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De-adoption of an evidence-based trauma intervention in schools: A retrospective report from an urban school district

Erum Nadeem[1,2] and **Vanesa Ringle**[3]

[1]Ferkauf Graduate School of Psychology, Yeshiva University

[2]Department of Child and Adolescent Psychiatry, New York University School of Medicine

[3]Department of Psychology, University of Miami

Abstract

The de-adoption of evidence-based practices (EBPs) is a largely understudied topic. The present study examined factors related to the de-adoption of an EBP for students exposed to traumatic events in a large urban school district. Qualitative interviews conducted with school clinicians and district administrators two years after the district embarked on a large-scale roll-out of the EBP distinguished between factors that impacted partial de-adoption after one year (phase 1) and complete de-adoption by the district after two years (phase 2). Phase 1 factors included organizational consistency, workforce stability, prior success, positive student outcomes, school- and district- level supports, innovation-setting fit, and innovation-related issues. Phase 2 factors included district-level leadership changes, financial and workforce instability, and shifting priorities. Study results suggest that sustainment-enhancing strategies should be included in the early stages of program implementation to most effectively adapt to school- and system- level changes.

Keywords

evidence-based practice; sustainment; de-adoption; trauma; schools

Mental health services in schools are critical for improving access to services for students with mental health needs (Atkins, Graczyk, Frazier, & Abdul-Adil, 2003; Reinke, Stormont, Herman, Puri, & Goel, 2011; Stephan, Weist, Kataoka, Adelsheim, & Mills, 2007; U.S. Department of Health and Human Services, 2003). School-based psychosocial interventions can improve students' overall mental health outcomes (Hoagwood et al., 2007), as well as their academic success (Kataoka et al., 2011). As such, there are ongoing efforts to disseminate, implement, and sustain evidence-based psychological practices (EBPs) in schools (Owens et al., 2014), with a growing number of studies on implementation of EBPs in this setting (e.g., Becker, Bradshaw, Domitrovich, & Ialongo, 2013; Langley, Nadeem, Kataoka, Stein, & Jaycox, 2010; Reinke et al., 2012). However, sustainment challenges and de-adoption of mental health EBPs in schools remain largely understudied. To our

Corresponding author: Erum Nadeem, Ph.D., Associate Professor, Ferkauf Graduate School of Psychology, Yeshiva University, 1165 Morris Park Ave, Rousso Building, Bronx, NY 10461; P: (718) 430.3822; F: (718) 430-3960; erum.nadeem@einstein.yu.edu.

knowledge no study to date has examined these issues as related to trauma interventions, which warrant specific attention. School-based trauma-focused services may involve actively identifying students who might not otherwise receive attention (e.g., Stein et al., 2002), and may be more likely to be perceived as being non-central to schools' educational mission compared to other types of supportive student services.

Nonetheless, because an increasing number of schools are seeking to implement mental health EBPs, including those focused on traumatized youth, research on EBP sustainment challenges and de-adoption is important. Sustainment can be defined as the maintenance of EBPs "for the continued achievement of desirable program and population outcomes" (Scheirer & Dearing, 2011; p. 2060). De-adoption, on the other hand, can occur at any stage of the implementation process, and often refers to failure to sustain an EBP (Massatti, Sweeney, Panzano, & Roth, 2008; Panzano & Roth, 2006; Stirman et al., 2012). Currently, there is a need to understand factors and processes that may lead to EBP de-adoption under real-world conditions in which researchers and university partners are no longer providing training, consultation, personnel, or financial support (Friend, Flattum, Simpson, Nederhoff, & Neumark-Sztainer, 2014; Greenhalgh, Robert, MacFarland, Bate, & Kyriakidou, 2004).

Existing conceptual models of implementation science have not focused specifically on de-adoption, but do outline interdependent, multi-level factors that can impact an organization's ability to sustain an EBP (e.g., Aarons, Hurlburt, & Horwitz, 2011; Domitrovich et al., 2008; Fixsen, Blase, Metz, & Van Dyke, 2013). One prominent model developed by Aarons and colleagues (2011) describes inner (organizational) and outer (macro-level) factors across multiple stages of implementation. Inner context factors relevant to the EBP sustainment phase include ongoing coaching and fidelity support, leadership support, organizational culture supporting EBPs, and mission/policy alignment. Outer context factors include sociopolitical issues such as leadership, federal, state, and local policies, financing, workforce stability, and relations with intervention developers. Interacting across these factors are innovation characteristics (e.g., ease of use), and innovation fit with both the system and the organization.

