, McCauley, & Vander Stoep, 2011; Ryan & Masia Warner, 2012). Although school counselors may lack specialized mental health training, they are essential to implementation efforts since large teams of school counselors are available in schools nationally (Ryan & Masia Warner, 2012). In addition, school counselors' familiarity with the student population, school culture, and available school resources may enable them to more easily relate to the students, anticipate concerns, and use the school environment effectively to optimize treatment gains. In a national survey of school counselors, the majority (67%) indicated a desire for more training and supervision to address students' emotional issues (Page, Pietrzak, & Sutton, 2001). Implementation research focused on school professionals is particularly scarce (Lyon, McCauley et al., 2011), and we know little about the ability of school counselors to deliver empirical treatments.

Due to the complexity of implementation research in community settings, several guiding frameworks have been developed (see Damschroder et al., 2009; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Han & Weiss, 2005; Meyers, Durlak, & Wandersman, 2012). Although these models vary in their constructs, they consistently highlight the importance of: 1) pre-implementation activities focused on intervention adaptations, organizational readiness, building support among critical stakeholders, and capacity-building strategies; 2) core implementation components such as training, coaching, supportive feedback, and ongoing consultation; and 3) a final emphasis on reinforcing program use and sustainability.

The current paper focuses on school counselor implementation of an efficacious, school-based group treatment for social anxiety disorder, Skills for Academic and Social Success (SASS; Masia Warner et al., 2005; Masia Warner, Fisher, Shrout, Rathor, & Klein, 2007). Social anxiety disorder (SAD), the second most common anxiety disorder following specific phobia, affects 9% of children and adolescents by age 18 (Merikangas et al., 2010). Yet, only 12% of socially anxious adolescents ever receive services, with alcohol abuse as the only non-anxiety disorder associated with a lower service utilization rate (11.9%; see Merikangas et al., 2011). The high prevalence and stability of SAD is particularly concerning, given its significant associated impairment, which involves limited friendships, difficulty engaging in classroom requirements, and avoidance of social interactions and opportunities (e.g., school clubs, sports teams). This restricted socialization often leads to loneliness, dysphoric mood, academic difficulties, and long-term functional impairment, such as underemployment, suicidal ideation, and risk for substance abuse and depression (Beidel, Turner, & Morris, 1999; Bittner et al., 2007; Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Essau, Conradt, & Petermann, 1999; Grover, Ginsburg, & Ialongo, 2007; Katzelnick et al., 2001; Wittchen, Stein, & Kessler, 1999). Integrating treatment for social

anxiety into schools may enhance access to effective anxiety treatment for those who otherwise would not receive services (Colognori et al., 2012).

During the pre-implementation phase, a major challenge was adapting Social Effectiveness Therapy for Children (SET-C; Beidel, Turner, & Morris, 2000; Beidel, Turner, Young, & Paulson 2005), an efficacious but intensive clinic-based treatment for children with SAD, to fit into the school setting. As SET-C involves 24 sessions lasting 90 minutes each (12 social skills groups followed by planned social activities and 12 individual exposure sessions), modifying it to enable delivery in the school setting, while maintaining its clinical impact, was no small task. We retained the core SET-C treatment components (i.e., exposure and social skills training), but significantly reduced the number and length of sessions. To compensate for the decreased treatment dose, we aimed to enhance the intervention's potency by capitalizing on the natural advantages of treating social anxiety disorder in schools. For one, we modified the intervention to involve teachers, parents, and school peers (see Ryan & Masia Warner, 2012). In addition, all sessions were changed to groups because of their clinical relevance for treating SAD and their routine use in schools (e.g., clubs, drug prevention, peer leadership; Foster, Rollefson, Doksum, Noonan, & Robinson, 2005; Kelly & Lueck, 2011). A group format was also considered more feasible for school counselors given their time burdens. Finally, we designed exposures to take advantage of the school context by utilizing real-life school situations (e.g., meeting with a teacher for clarification of academic material, approaching a peer in the library or cafeteria). We then evaluated the newly adapted intervention, SASS, delivered by the treatment developer and other specialized psychologists in three high schools (Masia et al., 2001; Masia Warner et al., 2005; Masia et al., 2007).

Through this systematic process, we obtained a thorough understanding of the school context (see Ryan & Masia Warner, 2012). We learned that sessions had to be one class period (40 minutes) and thus leading the group would require proficiency in promoting skills within strict time limits. In addition, according to guidance counselors across the three high schools, they had no prior training in EBTs, and were apprehensive about their ability to learn a specialized treatment. Finally, after observing notable improvements in students, school personnel who previously had been wary of having us conduct treatment in their schools, then provided overwhelming support for program continuation. Based on the similarities between our experience and the model of teacher implementation of school-based psychosocial programs by Han and Weiss (2005), we considered their framework in moving to the supported implementation phase, which consisted of school counselors receiving training and delivering the intervention independently with ongoing consultation.

The Han and Weiss (2005) process model of enhanced sustainability (see Figure 1) proposes that teachers who are trained to implement an efficacious program with high quality will achieve positive student outcomes. Observing the positive impact of these programs on their students will enhance teachers' motivation, confidence and skills to implement the program, thus creating a self-sustaining feedback loop that supports program continuation. Central to this model is utilizing training and consultation strategies that promote robust program fidelity.

