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## **The Beck Initiative: Training School-Based Mental Health Staff in Cognitive Therapy**

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A growing literature supports cognitive therapy (CT) as an efficacious treatment for youth struggling with emotional or behavioral problems. Recently, work in this area has extended the dissemination of CT to school-based settings. The current study has two aims: 1) to examine the development of therapists' knowledge and skills in CT, an evidence-based approach to promoting student well-being, and 2) to examine patterns of narrative feedback provided to therapists participating in the program. As expected, school therapists trained in CT demonstrated significant gains in their knowledge of CT theory and in their demonstration of CT skills, with the majority of therapists surpassing the accepted threshold of competency in CT. In addition, an examination of feedback content suggested that narrative feedback provided to therapists most frequently consisted of positive feedback and instructions for future sessions. Suggestions for future research regarding dissemination of CT are discussed in light of increasing broad access to evidence based practices.

**Keywords:** Cognitive therapy, training; implementation, schools; children, adolescents

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### **Introduction**

Cognitive behavioral therapy (CBT) has been established as an effective approach to support the emotional, behavioral, and social needs of youth and to improve their functioning in school (Kazdin & Weisz, 2010). However, successful implementation of CBT in school settings has lagged significantly behind the

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establishment of that evidence (Creed, Reisweber & Beck, 2011; Forman & Barakat, 2011). Although the call for empirically supported school-based intervention has been steadily increasing in the current culture of evidence based practices (Forman & Burke, 2008), reports of successful dissemination to schools have remained limited. Most studies assessing dissemination or implementation of CBT in schools have targeted a very specific presenting problem, most frequently the prevention or reduction of substance abuse, aggression, or violence (Forman & Bakarat, 2011). However, these targeted interventions may not represent the breadth and complexity of presenting problems typically encountered in school settings. A more flexible approach may better prepare therapists to meet students' diverse challenges, promote wellness, and help students move toward their individual goals. The goal of the current study was to evaluate the training outcome of this school-based initiative. Patterns of written feedback provided to therapist trainees were examined to explicate a mechanism through which the outcomes may have been achieved. This successful model of training may offer some guidance in the further uptake of CBT and other evidence based practices in the schools, increasing the accessibility of these interventions for children and adolescents.

Since 2007, the Beck Initiative has endeavored to implement Cognitive Therapy (CT) in community mental health settings, increasing access to this empirically supported treatment by those who are served by community mental health. CT is specified to distinguish this specific approach from the broader term, CBT, signifying that the case conceptualization is used to guide intervention according to the cognitive model, as originally developed by Beck (Beck, Rush, Shaw & Emery, 1979). In recent years, services for children and adolescents have been a major focus of The Beck Initiative, with an emphasis on school-based services. Implementation of CT in schools delivers a powerful intervention for youth without increasing the burden on stressed families to attend outpatient treatment, reduces the loss of academic time to travel to outpatient appointments, eliminates transportation issues, and facilitates the integration and generalization of new skills into a student's daily setting. Therefore, the Beck Initiative offers a unique opportunity for many underserved youth to benefit from access to evidence based practices and paves the way for the successful implementation of these practices in youth-accessible settings.

### **Overview of the Beck Initiative Training Program**

Established in 2007, the Beck Initiative is a public-academic partnership in a northeastern American city. This innovative, team-oriented approach advances the quality of care provided to persons in recovery from behavioral health concerns within this community mental health care system by teaching clinicians tangible, empirically-based skills. Objectives of this program are to: (a) incorporate the evidence-based practice of CT as a standard of care within the network; (b) facilitate recovery and improve treatment outcomes for people served within this healthcare system; (c) improve the professional lives of therapists in the network; (d) conduct program evaluation to measure outcomes; (e) become one of the first large-scale implementations of evidence-based psychotherapy; and (f) serve as a model for other large behavioral health systems (Stirman, Buchhofer, McLaulin, Evans, & Beck, 2009).

Participation in the Beck Initiative is intensive and requires a substantial commitment from the agencies and the therapist trainees. According to the established ACCESS training model (Stirman, Bhar,

Spokas, Brown, & Creed, 2010), therapists within a participating agency are nominated for participation by their administration. The nominated therapists who elect to participate and meet basic participation requirements (have a current caseload, hold at least a master's degree, demonstrate fluency in English) become identified trainees. Essential components of Beck Initiative training include participation in 22 hours of intensive workshop, 6 months of weekly consultation with therapy session tape review, evaluation of competency in CT based on the Cognitive Therapy Rating Scale (CTRS; Young & Beck, 1980), and ongoing internal supervision groups held within the agency. The workshop phase is completed in 4-5 weekly sessions and covers content including (a) the cognitive model, (b) case conceptualization, (c) cognitive interventions, (d) behavioral interventions, (e) tailoring the treatment approach to the individual, (f) stages of treatment and (g) competency and the CTRS. The 6-month consultation period was designed to maximize therapist benefit and structured to be consistent with empirical evidence that indicates quality of feedback is related to therapist competency (i.e. Brosnan, Reynolds, & Moore, 2006). Weekly meetings are held with the trainee group to review audio samples from the past week, share peer and trainer feedback about the audio, develop and refine case conceptualizations, brainstorm about creative ways to integrate CT approaches into the school milieu, and provide additional didactic information about special topics as requested by the trainees. After the workshop and 6 months of consultation, agencies are expected to continue to hold peer consultation meetings indefinitely to prevent drift from the model. Ongoing support is provided to the agency through instructor visits every 6-8 weeks and participation in quarterly meetings among all trained agencies within the network.