Results from a recent review of quantitative and qualitative sustainment studies across healthcare fields are in line with conceptual models, and include studies in which interventions were discontinued (Stirman et al., 2012). The authors found inner context factors such as the innovation (e.g. continued fit and benefit within a setting), organizational context (e.g. local leadership support, climate), implementation process (e.g. collaboration, ongoing support), and outer context factors such as broad leadership and capacity (e.g. workforce, stakeholder involvement) were most commonly related to program sustainment across healthcare fields. In mental health specifically, frequently cited factors included highlighted the importance of organizational-level inner context factors like workforce (staffing, attributes), organizational leadership, innovation fit, and training and education (Stirman et al., 2012). Additional, recent studies of EBP implementation and sustainment in community mental health settings highlight the importance of sustained funding (which can be at the inner or outer context-level), and inner context organizational issues, perceived effectiveness of the treatment, staffing support, therapist attitudes, lack of time, and other

resources (Bond et al., 2014; Palinkas, Ell, Hansen, Cabassa, & Wells, 2011; Palinkas et al., 2013).

Existing studies on program sustainment in the school context highlight similar factors. For instance, inner context factors such as fit with school structure, teacher buy-in, and minimal cost and time resources were the most influential factors in the sustainment of a school-based obesity program for adolescent girls (Friend et al., 2014). A set of studies examining organizations' sustainment of violence and delinquency prevention programs as part of a statewide effort focused on inner context factors and found that aligning intervention goals with those of the school/agency, program staff, overall school support, administrator support, and financial planning were important to organizations' sustainment of interventions (Tibbits, Bumbarger, Kyler, & Perkins, 2010). Sites that sustained programs reported better coalition functioning, communication to key stakeholders, knowledge of the EBP's logical model, and ongoing communication with intervention developers (Cooper, Bumbarger, & Moore, 2013).

Research specific to de-adoption in the mental health context is currently limited, with only one study that has examined de-adoption of EBPs. Massatti and colleagues (2008) conducted a mixed methods examination of factors associated with the de-adoption of various EBPs (e.g., Multi-systemic therapy, the Ohio Medication Algorithms Program) by twelve mental health agencies in Ohio. De-adoption factors were similar to those associated with successful sustainment, but were in the opposite direction, and included: lack of funding, lack of support from outside agencies, turn-over of qualified staff, organizational compatibility with the EBPs, lack of tangible outcomes and model fidelity, challenges with expert training, technical assistance, and consultation services, and lack of EBP integration with information technology changes.

Together, studies of sustainment and de-adoption point to the importance of examining ongoing implementation supports, leadership, fit of the EBP with the setting across multiple levels and over time, and the stability of the workforce as potential factors in the de-adoption of EBPs. To our knowledge, no study to date has examined the de-adoption of a school–based intervention for traumatized students. This is an important issue given the impact of trauma on educational and psychosocial outcomes (e.g., Cooley-Quille, Boyd, Frantz, & Walsh, 2001; Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009; Schwab-Stone et al., 1999; Schwartz, 2003; Zinzow et al., 2009), and the resources that schools, agencies, and local governments are committing to implementing EBPs and creating trauma-informed schools, and garnering support for a mental health issue that has not historically been addressed as part of routine school behavioral supports (e.g., Adams, 2013; Cole et al., 2005; Stevens, 2012).

The present study examines factors related to the de-adoption of the Cognitive Behavioral Intervention for Trauma in Schools (CBITS), a 10-week group intervention for students who have been exposed to trauma and exhibit significant symptoms of posttraumatic stress disorder (PTSD), in an urban school district. CBITS has been found to be effective in ameliorating symptoms related to PTSD and depression (Kataoka et al., 2003; Stein et al., 2003), and has been successfully implemented in various school districts across the United

States (e.g., Jaycox, Kataoka, Stein, Wong, & Langley, 2005; Kataoka et al., 2003; Langley et al., 2010; Nadeem, Jaycox, Kataoka, Langley, & Stein, 2011; Ngo et al., 2008; Stein et al., 2003). Prior to the current study, the school district implemented CBITS district wide with demonstrated improved outcomes for students and strong positive feedback from stakeholders (Nadeem et al., 2011). However, one year after this effort, only half the clinicians continued to use CBITS, and two years later the district completely discontinued using the EBP. Through qualitative interviews with school staff two years after CBITS was scaled up, the present study examined the factors related to the de-adoption of CBITS. Our primary questions included: 1) What are the inner and outer context factors that facilitate or hinder the ongoing use of CBITS in the school district? and 2) How do these factors differentiate those who sustained CBITS in the short-term versus those who de-adopted?

Method

Study context

The study was conducted in a large, urban school district in the northeastern United States serving over 27,000 students. Students in the district are from diverse backgrounds (38% Latino, 36% African-American, 10% White, 14% Asian American, 1% American Indian/ Alaskan Native, and 0.6% Pacific Islander) and speak over 75 languages. Approximately 74% of students are eligible for free or reduced price lunch.