Previous efforts to train community-based clinicians has shown that providing manuals, expert workshops, or web-based training improves therapists' attitudes and knowledge, but has minimal impact on actual skill (Beidas, Barmish, & Kendall, 2009; Chagnon, Houle, Marcoux, & Renaud, 2007; Dimeff et al., 2009; Gega, Norman, & Marks, 2007; Mitcheson, Bhavsar, & McCambridge, 2009; Sholomskas & Carroll, 2006). For skill acquisition, ongoing feedback and coaching is essential (Mannix et al., 2006; Miller, Yahne, Moyers, Martinez, & Pirritano, 2004; Sholomskas et al., 2005). Han and Weiss (2005) recommend

that program practice occur early in the training process to allow for consultant feedback, a method supported by research studies using training cases and coaching prior to independent implementation (Miller & Binder, 2002; Milne, Baker, Blackburn, James, & Reichelt, 1999). Consistent with this literature, our training curriculum involved only 5 hours of interactive didactics, followed by counselors co-leading a training group with a clinical psychologist who provided coaching and feedback while modeling key skills.

The value of ongoing consultation during initial independent implementation by community practitioners has been supported (Beidas & Kendall, 2010; Herschell, Kolko, Baumann, & Davis, 2010). However, minimal information is available concerning its essential parameters (e.g., active components, necessary dose and frequency). Han and Weiss (2005) suggest a rigorous consultation model to promote high quality implementation skills that includes: 1) direct observation of implementation; 2) feedback and partnering on resolving issues; 3) modeling of program techniques; and 4) attending to student improvements and connecting them to program use. Using a similar consultation approach to integrate social emotional techniques into an urban after-school program, Lyon, Frazier, Mehta, Atkins, & Weisbach (2011) conducted weekly consultation meetings and offered twice-weekly, real-time support with direct observation, modeling, and performance feedback. Similarly, our consultation with school counselors consisted of 12 regularly scheduled weekly meetings for one school period (40 minutes), and direct observation of the school counselors' treatment groups. However, because the main goal of observation was to monitor treatment fidelity during independent implementation, consultants did not provide any coaching or support during sessions.

Given the barriers that school counselors have reported in addressing mental health issues (e.g., handling crises, responsibility for large caseloads of student schedules, and other administrative duties; American School Counselor Association, 2005), weekly consultation may seem unrealistic. However, several considerations guided our decision to use this approach. First, research has shown that school clinicians are able to overcome barriers to evidence-based program (EBP) implementation with necessary support from school leadership and peers (Langley, Nadeem, Kataoka, Stein, & Jaycox, 2010). Thus, we built strong partnerships with principals and guidance directors, and facilitated periodic meetings of SASS counselors within and across schools (e.g., lunches). A second consideration is that guidance counselors are not mental health practitioners, yet they are clearly an untapped and underutilized resource to address students' emotional needs. The question of whether these counselors have the ability to conduct specialized treatment techniques, even under optimal conditions, is crucial, and is an initial step towards evaluating the potential for broader implementation and sustainability. Although it is possible that school counselors will require intensive training and close initial consultation, this investment may ultimately support the sustainability of school counselors delivering EBPs with sufficient fidelity to positively impact student outcomes (Han & Weiss, 2005).

The current pilot paper describes the consultation strategy utilized to support school counselors in implementing SASS. We present treatment fidelity of six school counselors trained to deliver SASS during their initial independent delivery of the treatment. Data will include consultant ratings of *adherence*, which refers to the application of prescribed treatment procedures, and *competence*, the therapist's skill in delivering treatment procedures (Perepletchikova & Kazdin, 2005). We will also report on two clinically relevant, nonspecific implementation variables: 1) counselor warmth/empathy because of its noted value to treatment delivery (Bohart, Elliott, Greenberg, & Watson, 2002); and 2) counselor confidence to implement the program as emphasized in the Han and Weiss (2005) self-sustaining feedback loop. Finally, we will describe the agreement between counselors' self-ratings of competence with ratings of the consultants. Because this data is part of a

larger ongoing clinical trial of the effectiveness of school counselors delivering CBT (R01MH081881), the relationship between counselor fidelity and student outcomes will be presented in future papers.

METHOD

School Counselors

Six school counselors (5 guidance counselors and 1 school psychologist), employed by three suburban public high schools, participating in a larger clinical trial (R01MH081881), volunteered to complete training to implement SASS in their schools. Schools were recruited based on guidance counselors' willingness to participate, as well as expressed support from their principals to implement the SASS program. Participating schools had an average of 1,258 ninth through twelfth grade students (range = 795 – 1,839). All six school counselors were female, Caucasian, and between the ages of 30 and 60 ($M = 43.8$; $SD = 13.5$). Each counselor held a master's degree in a related field (i.e., counseling, student personal services, psychology) and an average of 7.5 ($SD = 2.6$) years of experience in their current position. Counselors had an average caseload of 179 students ($SD = 79.4$), and most ($n = 5$) reported moderate to high job-related stress prior to SASS training. Prior to the study, half of the counselors reported having meetings with their school supervisors (e.g., head of guidance) and being satisfied with this support. Alternatively, the other three counselors reported receiving no supervision other than informal consultation with peers, and indicated being dissatisfied with the amount and quality of their supervision.