The Beck Initiative training model (Stirman et al., 2010) emphasizes the importance of providing trainees with consistent, structured feedback over time. Formal written feedback is provided through narrative responses and ratings on each of the 11 items of the CTRS at the mid-point and end of the 6-month consultation period, and this written feedback is structured so as to be strength-based. Specifically, for each item of the CTRS, instructors provide detailed written feedback regarding (1) the strengths or skills demonstrated by the trainee in the session, and (2) ways in which the strengths can be built upon to increase fidelity and competency in CT. This model is consistent with the extant research suggesting that the structure, content, and process of supervision are all integral to providing effective supervision. The structure of supervision has been shown to have an impact on therapist satisfaction and effectiveness. Specifically, supervision that includes a structured agenda, audio review, and competency ratings has been suggested to be atypical, but desirable and effective (Cox & Araoz, 2009). Furthermore, group supervision has been shown to have a number of benefits, including increased support among professional peers leading to better communication, planning, and delivery of treatment (Alleyne & Jumaa, 2007). Group supervision also enhances the cost efficiency of training by maximizing the impact of supervision while limiting the cost, which is particularly important given the current and expanding fiscal pressure on schools, providers and payers. Finally, more frequent supervision has also been associated with positive outcomes, as researchers have found that the more time trainees spend in supervision, the more they value the supervision (Livni, Crowe, & Gonsalvez, 2012). Notably, the structure of the group supervision in the Beck Initiative mirrors some of the CT approach with students, including an agenda, a collaborative stance, use of specific

constructive feedback, identification of skills to be practiced outside of the meetings and processing of the success of those practices.

Although research on the effect of feedback on therapist skill development is quite limited, evidence suggests that supervision should include consistent feedback with an opportunity for collaboration between trainee and supervisor (Falender & Shafranske, 2007). In particular, supervision tends to be most effective when supervisors provide consistent positive feedback and invite feedback from trainees (ibid.). Positive feedback has also been associated with increasingly efficient therapy, as it can help reduce the erosion of fidelity. Furthermore, therapists in training tend to prefer supervisors who provide support, insight, and instruction (Kennard, Stewart, & Gluck, 1987). Finally, a limited body of research suggests that providing feedback to therapists learning to implement CT affects the acquisition of CT skills. Specifically, Brosnan et al. (2006) found that providing direct supervision in cognitive therapy is related to demonstrated skills on the CTRS, even on the item that measures interpersonal effectiveness, a markedly global therapeutic skill.

In sum, establishing supervision as a structured but active process with experiential methods and tape review is a major component of guidelines suggested for evidence based clinical supervision (Milne & Reiser, 2011), and is likewise emphasized in the Beck Initiative. In addition, instructors in the Beck Initiative strive to deliver feedback that is positively-framed, building on strengths demonstrated in sessions, and oriented towards the goals of the trainee and his or her clients. By doing so, instructors mirror CT processes like skill-building and goal-setting that therapists concurrently learn to implement with students. There is a dearth of research examining the specific content of feedback (e.g. strength-based statements, instructions for improvement) provided in this effective approach to training therapists (Stirman et al., 2010). Therefore, examining the content of supervisory feedback may begin to elucidate the process by which therapists are successfully trained to competency in CT. Understanding this process would be a step toward identifying the most effective approaches to developing competency in evidence based practices.

The current study had two aims, namely to report the outcomes of a training program offered to therapists in school settings that emphasized an evidence-based approach to promoting student well-being, and to examine patterns of narrative feedback provided to therapists participating in the program. It was expected that therapists would demonstrate significant improvements over time both in knowledge of CT theory and in demonstration of CT skill, demonstrating that community-based therapists can be trained to deliver evidence based treatment with competency, within the real-world challenges of urban public schools. Competent delivery of these services would, in turn, create the opportunity for students to participate in these services in the setting where they already spend their days, as a step toward decreased disparity in access to care. This study is also the first of its kind to examine the content of the narrative feedback provided to school-based therapists, providing insight into a component of an effective CT dissemination process. Broader understanding of the components of effective dissemination may increase the uptake of CT and other evidence based care in the school settings, adding to increased student access to care.

## **Method**

### *Participants*

One agency was contracted to work at a public high school, while the other four treated primary school students. Of those four programs, two were specialized schools for students with disciplinary problems, one was a specialized classroom within a mainstream school, and one was a mainstream school that contracted for mental health services through the city's managed health care system. Overall, the therapists working at these agencies provide a variety of individual and group therapy services to students with both internalizing (e.g. depression, anxiety, grief/loss, managing family stress), and externalizing (e.g., oppositional or defiant behaviors, anger management) problems.