The district implemented CBITS for three consecutive years (2008–2011) before the de-adoption process began. Initial implementation was led by a community mental health partner with co-located services in the schools that were funded through grants and Medicaid billing. The agency began by providing CBITS in a large school (2008–2009) and expanded these services into an additional school at the request of the school's principal (2009–2010). As CBITS began to expand from 2009 to 2010, district-employed school personnel became increasingly involved in supporting the agency's implementation of CBITS by offering logistical support (e.g., help with photocopying, finding space and time, helping to engage stakeholders). The agency also provided a conference to the community at large about the impact of trauma on learning and mental health.

Based on prior success and increasing awareness among school personnel about the pervasiveness and impact of trauma, school district leadership determined that CBITS should be implemented in all schools by district-employed clinicians in order to scale the intervention and build sustainability. All district clinicians were formally trained in CBITS by expert trainers at the end of the 2009–2010 academic year (the second year of agency-led CBITS implementation). The district also spent this academic year planning their implementation support structure (R. Campbell, personal communication, August 12, 2015). By the 2010–2011 academic year, twenty schools (14 K-8, 6 middle or secondary schools) implemented CBITS for 6th grade students, representing all but two of the eligible schools. Although the provision of CBITS became a formal requirement for clinicians, these particular schools were not included based on mutual decision-making by the district and the school principals. Students and families were offered CBITS based on the results from voluntary screening efforts to identify students with exposure to traumatic events, and current symptoms of posttraumatic stress disorder.

The scale up effort was supported by a multi-level, district-led implementation support structure that included training and ongoing consultation from national CBITS experts and community agency partners, strong senior district leadership, and alignment of CBITS with other behavioral programs in the district. Clinicians were provided with a detailed implementation manual (consent, timelines, pre and post measures, fidelity expectations), implementation support groups, and regular meetings with district leadership, district supervisors, and agency partners. In addition, district leadership directly met with local school principals about CBITS to build buy-in and tangible support for the program, and worked to align CBITS with district policies and structures. The district also collected pre to post outcome data (i.e., PTSD and depression symptoms, grades), which showed significant pre to post improvements in depression symptoms, trauma symptoms, and grades for the majority of students. After the conclusion of the academic year, data were summarized and included in reports to the school board, school administrators, and clinicians. Although the district was not specifically guided by the implementation literature, their approach addressed several key strategies highlighted in research on implementation drivers, which include competency drivers (e.g., staff training and coaching), leadership drivers (e.g., managerial skills, adaptive leadership), and organization drivers (e.g., facilitative administration, data-based decision making, systems intervention). Additionally, research meetings between leadership and local implementation teams served as a mechanism for policy to practice feedback loops (Fixsen et al., 2013; National Implementation Research Network, 2015). Additional details on the implementation support system and student outcomes have been reported elsewhere (Nadeem et al., 2011).

Participants

There were a total of twenty school clinicians that successfully implemented CBITS in the school district during the scale up effort. Fourteen of the original CBITS clinicians (70%) and two central district staff members participated in this study. Seven (50%) of the fourteen clinicians implemented CBITS for one year, and no participants implemented CBITS for two years. Participants were recruited for individual interviews via phone and email. Six of the original CBITS clinicians were not reachable due to changes in employment.

Demographics—School clinicians were district-employed licensed clinical social workers (LCSWs), with the exception of two district-level personnel. LCSWs worked full-time providing psychosocial treatments for youth in middle schools (60%), high schools (40%), and elementary schools (40%). The categories were not mutually exclusive as some clinicians worked in multiple schools. Ages ranged from 34 to 65 (M = 48.2, SD = 9.7). Per self-report, participants were White (46.6%), African-American (13.3%), Latino (26.6%), and of mixed race or other background (13.3%). All participants had a Master's degree and had worked in schools an average of 12.9 years (SD = 7.7). Please see Table 1 for more detailed participant information.

Measures

Background Questionnaire—This questionnaire gathered demographic information and information related to the participants' history with the school district (e.g., changes in

school assignments) and their use of CBITS (e.g., number of years of CBITS implementation, number of CBITS groups).

Qualitative Interview—The first author (EN) developed a semi-structured interview guide after conducting an informal needs assessment (via an informational focus group discussion) with CBITS-trained clinicians and district staff. The meeting raised two major issues upon which the interview guide focused: the need to better understand current structure of mental health services in the school district (including for children with trauma symptoms), and catalog clinicians' CBITS-related implementation experiences. In addition to questions that provided details on how services were structured for general and special education students, interview questions asked about the perceived fit of CBITS with the school and district needs, CBITS implementation processes and experiences, the CBITS intervention itself, adaptations, factors that participants perceived facilitated or hindered sustainment of CBITS, and their suggested improvements for the future. Questions were structured to be open-ended with specific prompts to be used as needed to address the multiple levels of implementation support. The two district staff members were interviewed using the same interview guide and were included in the study to provide information about history of CBITS in the district and district-level context for the theme analysis. In addition, district staff were also able to provide supporting information about when individual clinicians stopped using the intervention.