SASS Program

SASS (Masia et al., 1999) is a cognitive-behavioral group treatment for adolescents with SAD designed for delivery in schools. Adapted from SET-C, an efficacious group treatment for children with SAD (Beidel et al., 2000; Beidel et al., 2005), SASS similarly emphasizes exposure and social skills training, but includes modifications for an adolescent population (e.g., age-appropriate social skills, addition of cognitive restructuring) and the school environment (e.g., fewer/shorter sessions, involvement of teachers, parents, and school peers). SASS consists of 12 weekly group sessions (40 minutes each), two brief individual meetings (20 minutes each), two parent meetings (45 minutes each), four social events (90 minutes each), and two booster sessions (30 minutes each). Group sessions, each lasting approximately a 40-minute class period, focus on three core components: 1) realistic thinking (one session); 2) social skills training, including initiating and maintaining conversations, assertiveness, and extending invitations (four sessions); and 3) in vivo exposure to feared social situations (five sessions). Exposures are often integrated into the school environment (e.g., speaking with the principal, starting a conversation in the library). See Figure 2 for more details regarding the content of the 12 weekly group sessions. Individual meetings provide the opportunity to problem-solve any obstacles to treatment and to conduct additional exposure exercises. Social events bring group members and outgoing school peers together in natural community social settings (e.g., bowling) to facilitate real-world exposure and skills generalization. Parent meetings provide parents with psychoeducation regarding the cognitive, physiological, and behavioral symptoms of social anxiety, along with strategies for managing their children's social anxiety, such as preventing avoidance and rewarding non-anxious behavior (for a complete description see Ryan & Masia Warner, 2012; Masia Warner, Fisher, Ludwig, Rialon, & Ryan, 2011). The present paper focuses on the treatment fidelity of the 12 school group sessions.

SASS Training

SASS training occurred at each of the three schools, and consisted of: 1) receipt of a treatment manual containing outlines and procedures for each session; 2) attendance at a 5-

hour interactive workshop co-led by the treatment developer (Dr. Masia Warner) and a post-doctoral level psychologist; and 3) co-leading a 12-session SASS training group with a CBT-trained post-doctoral-fellow with weekly consultation. Uniformity in training across schools was ensured in three ways. First, the three trainers were all female, and had an equivalent level of CBT training and expertise. They had been chosen for the research team, based on their prior specialized training and education in child psychology and the delivery of CBT for anxiety. Second, the treatment developer co-led the initial didactics at each school. Finally, the treatment developer held weekly group meetings with trainers to provide supervision of upcoming group sessions and discuss specific coaching strategies for each counselor. After the completion of the training groups, all counselors were considered trained to implement SASS (i.e., last 4 training group sessions rated as competent by trainers). Following training, each counselor was responsible for conducting SASS independently (i.e., without a trained co-leader) with ongoing consultation.

Consultation During the Initial Implementation

Consultants—Consultants ($n = 4$; 1 male and 3 females) were post-doctoral fellows on the research team with similar educational backgrounds and experience as the trainers; however, they were not the same psychologists who trained the counselors. All consultants had experience conducting SASS prior to providing consultation to school counselors. Thus, they were familiar with the school context and delivering the treatment. In addition, prior to meetings with school counselors, consultants received weekly group supervision from Dr. Masia Warner. Dr. Masia Warner and the consultants listened to an audio recording of a previous administration of the upcoming SASS session and rated its treatment fidelity. Fidelity ratings were then discussed in detail to promote two goals: 1) to highlight positive features and common difficulties of the session that consultants should emphasize with school counselors in upcoming consultation meetings; and 2) to prevent drift in treatment fidelity ratings between consultants.

Consultation with school counselors: School counselors were scheduled to have 12 weekly, in-school individual consultation meetings prior to each group session, lasting for one class period (40 minutes). Consultants directly observed each group session and rated counselor adherence and competence on session-specific treatment fidelity forms, but were instructed to avoid coaching or providing support during groups. Fidelity ratings were used to provide feedback to counselors during the following consultation meeting. Consultation meetings included the following components: 1) *Feedback* about the previous session, consisting of a self-assessment by counselors and specific feedback from consultants using their observational treatment fidelity ratings (10 minutes); 2) *Coaching of Key Concepts and Skills* for the upcoming session, including modeling and active role-plays; for exposure sessions, this also included planning exposure exercises (25 min); and 3) *Questions and Trouble Shooting* for clarification of any unclear treatment components and discussion of anticipated challenges and ways to address them (e.g., how to engage reticent students, how to manage resistance to exposures; 5 min). All planned consultation meetings took place with the exception of one; Counselor 3 did not receive consultation for Session 8. On average, consultation meetings lasted for 43.6 minutes ($SD = 10.4$, range = 36.7 to 53.8 minutes).