The sample consisted of 25 therapists employed at five different school-based agencies in a metropolitan city in the northeast United States. The sample was 88% female ( $n = 22$ ). The majority ( $n = 23$ , 92%) of the sample reported having received a master's degree, while one participant reported having received a Ph.D. and one an M.D. Participants worked in a variety of fields including counseling ( $n = 10$ , 40%), education ( $n = 1$ , 4%), psychiatry, ( $n = 1$ , 4%), psychology ( $n = 3$ , 12%), and social work ( $n = 10$ , 40%). A subset of the sample ( $n = 13$ ), responded to optional questions regarding their training background and prior experience with CBT. This sample reported a range in years since completing graduate training from 1 to 29 years ( $M = 7.31$ ,  $SD = 7.8$ ). Only two therapists identified their theoretical orientation as "behavioral" or "cognitive behavioral." Of the 13 therapists who responded, two (15%) had learned about CBT from reading books or articles, three (23%) had exposure to CBT in a graduate level course, six (46%) had attended a workshop in CBT, and two (15%) had attended a workshop with follow-up support. Regardless of how much prior exposure to CBT they reported having, most ( $n = 12$ ) therapists indicated knowing "only the basics" while one reported knowing "nothing" and no one reported knowing "a great deal" about CBT. All participants in this sample attended the workshop in its entirety and at least 80% of the weekly consultation sessions. Because this program was primarily a training initiative, program evaluation measures were collected voluntarily and completion of these measures varied based on the individual measure. Sample sizes are reported for each measure in its corresponding section below.

All training for school based agencies was provided by postdoctoral fellows ( $n = 5$ ) selected for their training and expertise in CT and experience working with youth, under the supervision of the lead author, an expert in the implementation of CT in community mental health settings and director of the Beck Initiative. Fellows received live supervision during the training meetings and additional individual weekly supervision of their delivery of training. Each agency was assigned 2 instructors for the duration of training from among the 5 postdoctoral fellows and the Beck Initiative Director.

#### *Adaptation of the Beck Initiative for School-based Programs*

*Embracing advantages and tackling challenges of the school setting.* Colocation of mental health services in a school setting brings unique therapeutic opportunities and challenges. The traditional Beck Initiative training described above was delivered to therapists in a way that highlighted opportunities and resolved challenges, while maintaining fidelity to the CT model. The structure and delivery of the training and consultation remained the same: 22 hours of workshop and 6 months of weekly consultation, followed by transition to a peer-led consultation group with periodic support from Beck Initiative instructors. The

emphasis in this training was specific to helping therapists take advantage of the opportunities presented by school-based services, while overcoming the inherent challenges. Rather than modifying CT, this approach embraced the flexibility inherent in CT by identifying the ways in which a good CT therapist (regardless of setting) uses the cognitive model and case conceptualization to tailor treatment for any client.

School-based therapists have the opportunity to observe their clients interacting with peers, teachers and other school staff in settings with little (recess, lunch) or a great deal of structure (classrooms). These opportunities also become settings for intervention and practicing coping skills. Therapists and clients worked together to develop coping skills for use during the school day, planned specific practice assignments for the client to use the skill in a school situation, and then were able to meet again to discuss the success of the practice – all within the course of a school day. Further, school-based therapists have access to information about their students beyond just their challenges. Whereas a depressed student may report that “nothing good has happened all week,” a school-based therapist may have additional information about the student’s successes from teachers, peers, administrators or others.

Along with these opportunities were challenges unique to the school setting. A recurring challenge was the disciplinarian role into which therapists were often placed. School staff frequently perceived therapists to be responsible for managing the moment-to-moment classroom behavior of their clients, and would expect therapists to remove students with problematic behavior from the classroom to discipline them. These expectations interfered with therapists’ ability to deliver individual and group therapy, both logistically and because of the toll taken on therapeutic relationship. Therapists were encouraged to use their new CT skills to conceptualize and empathize with these teacher perceptions, and then problem-solve collaboratively with the teachers to find a more feasible solution.

*Collaboration with teachers.* Colocation in the school also provided the opportunity for therapists to collaborate with teachers for targeted interventions (intervention intended for specific students in the classroom) and broader classroom-level interventions. The first step in these collaborations was to share the rationale for intervention with the teacher, followed by planning, implementation, and evaluation. For example, a student who struggled with reading would ruminate about his abilities, often becoming so upset and frustrated during individual reading activities that he would begin to disrupt the classroom. The therapist identified this pattern of thoughts, feelings and behavior with the student, and together they created a plan to help him reduce and cope with his distress. The plan was written on a small piece of paper and taped to the student’s desk. The teacher was able to cue the student to use his plan as needed by pausing near his desk and placing her finger on the piece of paper, facilitating the generalization of new skills from therapy room to classroom. The generalization and applied success built, in turn, a sense of being able to cope, ultimately leading to greater resilience in other situations.