Procedure

Interviews were conducted via telephone two and a half years after the district implemented CBITS district-wide by the lead author. Interviews lasted, on average, approximately 30 minutes, ranging from 20–45 minutes. All participants provided verbal consent and received a $50 gift card for participating in the study. Interviews were digitally recorded, transcribed verbatim by a professional transcriber, and were reviewed and checked for accuracy by the research team. All procedures were approved by the university Institutional Review Board.

Data Analysis

Interview transcripts were thematically coded using Atlas.ti (Muhr, 1998), a qualitative analysis software that aids the coding, organization, and retrieval of textual data. Following a modified grounded theory approach, preliminary codes were derived from the interview guide, and emergent topics from the transcripts themselves. Through an iterative process, the authors discussed, and refined a list of codes by independently coding transcripts and discussing code definitions and application (Bernard, 2006). Once consensus was reached on all codes, the coding list was finalized and applied to all transcripts by the second author. The first author independently coded 50% of the transcripts as a check of reliability, and a Kappa of .87 was obtained.

Though the entire interview was used in our analysis, topics included in the present study were limited to those pertaining to trauma services and implementation constructs related to CBITS. After the completion of all coding, the research team further analyzed the coded material to identify barriers and facilitators related to the two phases of de-adoption covered in the interview: Phase 1 partial de-adoption (2011–2012) and Phase 2 complete de-adoption

(2012–2013). In particular, we reviewed codes related to the use of CBITS one year after the district scale-up effort, and issues related to the district's formal decision to discontinue system-wide use of CBITS. Major themes were derived from the qualitative data as described above, and were conceptualized using the outer context (systems), inner context (organizational-level, individual-level clinician and client), and innovation-related (e.g., systems-level and organizational fit, benefit, ease of use) factors framework hypothesized to relate to program sustainment and de-adoption (Aarons et al., 2011; Chambers, Glasgow, & Stange, 2013).

Results

As noted above, analysis focused on factors related to de-adoption and sustainment challenges across two phases—one year post the district-wide CBITS scale-up effort and two years post CBITS scale-up. We refer to these as Phase 1 (partial de-adoption) and Phase 2 (complete de-adoption). Analysis of Phase 1 focused on identifying the primary barriers and facilitators to short-term sustainment, and exploring any distinguishing characteristics between the seven clinicians who implemented CBITS and the seven who did not. In Phase 2, the analysis focused on the district's overall de-adoption of CBITS. Distinct themes emerged across the two phases.

Phase 1

Data analysis revealed five overarching themes pertaining to de-adoption and sustainment issues for CBITS during Phase 1: 1) organizational consistency and workforce stability, 2) demonstration of prior success and positive outcomes, 3) school and district-level implementation supports, 4) innovation-setting fit, and 5) innovation-related issues (See Table 2 for a summary of Phase 1 results). Themes are presented in order of salience. Whenever present, we note overarching differences in the nature of the barriers and facilitators noted by the clinicians who used CBITS in Phase 1 and those that did not. Exemplar quotes are included whenever relevant. Quotes were selected for their representativeness of participant perspectives as well as their clarity and cogency. Comments from district staff supported the general themes identified by the clinicians.

Organizational consistency and workforce stability—All seven of the clinicians who sustained CBITS in Phase 1 reported that they did not change their school assignments. This stands in contrast to the seven non-sustaining clinicians who reported either a change in schools (n=2), an addition of another school to their caseload (n=3), or a change in school administration (n=2). Specifically, Phase 1 de-adopting clinicians who had additional schools added to their caseloads reported being stretched for time, "As much as I'd loved CBITS. I felt it was very beneficial. There is no way I could add that to my schedule." Others reported that CBITS was not a priority of their new school administration or because the new administration did not have prior experience with the intervention being successfully used in their school, it was not prioritized.

Demonstration of prior success and positive outcomes—Several clinicians that sustained CBITS in Phase 1 reported that previous positive experiences and documentation

of improved student outcomes helped them continue to use CBITS. Quotes from four of these clinicians are included below. One clinician explained, “We’re trained to do this awesome program. You see it works [to reduce symptoms and improve behavior]. You’re going to keep it going. I really feel that a lot of the LCSWs felt the same way about CBITS. They were passionate about it.” Another clinician explained: “It was something that I felt was very beneficial. It was something that I liked and the kids liked, and the staff here liked a lot. And so you just put it in your schedule at the beginning of the year. I just left one counseling spot open for CBITS.” Finally another clinician described the benefits perceived by teachers as a facilitating factor, “I had a couple teachers that were really gung-ho about it and would tell me, ‘I really feel like your group is making a difference in my children that you’re working with’.” Another clinician reported, “It was successful with the students that were involved. We did the pre and post test, and you could see the change in the kids.”