SASS Groups

SASS group sessions were held weekly over 12 weeks between January and May, starting the first week of each school's third quarter and ending prior to final exams. Table 1 provides characteristics of the groups including the number of assigned students, the initial diagnostic severity of group members, and attendance. All participating students had a primary diagnosis of SAD based on a baseline diagnostic assessment using the Anxiety

Disorders Interview Schedule for DSM-IV: Parent and Child Versions (ADIS-P/C; Silverman & Albano, 1996). In addition, diagnostic severity was assigned using the ADIS Clinical Severity Rating Scale (CSR), a 0–8 scale (4 or greater warrants a diagnosis). Average clinical severity across groups was 5.5 ($SD = 1.1$) with group severity ranging from 5.0 ($SD = 1.3$) to 6.0 ($SD = 0.8$). The number of students assigned to each SASS counselor's group ranged from 4 to 6 ($M = 5$, $SD = 1.3$). Student session attendance across groups was 91%, with student attendance within each group ranging from 87% to 96%. There were no significant group differences in severity, group size, or attendance.

Measures

Treatment fidelity (adherence and competence)—For each of the 12 school group sessions, counselors and consultants completed a session-specific treatment fidelity rating form consisting of core treatment-specific content (e.g., facilitated practice of initiating conversations, prevented and managed resistance to exposures). Each item was rated for both adherence and competence. Both consultants and counselors provided independent treatment fidelity ratings after each school session.

Adherence: Consultants rated counselor adherence to the manual by rating each session's treatment-specific items as absent or present (0 or 1) based on whether each item was implemented in the session. The treatment techniques that were essential to each session were carefully defined. Although we are familiar with the limitations to this approach (see Miller & Binder, 2002; Waltz, Addis, Koerner, & Jacobson, 1993), we prioritized simplicity over extensiveness due to utilization of the rating scale by novice school professionals.

Competence: Competence was rated on a 5-point Likert scale adapted from the Cognitive Therapy Scale, which has been used widely in the adult depression literature (James, Blackburn, Milne, & Reichfelt, 2001). The 5-point scale ranges from 0 (*Done inflexibly or inappropriately*) to 4 (Done with strong skill, flexibility, resourcefulness and creativity; or skillful and flexible in the face of challenges). Similar to the criterion used in depression studies, ratings of 3 (Done skillfully and flexibly, difficulties do not interfere with skill acquisition) or above were considered competent. In addition, this scale was used to provide a global competence rating for each session.

Consultant fidelity ratings—Several procedures were implemented to ensure that consultants were reliable and to minimize drift. As mentioned above, first, consultants were thoroughly familiar with the SASS program and received weekly supervision from the treatment developer on its implementation. Second, every week, Dr. Masia Warner and the consultants listened to an audio recording of the SASS session, rated its treatment fidelity and discussed any discrepancies. To estimate reliability of the consultants' competence ratings, a trained independent evaluator double-rated a selection of audiotaped SASS sessions. Independent evaluators (IEs) had also served as consultants, but only rated groups in which they had no previous involvement. Recording were selected to ensure equivalent coverage of the first (Sessions 1 to 6) and second half (Sessions 7 to 12) of intervention sessions, as well as to provide a representative ratio of sessions based on the occurrence of treatment components (e.g. cognitive, skill, exposure) in the program. This sampling resulted in having IEs double-rate 39% of SASS sessions. Reliability was defined as 'poor' for ICCs below .40, 'fair' for ICCs from .40 to .59, 'good' for ICCs from .60 to .74, and 'excellent' for ICCs from .75 to 1.00 (Chiu, McLeod, Har, & Wood, 2009; Cicchetti, 1994; McLeod & Weisz, 2005). A one-way intraclass correlation coefficient (ICC) was conducted, as these tapes were rated by randomly selected IEs (Cicchetti, 1994; Shrout & Fleiss, 1979). The overall intraclass correlation coefficient (ICC) was good for treatment specific items (.68) and fair for global competence (.53).

Warmth/Empathy—Following each treatment session, consultants rated counselors’ “empathy and warmth” using a 5-point Likert scale ranging from 0 (*Done inflexibly or inappropriately*) to 4 (Done with strong skill, flexibility, resourcefulness and creativity; or skillful and flexible in the face of challenges). An overall rating of each counselor’s warmth and empathy was determined by averaging the ratings across the 12 group sessions.

Counselor confidence to conduct SASS—After each consultation meeting and prior to each school group, counselors rated their confidence to conduct the session (“How confident do you feel to run today’s group?”) using a 5-point Likert scale from 0 (*not at all*) to 4 (*extremely*). Counselor ratings were averaged across the 12 group sessions to provide an indication of each counselor’s confidence to implement the program. This measure was created specifically for the purpose of this study.

Data Analysis

Counselor adherence to the protocol was reported as the percentage of prescribed treatment-specific items that occurred across the 12 sessions. Competence was examined using two methods. First, we computed the percentage of treatment-specific items rated as competent (a rating of 3 or 4) versus not competent (a rating of 0 to 2) for each session. In accordance with the treatment literature standards (Perepletchikova & Kazdin, 2005), a session was defined as competent if at least 80% of treatment-specific items were delivered competently. Second, any session given a global competence rating of 3 or 4 was considered competent. For every session, we calculated the percentage of treatment specific items rated competently for each counselor. In addition, for each counselor we calculated summary values of the overall percentage of competently delivered sessions based on the 80% criteria and session global competence ratings. Descriptive information was provided for counselor warmth/empathy and confidence. We also examined differences in competence, confidence, and warmth between treatment components (i.e., cognitive, social skills, exposure), as well as between the first (1 to 6) and last half (7 to 12) of SASS sessions using paired-sample t-tests. Pearson correlations were used to explore relationships of competence with warmth and confidence. Finally, we examined the agreement between counselors’ self-ratings of adherence and competence with consultants’ ratings.