Therapists and teachers also collaborated to create classroom-level interventions. The steps for catching, checking and changing an unhelpful or inaccurate thought (Creed et al., 2011; Granholm, McQuaid, Auslander, & McClure, 2004) were taught to all students in a classroom, and then a poster outlining the steps was hung prominently in the room. The teacher and therapist encouraged students to use the process and language of this skill during classroom interactions. For example, during a conflict between two students,

each was prompted to catch the thought he had at the beginning of the argument, check whether the thought was true or helpful, and move to a more helpful and accurate thought. Over time, this process became part of the classroom culture, and students could be heard cueing each other to catch, check and change their thoughts. The normalization of the use of CT skills and support for those skills in the child's environment were key components in classroom interventions.

*Goal setting and Individualized Educational Programs.* A hallmark of CT is the collaborative goal setting that takes place with clients. The therapist helps the child as needed to identify and quantify personal goals, the skills and strengths already possessed by the client, and the challenges or roadblocks standing in the way of the child meeting his or her goals. The goals, strengths, and needs are then translated into treatment goals that have meaning to the client, with the intent of supporting the client's growth in his or her intended direction. Collaborative goal setting remains a central point in school-based cognitive therapy, and may perhaps be particularly relevant for students who were referred to treatment for issues that they do not see as valuable treatment goals (Creed & Diamond, 2001; DiGiuseppe, Linscott, & Jilton, 1996; Shirk & Russell, 1998). For example, one adolescent student indicated that her goal was for her teacher to yell at her less often. The therapist and student worked to identify the situations in which her teacher most often yelled at her. Together they concluded that her teacher most often yelled when the student left her seat without permission or argued with other students. The therapist and student developed goals to reduce each of these behaviors by (1) understanding what triggered the behavior ("What thought goes through my head before I leave my seat / start to argue with a peer?"), (2) checking whether those thoughts were accurate or helpful for her, (3) identifying a more accurate or helpful thought that would make it easier for the student to engage in a different behavior, and (4) learning and practicing new coping behaviors to help the student behave differently in those situations.

Individual Education Programs, or IEPs, are mandated by the Individuals with Disabilities Education Act of 2004, a law in the United States that governs how educational services are provided to students with disabilities. The plan is guided by the student's identified needs (U.S. Department of Education, 2007) and focuses on addressing deficits. Collaborative goal setting provides an alternative to organizing treatment around deficits, and instead focuses on working toward the student's own goals. Whereas IEP goal setting may be set without the child attending the meeting, CT goals are led by the child. The strategy for achieving the goals is organized around helping the child overcome obstacles to the goals, rather than disability.

*Case conceptualization.* Another hallmark of cognitive therapy is the case conceptualization, which elucidates the ways in which a student's life experiences have informed core beliefs, intermediate beliefs or assumptions, and coping behaviors. Those patterns of thinking and behavior influence how students perceive and react in given situations. Case conceptualization brings two powerful pieces to bear on treatment in schools. First, it provides a common way of understanding a student's behavior which frames that behavior as making sense, given the way the student perceives the world, him or herself, and others. Case conceptualization also helps the student to recognize unhelpful or inaccurate beliefs and shift them, resulting in moving the student closer to his or her goals. When school staff and students approach a student's behavior in this way, they may experience more empathy and less frustration in response to the behavior.

Therapists in the Beck Initiative learned ways to communicate with teachers about the cognitive model, thus facilitating teachers' understanding of how a student's beliefs might impact his or her reactions (emotions and behavior) in school situations. For example, the traditional case conceptualization (Beck, 1995) was simplified into a simple three-box design (History, Beliefs, Behavior) to communicate these connections to teachers who has not been trained in CT. This shared conceptualization aimed to decrease stigmatization of student's school behavior as "troublesome" or "malicious" and rather conceptualize it as behavior that made sense, given the way the student sees the world, him or herself, and others. Shared understanding of the origins of behavior can increase empathy and understanding, ultimately increasing the likelihood that the behavior (and related beliefs and emotions) may be shifted to something more adaptive (Creed et al., 2011). For example, one student was receiving services because he frequently made loud comments in class, resulting in laughter and disruption of the classroom. The therapist and child worked together to identify that in the child's past ("History"), she had been openly ridiculed by a different teacher for making mistakes in class. The child had developed a belief that if she made a mistake, she would be humiliated. She had also learned that if she said disrupted the class with something humorous, she could divert attention from any mistakes she might make (Beliefs). Those beliefs led her to make loud comments whenever she began to worry that she was making an academic mistake (Behavior). When this conceptualization was shared with the teacher, he developed empathy for the child and was willing to collaborate on a plan for the child to ask for help quietly, with an explicit agreement that the child would never be teased for doing so. When the child agreed to test this plan as a behavioral experiment, she experienced new evidence that countered her prediction that she would be embarrassed, and instead experienced her teacher as helpful. New, positive experiences such as this one were able to build the child's confidence in alternative responses to struggling with academics.