School- and district- level implementation supports—Having support in the school and from the district emerged as an important facilitator to sustaining CBITS. At the local school level, this support came from other school personnel or school administration. A clinician who continued to use CBITS in Phase 1 provided an example of tangible support she received from her colleague, “The art therapist worked with me on it. If I was busy, she could make copies of materials. And she was there to help me run it, so that helps tremendously.” Other clinicians who used CBITS in Phase 1 described logistical support from local school administrators. Examples from five of the seven clinicians included protected time in their schedule, space to run the group, and assistance in how to balance the benefit of CBITS with missed instructional time. Sometimes support was more passive, but still perceived as helpful. One clinician said the following about the school administration, “They were very supportive of whatever I wanted to do. They didn’t particularly get involved or ask questions. They just let me run it again. In the first year, I invited the principal to the party and awards ceremony at the end to come help hand out certificates.”

Clinicians who de-adopted CBITS in Phase 1 described the challenges they experienced as being related to administration priorities. One of these clinicians noted, “I attempted to run CBITS groups again but the administration was focused on academics, and I needed their permission. I don’t think it was that they didn’t want it, but it was not on the top of their list. There was a request to launch a grief group, so I did that and incorporated some of the strategies from CBITS.”

At the district-level, it was evident across all interviews that there was no longer a district mandate that supported CBITS implementation, which resulted in no district-wide strategy for engaging principals, or a structured implementation support system for clinicians. Participants reported that district-level leadership changes and shifting priorities impacted the local schools’ priorities. Despite these issues, there were positive comments from Phase 1 and Phase 2 de-adopters about the district’s CBITS implementation toolkit, which contained schedules, consent forms, screening materials, timelines, and other implementation materials. A clinician that used CBITS in Phase 1 reported, “We had all the materials we needed in order to run CBITS, so it was easy to do it again.” For clinicians who de-adopted CBITS in Phase 1, it appeared that a lack of district-level infrastructure, district leadership engagement, or a mandate to run CBITS impacted their ability to continue to use

the treatment. A clinician stated, “Without someone from the top supporting it and paving the way, it was very difficult to use CBITS again.”

Innovation-setting fit—Overall, clinicians across both groups reported that CBITS was a good fit for the needs of the students in their schools. In each of the interviews, clinicians perceived a high need for the intervention and reported that along with behavioral problems, trauma and chronic stress were among the top problems faced by students in their schools. One clinician described the impact of trauma exposure on learning, “We see a lot of stress in our kids. There are a lot of incidents in the community and in their home lives where they are exposed to violence, and this impacts how they do in school and their behavior.” Another noted, “I was not surprised to see how many of the students qualified for the program.”

Innovation-related issues—The types of innovation-related barriers reported did not differ across the two groups of clinicians. There were two primary challenges discussed: 1) time out of class, and 2) parent engagement. With respect to time out of class, a clinician who discontinued CBITS in Phase 1explained: “I think the part that was really challenging for me was how many times I had to get these kids out of class.” Another clinician (who used CBITS in Phase 1) noted that she tried to minimize missed academic time, but “for the individual sessions [trauma narrative], I had to pull the kids out of an actual class. That was hard [because] a lot of times, these kids [were] not doing well in class.”

Additional comments reflected challenges in engaging parents for consent and treatment. Although the parent component of CBITS is designed to be flexible, it includes two parent sessions and students may need additional parent support throughout treatment. A provider who discontinued CBITS in Phase 1 explained, “I experienced reluctance from the parents. When they first heard the word ‘trauma’, that was a no-no. I had to reframe how I introduced the idea to them.” Another clinician who used CBITS in Phase 1 noted, “You’re lucky if the parent does the homework with kid. Celebrate. Throw a party.” There were no comments made about fit of the intervention with the school or student needs, the ease of use of the manual itself, the content of the sessions, the training provided, or the flexibility and adaptability of the intervention. The only exception was that a few clinicians from both groups mentioned that they devoted additional time to a given component of CBITS than what was in the manual (e.g., the fear hierarchies took more than one session), or that they enhanced certain activities to more effectively engage the students (e.g., use of additional role plays or games).

Phase 2

Phase 2 de-adoption occurred two years after the district embarked on the district-wide implementation of CBITS. During that particular academic year, no clinicians used CBITS and the program was completely de-adopted. There were three major themes that emerged as possible contributing factors: 1) district-level senior leadership changes, 2) financial and workforce instability, and 3) shifting priorities and restructuring. Clinicians and district staff who de-adopted in Phase 1 and Phase 2 did not differ in their comments about Phase 2, therefore they are reported below as one group.