Results

Adherence

Table 2 includes a summary of consultant ratings of counselors’ adherence and competence ratings across the 12 school group sessions. Consultants rated school counselors as highly adherent to the treatment protocol. Five of six counselors met the 80% criteria of adherence to the treatment specific content. Counselor 3 did not deliver the SASS program as intended. Overall, the percentage of adherent sessions was 90%, with adherence of individual counselors ranging from 58% to 100% across school counselors (see Table 2). Adherence was high across treatment techniques (cognitive = 97%, exposure = 94%, social skills = 94%).

Competence

As seen in Table 2, according to consultants’ global competence ratings, with the exception of Counselor 3 who only conducted 50% of the sessions competently, all counselors were highly competent in delivering treatment sessions (range = 83% to 100% of sessions). However, a different picture emerged when we examined competence ratings for treatment specific items; applying the standard 80% item competence criteria, only half of school counselors administered SASS skillfully. Examining the treatment specific items, the overall percentage of competent sessions for individual counselors ranged from 17% to 100%. In

addition, the following observations of the data were made. First, there was no systematic increase in competence over time (from sessions 1 to 12). Second, Sessions 5 (maintaining conversations) and 12 (graduation and relapse prevention) were particularly problematic, with only 2 and 3 counselors respectively, delivering this material competently (see Table 2). Finally, when examining competence across different treatment components, school counselors were significantly more competent at implementing exposure sessions (81% of treatment specific items) compared to social skills training sessions (68% of treatment specific items), $t(5) = 2.7, p = .04$. Five counselors skillfully delivered exposure sessions, while only two counselors competently implemented social skills sessions. Four of six counselors were also rated as competent in conducting the one cognitive session (realistic thinking).

Counselor Warmth and Confidence

Universally, counselors were rated as highly warm and empathic in their interactions with group members by consultants with average ratings for each counselor ranging from 2.9 ($SD = 0.5$) to 4.0 ($SD = 0.0$); ($M = 3.5, SD = 0.4$). No differences in warmth were observed over the 12 group sessions or across treatment components.

Counselors reported moderate to high confidence in their ability to implement SASS, with average confidence ratings across 12 sessions for each counselor ranging from 2.6 to 4.3, ($M = 3.7$ for all counselors, $SD = 0.6$). Counselor confidence increased from the first six ($M = 3.4, SD = 0.6$) to the final six sessions ($M = 4.0, SD = 0.7$), $t(5) = 4.0, p = .011$. In addition, counselors reported more confidence administering exposures ($M = 3.9, SD = 0.7$) and social skills sessions ($M = 3.7, SD = 0.6$) than cognitive restructuring ($M = 2.8, SD = 0.8$), $t(5) = 3.9, p = .014$, and $t(5) = 4.3, p = .007$, respectively. Neither counselor warmth nor confidence showed any association with competence.

Agreement of Counselor Self-Ratings of Treatment Fidelity with Consultants

Agreement on adherence was reached when both the counselor and consultant rated a session as adherent or non-adherent. Agreement on competence was examined for percentage of treatment specific items and global competence ratings. Similar to adherence, agreement on competence was reached when the counselor and consultant rated a session as competent or incompetent. Sessions rated as adherent or competent by consultants but not counselors, or vice versa, were considered disagreements. Overall, agreement was good for adherence (87%). Agreement was lower for competence, particularly when using items representing specific treatment content (61%), rather than global competence ratings (73%). Of note, the main source of discrepancy stemmed from counselors being less likely than consultants to rate their performance as competent on prescribed treatment procedures. Overall, this occurred for 27% of sessions (see Table 3). However, Counselor 3 showed the opposite bias (overestimated self-competence relative to consultant) and was perceived to be the least adherent and competent counselor, as per consultant ratings.

Discussion

Demonstrating that school-based personnel, particularly those with less specialized mental health training, can implement EBTs as intended is critical for establishing program effectiveness in community settings and justifying broad implementation (McLeod & Islam, 2011). According to consultants' judgments, school counselors were highly adherent to the SASS protocol. Consultant ratings of counselor competence were more mixed. Overall, ratings of global competence indicated high implementation quality across counselors; however the more stringent 80% criteria (of individual techniques) suggested that only half of the counselors competently delivered SASS. These findings are consistent with Garland

et al. (2010) who documented that, although community-based therapists often employ evidence-based strategies, they are frequently applied incompletely. While we expected more robust competence given the intensive training and subsequent weekly in-person consultation, this initial effort provides a foundation for improving the development and testing of future consultation approaches by highlighting critical areas to address.

One issue identified by our findings is that school counselors may be more comfortable and effective delivering certain treatment components relative to others. Counselors reported more confidence delivering exposures and social skills compared to cognitive reappraisal, and were most competent in implementing exposures. It is possible that counselor confidence was influenced by the novelty of cognitive restructuring compared to the more familiar notions of skills training and facing fears. In addition, cognitive and social skills sessions, such as Session 5 which was particularly problematic, were more demanding than exposures due to the inclusion of didactics, structured role-plays, and activities. Thus, counselors had a lot of information to learn, retain, and convey. Finally, whereas SASS includes only one cognitive session, and each social skills session changes significantly (i.e., different core skill and activities), all exposure sessions involve the same concepts and procedures. Such repeated rehearsal of implementing exposure may have afforded counselors the opportunity to become more adept at exposure. Should administering high-quality exposures, believed to be the key element of anxiety treatment (Kazdin & Weisz, 1998), produce significant clinical improvement, our school counselors may be effective in treating social anxiety despite shortcomings in implementing social skills training.