#### *Therapist Feedback in the Beck Initiative.*

Therapists participating in The Beck Initiative received feedback on their progress toward competency in cognitive therapy in two ways, each of which were intended to build new skills in an approach that echoes the CT approach with students. Small group meetings (5-7 therapists) were held weekly for two hours with audio review for at least 2 therapists per meeting. At the beginning of each meeting, an agenda was set collaboratively with the therapists. Prior to playing audio, therapists were asked to specify the feedback they sought for the cued audio. The therapist, his or her peers, and two Beck Initiative instructors then listened to segments of audio, provided verbal feedback, and suggested possible future directions. The instructors guided the structure of the verbal feedback to begin with reinforcement of skills demonstrated in the audio and then to the requested feedback. Before moving to the next agenda item for the meeting, the instructor confirmed that the therapist received the verbal feedback he or she was seeking and had a concrete plan of action for the next session. In many cases, therapists were given an opportunity to practice the indicated future suggestions by participating in role plays and receiving further relevant feedback from peers and instructors.

In addition to verbal feedback in the weekly meeting, therapists received structured, individual written feedback at the midpoint (3-months post-workshop) and endpoint (6-months post



workshop) of the consultation group, using a gold-standard measure of competency. This written feedback was provided for each item of the competency measure (see below).

### *Program Evaluation Measures*

*Cognitive Therapy Competency.* All 25 therapist trainees submitted audio recorded sessions with students that were rated using the Cognitive Therapy Rating Scale (CTRS; Young & Beck, 1980), an 11-item observer-rated measure designed to evaluate therapists' overall and specific CT competencies, at three different time points: (1) prior to the workshop phase of training (baseline); (2) at the midpoint of the 6-month consultation phase; and (3) at the endpoint of the 6-month consultation phase. Each item is scored on a 7-point Likert scale, ranging from 0 (*Poor*) to 6 (*Excellent*); the 11 items are summed to yield a total CTRS score, ranging from 0 to 66. The CTRS contains two subscales: (1) general therapy skills (i.e., feedback, understanding, interpersonal effectiveness, and collaboration); and (2) CT-specific skills (i.e., guided discover, focus on key cognitions and behavior, strategy for change, and application of CT techniques; Vallis, Shaw, & Dobson, 1986). Traditionally, scores of 40 or above are considered to be indicative of competent delivery of CT (Shaw et al., 1999). In addition to the numerical ratings, raters provide trainees with narrative written feedback for each item of the CTRS, as well as general written feedback regarding the session as a whole. The written feedback on each item followed a general format of (1) describing what the therapist did well in the session, relevant to the item, and (2) suggesting specific changes the therapist could make or interventions the therapist could try to increase competency on the given skill. The CTRS has demonstrated adequate internal consistency and inter-rater reliability (Vallis et al., 1986), and strong inter-rater agreement for general competency (Williams, Moorey, & Cobb, 1991).

CTRS ratings were conducted by the 2 instructors assigned to each agency. Prior to rating any audio, instructors were required to demonstrate that they were calibrated with gold-standard CTRS ratings. Instructors would listen to audio recorded sessions that had been previously rated by a group of calibrated raters. For an individual audio recording, the instructor "matched" the gold standard by (1) rating item scores within 1 point of the gold-standard rating for 9 out of 11 items, and (2) showing agreement with the gold standard about whether the total score indicated competency ( $\geq 40$ ) or non-competency ( $< 40$ ). For an instructor to be deemed calibrated, he or she must match on 3 out of 4 audio sessions rated. If the instructor did not match on 3 out of 4, a new set of 4 was completed as a new attempt. All raters in this study were calibrated prior to rating audio from trainees, and monthly calibration meetings were held to monitor and maintain reliability.

*Evaluation of Narrative Written Feedback on the CTRS.* As mentioned previously, in addition to the 11 quantitative items described above, the CTRS includes space for open-ended narrative feedback following each item. Coding of narrative feedback responses from the CTRS was conducted on the full sample ( $N = 25$ ). A novel coding system was developed for the current study to describe the content of written feedback delivered to trainees via the CTRS. Narrative written feedback was organized into categories that were developed and clarified through several iterations. First, three postdoctoral fellows (1 instructor from the current study, 2 Beck Initiative instructors who did not participate in the school-based trainings)

independently read through the narrative feedback provided to five randomly selected participants and developed lists of all potential feedback categories. Via consensus, the categories were then synthesized to create a comprehensive and distinct list of 16 categories (see Table 1 for examples of each category): (1a) positive observation, (1b) negative observation, (1c) neutral observation, (2) description of client behavior, emotions, or quotes, (3) positive statement followed by suggestion for improvement, (4a) suggestions to carry out, (4b) pitfalls to avoid, (5) normalization of therapist's behavior, (6) pointers for raising a score, (7a) positive statement of growth, (7b) negative statement of growth, (8a) rationale for implementing a suggestion, (8b) rationale for refraining from a behavior or intervention, (9) implementation instructions, (10) positive exclamatory statement, and (11) miscellaneous. Next, the postdoctoral fellows operationally defined each category and trained two masters level research assistants to code each sentence of the narrative written feedback into one distinct category. During the coding process, the two raters flagged any sentences that did not fit into one precise category; based on consensus the fellows placed these sentences in one of the categories. A small number of responses were not fit to any category and were therefore placed in the miscellaneous category.