District-level leadership changes—Participants reported several changes at the district level that impacted the sustainment of CBITS. Specifically, a particular district leader who was a major advocate for CBITS and other behavioral interventions left the district. The loss of this leader coincided with a restructuring of district programs across a range of student issues. One clinician, representing the views of the majority of participants, described the transition and new priorities: “We’ve lost a major senior administrator that is proactive and advocated for the kids’ needs, across the board, regular education and special education. Things have changed. Within the last year, they’re just looking at all the academics right now.” Another representative comment, “Because of the change of administration, the only thing that makes sense is the academics.”

Financial and workforce instability—Financial challenges in the district and consequent workforce instability emerged as another important phase 2 theme. Specifically, a major state and local budget crisis led to significant job restructuring and layoffs for both clinical and non-clinical social workers. Although the majority of CBITS clinicians remained in the district, some LCSWs that had previously implemented CBITS were laid off. The following quote from a clinician exemplifies the issues that the district faced, “My take away was that we had a lot of social workers employed in this district, like maybe eighty of them. And people were saying, that’s too many. When we had that big budget crisis, they cut over thirty [clinical and non-clinical] social workers.” Several clinicians reported that this upheaval created a stressful work atmosphere and many previously existing programs did not retain their priority status.

Shifting priorities and restructuring—The previously discussed emergent themes also co-occurred with themes about the shifting priorities of the district and the major restructuring of clinician job duties, which every participant reported. Namely, providers who were not laid off now had reconfigured job duties including having to attend to more administrative tasks, and having less time for direct therapy. One provider explained, “Our primary job [during CBITS implementation] was to do counseling. CBITS was easy to put in [place] because that’s part of counseling. That’s what we did all day. Now, we do a very small amount of counseling and it’s not really a priority.” This was perceived as major shift from a program of behavioral supports and counseling targeting students in general and special education to duties specifically focused on the needs of students with individualized educational plans (IEPs). One clinician explains, “In terms of contact with our students, it’s all basic work towards the IEP. Our role with the counseling is very limited.” Another clinician provided additional detail, “We’ve been given the directive this year that our priority is not counseling. There’s a date that we need to comply with for each IEP. So that means consulting with the other team members and the child’s teacher, getting feedback in order to complete the IEP, holding IEP meetings with parents and other educational personnel, as well as conducting social assessments as needed.”

Across the interviews, participants indicated that these shifting priorities had implications for the ways in which students in general education settings were provided with psychosocial interventions. According to the district staff members and some of the clinicians who were interviewed, mental health interventions had previously been aligned

along a continuum of needs from general to special education students and were conceptualized as prevention, early or targeted intervention, and indicated interventions. The structure was explicitly aligned with the intervention model used for academic interventions. One clinician reported that prior to district-level changes, “teachers would identify behaviors in the classroom and ask the LCSW to see the child.” Across all the interviews conducted, clinicians reported that, for the most part, they now had to make outside referrals for students who did not have an IEP because there was significantly less time for direct counseling services for them.

Discussion

The potential impact of exposure to traumatic events on students’ academic and psychological outcomes has been well-documented (e.g., Fowler et al., 2009; Zinzow et al., 2009), and many school districts across the country are implementing EBPs and other trauma-informed approaches (e.g., Adams, 2013; Cole et al., 2005; Ngo et al., 2008; Stevens, 2012; Walker, 2008). Given the significant financial, personnel, and time investment it takes to adopt and launch new EBPs, understanding the context for de-adoption of such programs is critical. Studying this issue in schools is particularly important, given that mental health is not the primary mission of schools and trauma services may require special advocacy, education, and engagement efforts. The goal of the current study was to understand the contextual factors that may have influenced the short-term sustainment and ultimate de-adoption of CBITS in a large urban school district.

Overall, findings from the present study are in line with the existing conceptual models and empirical research on sustainment and innovation de-adoption. Specifically, our findings point to factors such as organizational consistency and workforce stability, leadership support, innovation-setting fit, and system-level financial issues (e.g., Aarons et al., 2011; Chambers et al., 2013; Massatti et al., 2008; Stirman et al., 2012). Interestingly, our findings related to Phase 1, which referred to the partial de-adoption of CBITS, suggested an emphasis on inner context or intra-organizational factors. In contrast, our findings related to Phase 2 (complete, district-wide de-adoption of CBITS) showed a relative emphasis on outer context or macro-level challenges to sustainment as described in the work of Aarons and colleague (2011).