Because EBTs often contain multiple treatment techniques and their “active ingredients” have not yet been isolated, we do not know which components are essential. As a result, another approach is that of modular treatments, where clinicians are given an algorithm for selecting which techniques to deliver based upon their perception of symptoms and problems (Chorpita, 2007). Whereas SASS mainly consists of social skills and exposures delivered in a predetermined sequence, modular treatment approaches train school counselors in an array of cognitive-behavioral strategies (e.g., relaxation, problem-solving, contingency management, exposure) and allow them more flexibility to choose which module to deliver (Chorpita, 2007). Using a modular approach with school counselors, but instructing them to include exposure in as many sessions as possible, Becker, Becker, and Ginsburg (2012) found that school counselors selected exposure most frequently (46.8% of sessions) when treating a sample of 16 youth with anxiety disorders. In contrast, a study of seven school-based therapists treating anxious and depressed youth, Lyon, Charlesworth-Attie et al. (2011) reported the lowest use for exposure (4.6% of sessions) relative to other treatment techniques, which may be partially accounted for by the mixed diagnostic sample. Unfortunately, it is not yet clear what strategies should receive priority when training school counselors, or whether the role of clinician choice of therapeutic techniques significantly affects the competence of treatment delivery. Examining links between treatment elements, clinician choice, fidelity, and clinical outcomes will help determine critical treatment features. Increased understanding of key intervention components will likely promote the development of targeted and efficient models for training and consultation that tailor efforts to enhance utilization and competence of the essential techniques (Dobson & Singer, 2005; Kazdin & Nock, 2003; Weisz, Ugueto, Herren, Afrienko, & Rutt, 2011).

Similar to our limited understanding of key treatment ingredients, we also have minimal information concerning the essential parameters of consultation (e.g., active components, necessary dose and frequency). There is some evidence that consultant expertise in evidence-based treatment may be linked to more skilled treatment implementation and improved youth outcomes (Henggeler, Clingempeel, Brondino, & Pickrel, 2002; Schoenwald, Sheidow, & Letourneau, 2004). Another recent study suggests that consultants’

comments about specific techniques to use in upcoming sessions, rather than feedback on performance in previous sessions, improve subsequent therapist adherence (Anderson, Crowley, Patterson & Heckman, 2012). Future studies should investigate the content of consultation meetings more closely for the differential impact that specific consultation techniques have on school counselors' competence and youngsters' clinical outcomes (Schoenwald et al., 2004).

Another way to support well-informed training and consultation strategies is to better understand the necessary performance standards for program delivery. It has been generally assumed, but inconclusively demonstrated, that high treatment fidelity is related to therapeutic effect (Hogue, Henderson et al., 2008; Perepletchikova & Kazdin, 2005). That is, we do not have research that indicates what levels of fidelity are necessary to affect clinical improvement (Dobson & Singer, 2005; Hogue, Dauber et al., 2008; Kazdin & Nock, 2003; Perepletchikova & Kazdin, 2005). In the absence of this information, arbitrary cutoffs of 80% fidelity have been applied, but it is possible that lower levels are sufficient for meaningful treatment outcomes. Investigations examining the associations between treatment fidelity and clinical outcomes will inform on the degree of fidelity necessary to achieve meaningful therapeutic change, and therefore, determine whether training and consultation efforts have been effective. We will address these questions more fully in future papers once the clinical trial is completed.

In addition to effectiveness, sustainability is a central consideration to the usefulness of any consultation approach. Han and Weiss (2005) assert that high fidelity during supported implementation is the key to long-term sustainability. That is, school personnel who are trained to implement an efficacious program as intended for a sufficient period of time will observe its benefit for students, and therefore, have the motivation, confidence, and skills to continue the program, following the removal of external resources. In agreement with this philosophy, we provided rigorous initial support that involved having school counselors conduct practice groups co-led with doctoral-level psychologists, followed by independently implementing treatment groups with 40-minute weekly in-person consultations. As would be predicted by Han and Weiss (2005), our counselors' confidence increased over treatment sessions. Other consultation strategies have employed weekly review of session audiotapes by a consultant who provided detailed feedback and coaching during consultation meetings (Mufson et al., 2004). Both of these consultation approaches are labor intensive and will not likely be feasible for large scale implementation. However, the field is in its infancy regarding how to support and sustain high quality implementation by school providers. Thus, this work is an initial step in helping to shape more cost-effective consultation strategies with potential for broader implementation. Clearly, more research is needed to evaluate what investment in training and consultation will be required to establish and sustain high quality program implementation. Should more intensive approaches be supported, delivery models that utilize technology for training and consultation (e.g., distance learning) or assist school counselors with conducting groups (e.g., videotapes, computer-assisted lessons) may reduce costs and increase feasibility while still providing thorough training (Funderbunk, Ware, Altshuler, & Chaffin, 2008; Khanna & Kendall, 2008, 2010; Vismara, Young, Stahmer, Griffith, & Rogers, 2009).