In order to determine inter-rater reliability, both raters independently coded the narrative written feedback of three randomly selected participants. Reliability coefficients for each category, ranged from unacceptable ( $\kappa = .16$ , Category 4b) to excellent ( $\kappa = .90$ , Categories 1a and 3). For the subsequent analyses, two categories were combined (4a and 9, from here referred to as 4a\9) because the raters were unable to reliably distinguish them, indicating that they were describing the same construct. In addition, two reliability coefficients (Categories 7a and 7b) could not be calculated because the categories were coded with too low frequencies or not coded at all by at least one of the raters. Category 4b was excluded because the reliability was poor according to commonly accepted standards (Landis & Koch, 1977). All other categories (1a, 1b, 1c, 2, 3, 4a\9, 5, 6, 8a, 8b, 10, and 11) demonstrated at least moderate interrater reliability ( $\kappa > 0.6$ ) and were retained in subsequent analyses explained below and presented in Table 2.

*Knowledge of Cognitive Therapy.* The Cognitive Therapy Knowledge Quiz is a 20-item multiple choice test designed to assess knowledge of CT principles and interventions (e.g., "According to the cognitive model, a person's *interpretations of life events* lead to emotions and behavior"). The quiz was developed specifically for The Beck Initiative to test trainees' knowledge of CT before (baseline) and after the 22-hour workshop (approximately 5 weeks post-baseline). Preliminary results of this measure have been presented previously, indicating that the Knowledge Quiz is sensitive to change in knowledge acquisition resulting from training (i.e., Corso, Cunningham, Sposato, & Buchhofer, 2010). A subset of the sample ( $n = 16$ ) completed this measure.

*Program Feedback from Trainees.* In an effort to evaluate trainees' satisfaction with The Beck Initiative training program, participants were asked to complete an 11-item anonymous program feedback form at post-workshop, mid-practicum (3 months post-workshop) and post-practicum (6 months post-workshop). The feedback forms, which were developed for this initiative, were administered by the community partners and were de-identified before being shared with the training instructors. Given that the present study is focused on the effectiveness of the entire training program, only data from the final written

**Table I. Cognitive Therapy Rating Scale Feedback Categories and Examples**

Category Number	Category Name	Examples
1a	Positive observation	Nice job explaining the thought-feeling-behavior triangle!
1b	Negative observation	Some parts of your agenda were a little vague.
1c	Neutral observation	You also had him review the triangle when talking about his belief that things aren't fair.
2	Description of client behavior, emotions, or quotes	He is very concrete in his responses.
3	Positive statement followed by suggestion for improvement	It's great that you wanted her to see that people aren't better than her, but sometimes you were trying to prove it to her, rather than have her uncover it, in her words.
4a\9	Suggestions to carry out	Remember to put the homework check on the agenda in future sessions.
4b	Pitfalls to avoid	One thing to watch for is trying to convince her or talk her into changing her thoughts.
5	Normalization of therapist's behavior	I could hear you working hard at making sure all of the CT pieces were in there, but what sometimes happens is that therapists focus so much on doing the CT components that they forget to do some of the empathy and warmth that comes so naturally.
6	Pointers for raising a score	To improve this score more, you could have asked if he's okay moving on to the next topic of discussion before transitioning.
7a	Positive statement of growth	Fantastic job – you're really making good progress.
7b	Negative statement of growth	Guided discovery is a great area for growth for you to focus on.
8a	Rationale for implementing a suggestion	Getting more specific agenda items will likely lead you to specific interventions that can give your client a sense that they are chipping away at their problems.
8b	Rationale for refraining from an intervention or behavior	Often when the agenda items are vague or broad it can lead to a vague or diffuse therapy session without any intervention.
10	Positive Exclamatory statements	Nice work!
11	Statements not accounted for by any other category	Maybe we can have some practicum group discussions around how to modify questioning for very concrete youth.

feedback form will be presented. A subset of the sample ( $n = 13$ ) completed this form. The form consists of three items rated on 7-point Likert scales assessing the overall quality of the training and comfort in applying the skills trainees acquired throughout the training. Three forced-choice (i.e., yes/no/maybe) questions measure trainees' beliefs about adequacy of time spent in group practicum, relevancy of topics to trainees' clinical work, and whether practicum sessions were useful adjunctive training tools to the training workshop. An additional four items inquire about the structure of the practicum sessions, as well as the most and least

helpful components of the training. The final item provides trainees with the opportunity to share additional comments regarding their experience with the program.