With respect to short-term sustainment (Phase 1), we found that clinicians who implemented CBITS for longer tended to report working in the same school or under the same school administration, and had not been reassigned to a different school or assigned additional schools to their caseload. This is consistent with previous findings around workforce stability, administrative support, and fit with the school’s structure and priorities (e.g., Friend et al., 2014; Palinkas et al., 2013; Tibbits et al., 2010). For these clinicians, sustaining the intervention did not appear to present major challenges despite the fact that there was no longer a district-wide CBITS implementation support structure (e.g., ongoing clinical consultation, district-level support systems). Facilitators included being able to run the intervention successfully the year before, school personnel perceiving benefits from the intervention, and positive pre to post-test outcomes for students. In line with theoretical models and empirical research (e.g., Aarons et al., 2011; Palinkas et al., 2013), it appears

that these schools and clinicians benefited from the overall culture and climate for EBPs that was set in the years prior, and the clinicians had enough of a support system to continue to use the intervention. Of note, study results provided specific strategies for involving administration and other school personnel in the process (e.g. co-facilitating a group, help with logistics, principal participation in graduation) that may have contributed to the positive culture about trauma-focused interventions.

In contrast, those who were not able to sustain CBITS in Phase 1 did not have support within their schools or from administration, and did not have time in their caseload to prioritize CBITS. For these clinicians, it appears that the maintenance of the district-level support structure, including the direct engagement of local school principals by district leadership would have been beneficial to surmount typical logistical challenges (e.g., Langley et al., 2010), garner local administrator support for CBITS, and prioritize the intervention. Interestingly, across both groups of clinicians, there were virtually no negative comments about the need for a trauma-focused intervention such as CBITS, or its ease of use. While it is possible that clinicians may have been reluctant to give negative feedback to the interviewer, even when asked about specific adaptations or modifications they felt they needed, the only adaptations mentioned had to do with enhancing existing activities in the manual or adding more time to cover a specific clinical topic. This suggests that during Phase 1 of the de-adoption and sustainment process, intra-organizational factors and workforce stability issues were most salient. This may be because clinician concerns about addressing trauma, the intervention, and issues of fit to the setting were sufficiently addressed during pilot work and active implementation.

During Phase 2, which was the complete de-adoption of CBITS by the school district, outer context or macro-level factors featured most prominently (Aarons et al., 2011). The reasons were system-level upheaval in two critical areas — district leadership and the stability of the workforce district-wide. These are consistent with Massatti et al.'s (2008) findings around turnover, financing, and organizational fit. In what could be called a perfect storm of leadership change and a major budget crisis, the district experienced a recalibration of priorities, which led them to de-emphasize their existing public health approach to mental health interventions, and instead focus clinical personnel on pressing administrative and regulatory priorities. These new priorities were mainly related to academic and behavioral support needs within the special education sector. This occurred despite implementation drivers that the district attempted to put in place (i.e., leadership support, training and coaching, facilitative administration, data and outcome monitoring; Fixsen et al., 2013; National Implementation Research Network, 2015). From the perspective of the dynamic sustainability framework (Chambers et al., 2013), which emphasizes the importance of adaptation, ongoing continuous improvement, problem-solving by organizations, and attention to innovation-setting fit at all levels of the system, CBITS was no longer a good fit for the school district. This impacted the sustainment and strength of the key drivers within the CBITS implementation support system.

Of note, across both phases of the de-adoption process, the majority of issues that arose did not appear to be specific to trauma interventions, but were more broadly related to EBPs and new programs in general. This is not surprising, as many mental health programs appear to

have similar sustainment barriers (e.g., Forman, Olin, Hoagwood, Crowe, & Saka, 2009; Stirman et al., 2012). Although discomfort with addressing trauma in schools was not mentioned explicitly by participants (who were primarily clinicians), there was some evidence that trauma services may be particularly vulnerable to de-adoption in educational settings. For instance, clinicians who de-adopted during phase 1 and were working with a new school administration reported that trauma interventions were not perceived as a priority.

There are important limitations to the present study. First, the study was a case study of de-adoption in one particular school district and may not generalize to all districts. While some of the circumstances faced by the district in the current study may have been unique, school districts across the country are routinely faced with changes to school leadership, district leadership, funding, and central organization which can have a profound impact on how programs and services are implemented within the district (Datnow, 2005; Gamoran, Secada, & Marrett, 2000). The current study provides an important, in-depth analysis of how this larger context can impact specific mental health programs. Another important limitation of the current study was that because of the system-level issues experienced by the district at the time of our study, we were unable to interview school administrators, teachers, and other staff from each of the schools. This is a critical area for future research because such information would deepen our understanding of EBP de-adoption and would provide critical, non-clinical perspectives on trauma-specific services. Despite these limitations, we feel that the present case study analysis provides important insights into how programs may be de-adopted and provides important directions for research and practice.