Advances in establishing the fidelity of treatments conducted by school personnel has also been hindered by the lack of standard fidelity measures. Currently, it is unclear how to best capture implementation quality. Most EBTs have developed their own measures of fidelity, and they vary greatly as to the number and type of techniques being assessed, the rating scales for adherence, and the definitions of competence. As illustrated by our findings, global competence ratings, relative to ratings of specific treatment elements, provide an inconsistent view of the quality of SASS delivered by school counselors. However, perhaps

global judgments by consultants, indicating that adolescents received enough of the targeted skills, are more indicative of clinical outcome than the burdensome, detailed ratings of specific treatment content. Conversely, counselors and consultants may have been more hesitant to evaluate an entire session as incompetent, compared to a few treatment techniques, resulting in inflated global ratings. Consultant reluctance to rate an entire session as incompetent, especially when they could be viewed as being responsible for the outcome, may have contributed to our lower reliability estimates between consultants and independent evaluators on global competence compared to treatment specific judgments. Further research is needed to examine what type of fidelity measurement will be most feasible and informative in community settings.

Providing counselors with valid methods to report fidelity may enhance the feasibility of future sustainability efforts by reducing the need for external monitoring. While therapist self-reports have been deemed invalid due to a presumed positive self-bias regarding their performance (Brosan, Reynolds & Moore, 2008), our results showed the opposite trend. School counselors rated their implementation of specific treatment components more critically compared to consultants, and there was adequate agreement in global ratings. However, whereas Brosan et al. (2008) studied therapists who were practicing cognitive therapists, our school counselors had minimal exposure to implementing evidence-based interventions. Thus, these inconsistent findings may be attributable to variations in provider perceptions of their expertise. More similar to Brosan et al. (2008), who found that less competent therapists were more likely to inflate their own competence, School Counselor 3 who had the lowest competence according to consultant ratings, also had the highest disagreement compared to other counselors. Understanding the sources of bias and variability in providers' self-ratings will help to identify means to reduce bias and enhance accurate self-judgment (Carroll et al., 2000), which will be essential in monitoring ongoing fidelity in school settings. For example, disparity in competence ratings between counselors and consultants can inform the need for further consultant-initiated feedback or the opportunity for counselors to seek guidance for therapeutic techniques they identify as more difficult. Because self-ratings are one of the most pragmatic methods to use in community settings, it may be valuable to provide counselors with a fidelity manual or a brief training in assigning ratings to enhance the accuracy of their evaluation.

Limitations

The most significant limitation is that our data are based on a small sample of school counselors, and thus our analyses do not have sufficient power. Second, because participating counselors were female and employed at suburban schools, results cannot be generalized to male counselors or urban schools. Third, measures were not established instruments with known psychometric properties, and were specific to the current study. Fourth, ICCs for competence ratings between consultants were on the lower range of acceptable. In addition, adherence was determined based on the presence or absence of prescribed session-specific techniques rather than on a graduated continuum, which may inflate adherence scores and obscure degrees of fidelity related to clinical change (Miller & Binder, 2002; Waltz et al., 1993). Future clinical outcome analyses will incorporate dimensional adherence ratings by independent evaluators similar to Hogue, Dauber et al. (2008). Moreover, we have only examined ratings of fidelity during ongoing consultation. Another important question is how fidelity can be sustained once regular consultation has ended. Although the current study cannot answer this question, we plan to follow-up with schools to assess level of program maintenance once the study has ended and the consultants have withdrawn from the school. Also, we did not include organizational (e.g., school climate) or provider (e.g., attitudes of school counselors towards EBTs) variables that may influence fidelity and adoption of evidence-based practice (Beidas et al., 2012). Finally, we

cannot link the fidelity ratings to treatment outcome, as the clinical trial is still ongoing; however, upon study completion this important research question will be examined.

Conclusions

Treatments implemented by school personnel are a promising solution for overcoming barriers to accessing mental health services for underserved youth. However, implementation of evidence-based care will require feasible and cost-effective methods for supporting school counselors' delivery of treatments with sufficient quality. In the spirit of Han and Weiss (2005), our initial attempt to train school counselors involved an intensive training approach followed by ongoing in-person consultation of 40 minutes weekly during counselors' initial independent implementation. Our preliminary findings, based on consultants' ratings, indicated that half of the counselors reached high levels of competence on treatment specific techniques, while two counselors were judged to have modest competence, and one failed to implement the program with quality. Although this lack of robust competence may appear to have disheartening implications for the ability of school professionals to deliver EBTs, any conclusions would be premature. We simply cannot determine how good is good enough until we examine the level of fidelity necessary to result in positive clinical outcomes. We plan to address this crucial question once our clinical trial is completed. Furthermore, a better understanding of crucial treatment ingredients of EBTs, as well as streamlining treatment content, should allow for more efficient training strategies, such as training school counselors more intensively in fewer, core techniques. Additional research on the use of computer and web-based aides to assist school counselors in treatment delivery may also promote competent implementation. Such research advances have the potential to result in more empirically-informed approaches to training and consultation that will be more potent, yet less labor intensive. These strategies may be a better fit for the time constraints of the education sector while still promoting fidelity of EBTs delivered by school personnel to youth in need of services.