**Table II. Cognitive Therapy Rating Scale Feedback Categories, Mean per Therapist and Frequencies**

Category Number	Category Name	Mean	SD	Frequency	Percent
1a	Positive observation	30.28	16.96	757	25.89
1b	Negative observation	4.24	5.16	106	3.62
1c	Neutral observation	11.60	21.50	290	9.92
2	Description of client	20.32	33.24	508	17.38
3	Positive statement followed by suggestion for improvement	3.72	2.73	93	3.18
4a/9	Suggestions to carry out	31.6	13.52	790	27.02
5	Normalization of therapist behavior	0.20	0.50	5	0.17
6	Pointers for raising a score	2.84	3.44	71	2.43
8a	Rationale for implementing a suggestion	6.40	4.75	160	5.50
8b	Rationale for avoiding a behavior or intervention	0.68	0.90	17	0.58
10	Positive exclamatory statements	3.24	2.92	87	2.77
11	Miscellaneous	1.16	1.43	29	0.01

*Note.* Mean = mean times category occurred per therapist; SD = Standard Deviation; Frequency = total number of times each category was coded (out of 2929 total feedback sentences); Percent = percentage of each category when all rating scales are summed.

## Results

### *Training Effectiveness*

Baseline scores on the CTRS ranged from 6 to 35 ( $M = 20.54$ ,  $SD = 8.28$ ), 3-month scores ranged from 21 to 50 ( $M = 33.04$ ,  $SD = 7.31$ ), and 6-month scores ranged from 19 to 54 ( $M = 41.12$ ,  $SD = 9.43$ ). As noted previously, a total score of 40 is widely accepted as the clinical benchmark of competency in CT. None of the participants reached a score of 40 or above at baseline, five participants achieved competency by the 3-month mark, and 18 participants demonstrated competency by the final assessment (72% of the 25

participants). In addition, participants are considered to be competent with regard to a specific skill if they receive a score of 4 or above on a given item. At baseline, the mean scores for individual items ranged from .63 (homework) to 3.13 (interpersonal effectiveness), suggesting that, on average, participants did not demonstrate competency on any of the skills assessed by the CTRS. In contrast, individual item means ranged from 3.36 (homework) to 4.2 (interpersonal effectiveness) at the 6-month point, indicating that, on average, participants approached competency on all items.

Hierarchical linear modeling (HLM) growth curve analysis was used to assess changes in CTRS scores over time because it more accurately captures individual growth compared to traditional methods of repeated measures variance tests (Bryke & Raudenbush, 1992). The model predicting change over time within participants using CTRS total score as the outcome variable was significant (*Coefficient* = 10.28, *SE* = 1.10,  $t(24) = 9.39, p < 0.001$ ).

### *Knowledge of Cognitive Therapy*

A subset of participants ( $n = 16$ ) completed the CT Knowledge Quiz at the beginning and end of training in CT. These participants demonstrated a statistically significant increase in their knowledge of CT principals and theory,  $t(15) = -2.758, p < .05$ . This change also represented a large effect (Cohen's  $d = -0.69$ ). The participants who completed this measure did not differ significantly in CT competency compared to those who did not complete this measure ( $\chi^2(1) = .62, p = .43$ ).

### *Program Feedback from Trainees*

At the end of the practicum phase, 13 trainees (52%) completed a program feedback form developed specifically for this initiative. Therapists who completed the program feedback form did not significantly differ in CT competency from those who did not complete the feedback form ( $\chi^2(2) = .65, p = .72$ ). Given the small sample size, there was insufficient power to run statistical tests of differences between feedback completers and non-completers on all demographic measures. However, a non-significant tendency was identified for therapeutic orientation to predict feedback form completion ( $\chi^2(4) = 8.98, p = .06$ ).

Overall, trainees' feedback about the program was notably positive. The mean score for the overall quality of the practicum phase of training was 5.38 ( $SD = .77$ , range = 4-6) on a scale of 0 (*Poor*) to 6 (*Excellent*). The mean ratings for the degree to which participants felt comfortable applying CT in general, and the extent to which participants felt comfortable applying the particular content discussed during the practicum phase were 4.54 ( $SD = .88$ , range = 3-6) and 4.92 ( $SD = .86$ , range = 4-6), respectively, on a scale of 0 (*Not at all comfortable*) to 6 (*Very comfortable*). Of the 13 trainees who provided feedback about the program, 98% ( $n = 12$ ) stated that the amount of time spent in group practicum was adequate, and 85% ( $n = 11$ ) found the practicum topics to be relevant to their clinical work. All 13 trainees found the practicum sessions to be a useful, adjunctive training tool to the workshop.

Participants were also asked to identify the most helpful component of the training. In response to this question, 77% ( $n = 10$ ) of participants made reference to the feedback they received from their mentors.

For example, one trainee wrote: “The feedback and suggestions given each week were very helpful.” With regard to the least helpful components of the training, 38% ( $n = 5$ ) of participants declined to comment. An additional 38% ( $n = 5$ ) commented on the structure and logistics of the consultation sessions (e.g., “I believe the weekly sessions could have [been] a little longer”). Only one trainee commented on the quality of mentors’ presentation style (“sometimes it felt as though group discussions evolved into lectures...”).