From a research and practical perspective, our study suggests that intervention developers, researchers, and implementation strategists would be well-served to assume that leadership and budget changes are likely to occur over the life of any program. While it is not possible to anticipate when and how such changes will occur, there may be benefits to building coalitions that go beyond those who are directly involved in implementation. At a district level, this might involve sharing program results widely with divisions across the district, deepening the involvement of school administration and district leadership teams, and providing relevant information and results to parent groups and school board members. At the local school-level, practitioners could use similar strategies to routinely provide feedback to parents, teachers, and administrators, and involve additional school staff in the process. Another potentially helpful strategy is pre-service and in-service training for school leadership to help them systematically assess district, school, and student needs and thoughtfully consider the prior programs and practices that have been in place. Our short-term sustainment findings also highlight that there may be a way to provide ongoing district-wide implementation support systems that are not as burdensome and costly as the initial program launch may have been. This might involve continued, but less frequent clinician meetings, district-level outreach to local school principals, ongoing trainings, and in-services led by the district in order to keep emphasis on the program. Whenever possible, it may also be helpful for interventionists to conceive EBPs not as standalone programs but as set of core practices and strategies across multiple contexts (e.g., individual treatment, afterschool programs, group counseling, classrooms). How to do this while maintaining fidelity and desired outcomes is an important area for future research.

It will also be important for practitioners, educators, and school mental health leadership to be thoughtful about the particular nuances of sustaining trauma-focused services in schools. As implementation teams are using some of the coalition-building and multi-stakeholder engagement strategies described above, it will be important to provide information about the impact of trauma on learning. In addition, broad dissemination of program impact on both mental health and educational outcomes will be important to an organization's ability to sustain trauma-focused services. Alignment of trauma services with other school-wide educational initiatives could also be helpful. This could be the inclusion of trauma-focused EBPs as Tier 2 or Tier 3 support services aligned with Response to Intervention or Positive Behavior Support models. Direct consultation to teachers around supporting traumatized students in the classroom could also help garner support for trauma services in schools more broadly.

In summary, the current study provides an in-depth analysis of the multi-level factors that can impact the de-adoption and sustainment of an EBP for trauma in schools. Specifically, it appears that in the short term, after a successful large-scale effort to implement an EBP, if practitioners retain stability in their settings, they can often continue to use an intervention. There also may be benefit to retaining systematic supports, especially for those who experience changes to their workloads, assignments, or local school leadership. Our study also highlights the tremendous influence of broad, macro-level context factors, particularly with respect to leadership, policy, and financing. While these factors may not be mutable, practitioners, school and district leadership, and university partners who strive to create trauma-informed schools through the use of EBPs can begin to develop and test implementation and sustainment strategies that can more nimbly anticipate changes.

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Table 1

Background characteristics

ID Number	Age	Gender	Degree	Years of experience	Role	De-adoption
1	36	F	Masters	9	Clinician	Phase 1
2	48	M	Masters	17	Clinician	Phase 1
3	42	F	Masters	11	Clinician	Phase 1
4	50	F	Masters	11	Clinician	Phase 2
5	48	F	Masters	13	Clinician	Phase 2
6	65	F	Masters	36	District Staff	N/A
7	34	F	Masters	5	Clinician	Phase 2
8	53	M	Masters	12	Clinician	Phase 2
9	40	F	Masters	7	Clinician	Phase 1
10	60	F	Masters	22	Clinician	Phase 1
11	50	M	Masters	11	Clinician	Phase 1
12	38	F	Masters	10	Clinician	Phase 1
13	64	M	Masters	10	Clinician	Phase 2
14	56	F	Masters	8	Clinician	Phase 2
15	39	F	Masters	8	Clinician	Phase 2
16	59	F	Doctorate	30	District Staff	N/A

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Table 2

Summary of results related to Phase 1 partial de-adoption of CBITS

	Implementers	Non Implementers
Organizational consistency and workforce stability	• Did not change schools	• Changed or added schools
Demonstration of prior success and positive outcomes	• MH and academic outcomes • Teacher observations of student behavior	• Did not mention that this was a facilitator, but did acknowledge impact of CBITS
District-level supports	• Some implementation supports remained • District implementation toolkit • Support was still perceived even without formal structure	• Cited a need for district level mandate in order to get buy-in locally
• School-level support	• Supportive local school administration, teachers, and other staff	• New leadership that was not supportive of prior practices • Shifting priorities that de-emphasized mental health
Innovation-setting fit	• Innovation-setting fit (i.e., there was a perceived need for CBITS)	• Clinicians perceived need, but barriers were deemed insurmountable
• Innovation-related issues	• Intervention was easy to use • Barriers related to time out of class and parent engagement	• Intervention was easy to use • Barriers related to time out of class and parent engagement