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Figure 1.

Process Model of Program Implementation

Description/Note. Adapted from "Sustainability of Teacher Implementation of School-Based Mental Health Programs," by S.S. Han and B. Weiss, 2005, *Journal of Abnormal Child Psychology*, 33(6), p. 674.

Session 1: Psychoeducation

- Introducing Group members
 - Psychoeducation about social anxiety
-

Session 2: Realistic Thinking

- Connection between thoughts, feelings, and behaviors
 - Practice challenging negative and unhelpful thoughts
-

Session 3: Social Skills 1: Initiating Conversations

- Model friendly and open nonverbal behaviors
 - Practice initiating conversations with feedback
-

Session 4: Exposure 1: Rationale and Fear Ladder

- Present the rationale for exposure exercises
-

Session 5: Social Skills 2: Maintaining Conversation

- Learn how to keep a conversation going
 - Practice maintaining conversations
-

Session 6: Exposure 2: Conduct Group Exposure

- Practice starting conversations with group members
-

Session 7: Social Skills 3: Listening and Remembering

- Explain how anxiety interferes with effective listening
 - Practice effective listening
-

Session 8: Exposure 3: Conduct Exposures

- Practice commonly feared situations (eg, talking on the phone)
-

Session 9: Social Skills 4: Assertiveness Training

- Discuss how to refuse requests and be assertive
 - Practice using “I statements”
-

Session 10: Exposure 4: Conduct Exposures

- Practice exposures higher on the fear ladder
-

Session 11: Exposure 5: Conduct Exposures

- Continue practicing exposures higher on the fear ladder
-

Session 12: Relapse Prevention

- Explain setbacks and relapse; devise a relapse prevention plan
-

Figure 2.

Outline of 12 weekly group sessions

Adapted from “Treating Adolescents with Social Anxiety Disorder in Schools,” by J. L. Ryan & C. Masia Warner, 2012, *Child and Adolescent Psychiatric Clinics*, 21(1), 105-118.

SASS Group Characteristics**Table I**

Counselor	# Students	% Attendance	Severity Mean (SD)
1	4	96	6.0 (0.8)
2	5	88	5.2 (1.3)
3	4	96	6.0 (0.8)
4	5	88	5.8 (1.2)
5	5	87	5.2 (0.8)
6	6	92	5.0 (1.3)

Note. # Students = number of students assigned to group; % Attendance = percent of sessions students attended across group sessions; Severity = baseline group mean Social Anxiety Clinical Severity Rating (CSR) on the Anxiety Disorders Interview Schedule for DSM-IV: Parent and Child Versions (ADIS-P/C; Silverman & Albano, 1996).

Table II
Percentage of Treatment Specific Items Rated as Competent by Session

	Education		Cog		skill					Exposure					RP		Overall Percentage of Sessions		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Comp.	Adh.	TS%
Sessions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
Counselor																	Global	TS%	
1	100	80	83	14	83	86	67	80	67	100	100	100	89	100	100	100	92	83	100
2	100	80	83	0	100	67	63	100	60	80	100	100	88	75	83	67	83	67	83
3	75	40	17	43	17	43	30	20	100	0	80	67	53	67	50	17	58		
4	100	80	100	86	n/a ^a	86	91	100	100	80	100	83	93	83	100	100	100		
5	100	80	43	57	83	86	67	80	100	83	67	71	80	50	92	58	100		
6	100	20	100	86	83	86	89	80	100	80	80	83	85	83	92	92	100		
Mean	96	63	71	48	73	75	68	77	88	71	88	84	81	76	85	70	90		
Counselors Competent	83	67	67	33	80	67	33	83	67	83	83	67	83	50	83	50	83		

Note. All numbers are given as raw percentage of treatment specific items rated as competent. Education = session focused on psychoeducation; Cog = session focused on anxious cognitions; Skill = sessions focused on skill acquisition; Exposure = sessions focused on conducting in vivo exposures; RP = session focused on relapse prevention and summary of other sessions; Comp. = competence; Adh. = adherence; Avg = mean of sessions within the component; Global = global competence; %TS = competence based on percentage of treatment specific items; Mean = the overall percentage of treatment specific items across counselors. Counselors Competent = percent of counselors who conducted the session competently according to achieving competence on 80% treatment specific items for the session.

^aThis session was not conducted.

Table III
Agreement between Consultant and Counselor for Session Competence based on 80% of Treatment Specific Items

Counselor	% Agreement	% Disagreement	
		Consultant Comp.	Counselor Comp.
1	66	25	8
2	73	18	9
3	67	0	33
4 ^a	55	45	0
5	50	33	17
6	58	42	0
Total	61	27	11

Note. Agreement is presented for each counselor and overall. It is based on consultant and counselor ratings of competence (dichotomous Y/N; 80% of items per session rated as competent) for each conducted group session. Percentages represent the percent of sessions that consultants and counselors agreed or disagreed upon. Total = the overall percentage of agreement and disagreement between consultants and counselors. % Disagreement: Consultant Comp. = sessions the consultant rated as competent and the counselor rated as incompetent, % Disagreement: Counselor Comp. = session the counselor rated as competent and the consultant rated as incompetent.

^aDue to missing data, percentages for counselor 4 are based on 11 group sessions, while all other data is based on 12 group sessions.