### *Evaluation of Narrative Feedback*

In order to gain a systematic understanding of the way in which mentors provide written feedback to trainees, we examined the frequency of the feedback categories described above that met our criteria for reliability. The most common type of feedback fell under the umbrella of suggestions to implement and step-by-step recommendations for how to do so (combined Categories 4a\9), which accounted for 27% of the total CTRS sentences. Positive observations (Category 1a, 26%) was the second most common category, followed by Category 2, which captured sentences describing students’ behaviors and feelings (17%), and neutral observations regarding the session (Category 1c, 10%). Feedback providing a rationale for a specific suggestion to implement (Category 8a) accounted for 6% of CTRS sentences, whereas negative observations accounted for 4% of feedback sentences. The remaining categories each accounted for less than 4% of the total feedback (see Table 2 for the frequency of occurrences of each category).

## **Discussion**

The program evaluation findings suggest that the Beck Initiative training model is a promising method for training school-based community mental health workers to deliver CT competently with students. Over the course of the training program, therapists were able to demonstrate the acquisition of cognitive therapy skills as evaluated by expert raters, and demonstrate those skills in the schools. Therapists demonstrated significant gains in skill by the mid-point of training, and they demonstrated further gains by the end of training, with almost three quarters of the trainees demonstrating competency at 6 months. Notably, no restrictions were placed on the treatment goals or presenting problems of students, which led to training cases representing the broad spectrum of students seen in school-based services. The majority of therapists were able to deliver CT competently with their students, even among the challenges inherent in delivering services in this high-demand, real-world setting. The success of this training suggests that training school-based community mental health service providers in CT or other evidence based practices may be one effective way of increasing access to care for youth who may be otherwise underserved.

Consistent with this demonstration of skill, trainees also evidenced increases on the test of CT knowledge after completing the workshop. Prior to training, average knowledge test scores indicated that the baseline level of knowledge about CT was quite low. Scores increased after the workshop phase of the training, showing meaningful gains. In fact, the majority of the trainees scored a 90% or higher on the post-workshop test, indicating that they answered no more than 1 or 2 items incorrectly. This accumulated

knowledge may have set the stage well for the trainees to benefit from the 6 months of practiced application and feedback and suggests that this type of workshop may be an effective component in effective training.

In addition to demonstrating increased skill and knowledge, trainees provided quite positive feedback about the training experience. Trainees particularly valued feedback pertaining to their emerging skills, underscoring the importance of the feedback component of the training program. Analysis of the content of written feedback at the midpoint and end of training revealed that specific suggestions and instructions were the most common form of written feedback provided, followed by the provision of positive feedback. Negative feedback occurred quite infrequently in the written comments. This focus on a strength-based approach to clinical training appears to have been effective, given that almost 75% of the trainees were able to demonstrate competency in CT after 6 months. These findings are a step toward quantifying successful and acceptable components in this training initiative, which in turn can guide further refinement of effective training programs. This unpacking of the components of the Beck Initiative may help guide future research to distill the most effective and acceptable approaches to train community therapists to competency, increasing overall community access to evidence based care.

Although these findings suggest that the model of training employed in the Beck Initiative may be an acceptable and possibly efficacious approach to training school-based therapists in CT, the study has limitations that may impact the findings. The small sample size of therapists precluded the analysis of the relation between the content of the written feedback and trainees' performance. The limited variability within the written feedback (largely instructional and positive) and training outcomes (largely successful in training therapists to competency) further limited the ability to analyze the relation between written feedback and training outcomes. The use of instructor ratings on the CTRS rather than blind raters may have resulted in a bias in competency scores or feedback, although this approach was necessary from a training perspective. Reliability of the raters was monitored and maintained throughout the study, which may have limited the impact of any bias. In addition, our findings are further limited by missing program evaluation data for a number of the therapists included in this sample, attributable to the voluntary nature of participation in the program evaluation. Without a control or comparison group, these data stand primarily as a preliminary indication that method of training was acceptable to therapists and an effective tool in teaching CT to school-based therapist. Only the written feedback was analyzed, and although it may serve as a proxy for the weekly verbal feedback, it cannot be assumed that the written feedback is fully representative of the briefer but more frequent verbal feedback.

Given the rising call for empirically supported school-based interventions (Forman & Burke, 2008), the preliminary outcomes of the training model suggest that further examination of the efficacy and impact of this training may be merited. First, a more rigorous randomized study of the model would help to increase confidence in its effectiveness, including a larger sample size for better statistical power, a control group for comparison, measures of the impact of training on student functioning, and measures of the degree to which CT has been implemented in the school setting. After establishing the effectiveness of the training, a study of sustainability would provide important data about the degree to which investing in this CT training might

lead to long-term change in the services provided. A larger sample would also allow for examination of whether the content of feedback, whether written at the 3-month point or verbal in weekly groups, might predict competency by the end of training. Each of these further directions would facilitate a better understanding of factors that might enhance or inhibit the implementation of evidence based treatment in schools, ultimately leading to greater confidence in the services received by our students and better access to effective care.

The Beck Initiative training in CT is one important step in answering the call for broad access to effective care. This training model was not limited by a manual or to a specific presenting problem, but instead used case conceptualization to meet the wide-ranging needs and strengths of students in their regular academic environments. Bringing evidence based practices to the schools where students spend their days may reduce the challenge of connecting children and adolescents with the services that can improve their lives, moving ever toward equal access to effective services for all.

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