

Monitoring Provider Fidelity of a Parenting Intervention Using Observational Methods

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Monitoring fidelity to evidence-based interventions is a critical component of successful dissemination. Attachment and Biobehavioral Catch-Up is a nationally and internationally disseminated evidence-based early intervention that uses observational methods (e.g., video review and content coding) to monitor fidelity as well as video conferencing to provide consistent and interactive feedback. The current study examined patterns of change in fidelity data, measured by “in-the-moment” commenting rate, across 2 cohorts of parent coaches. Coaches demonstrated a significant increase in commenting rate across the training year. However, there was also a significant amount of individual variation, with some coaches exhibiting initial high rates of commenting and others providing limited commenting, with individually varying patterns of change across time. The within-coach variability raises the possibility of individualized supervision processes based on regular quantitative feedback. Future investigations should identify common trajectories in fidelity across coaches and factors (e.g., coach, session, organizational) that may affect commenting.

Public Significance Statement

This study found that all trained providers were able to reach fidelity to an evidence-based intervention (Attachment and Biobehavioral Catch-Up); however, there was also significant within-provider variability in meeting fidelity requirements during the training period. Although follow-up studies are needed, results suggest the potential of an individualized, data-driven approach to supervision to support evidence-based intervention fidelity.

Keywords: evidence-based intervention, dissemination/implementation, fidelity monitoring, early intervention, Attachment and Biobehavioral Catch-Up

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Despite the well-documented benefits of evidence-based early parenting interventions for infants and young children who have experienced maltreatment (Toth, Gravener-Davis, Guild, & Cicchetti, 2013), access to these programs is often limited in child welfare (Hurlburt et al., 2004). To remediate this problem, researchers and community providers, often through large-scale dissemination efforts, have been working to move such interventions into the community. Although access may be improved by dissemination, community implementations often do not replicate parental skill and child well-being outcomes from research-based trials, which may result in decreased treatment effectiveness (Bearman, Schneiderman, & Zoloth, 2017). For children and families involved in the child welfare system, the ability to implement research-supported interventions that yield outcomes similar to university trials is critical.

Measuring and monitoring preestablished fidelity criteria is a key component of dissemination that can allow treatment developers to maintain control over intervention delivery, prevent provider drift, and achieve community-based outcomes similar to research trials (Durlak & DuPre, 2008; Schoenwald et al., 2011). Indeed, maintaining high fidelity to evidence-based interventions is important, as fidelity seems to moderate intervention effectiveness (e.g., positive parent and child outcomes) as programs are moved into the community (Dusenbury, Brannigan, Falco, & Hansen, 2003). The “gold standard” of fidelity measurement, using video review and content coding by trained coders, is a rigorous approach that can yield precise and objective data (Hogue, Liddle, & Rowe, 1996; Mowbray, Holter, Teague, & Bybee, 2003; Schoenwald et al., 2011). Thus, this observational method of fidelity measurement can be an effective way to monitor provider delivery of an intervention. In addition to fidelity monitoring, ongoing supervision after the initial training has also been identified as an integral component of successful dissemination (Edmunds, Beidas, & Kendall, 2013). Within child welfare specifically, the incorporation of fidelity-focused feedback into training, compared with less active methods (e.g., providers solely attending an initial training or receiving a manual), has been found to yield positive outcomes, including lower provider turnover (Aarons, Sommerfeld, Hecht, Silovsky, & Chaffin, 2009) and higher rates of successful intervention implementation (Nelson, Shanley, Funderburk, & Bard, 2012).

Despite the impact of fidelity and supervision on parent, child, and staff outcomes, many evidence-based interventions fail to measure or report intervention fidelity (Durlak & DuPre, 2008). Additionally, it has been well documented that provider fidelity can “drift” and decrease over time, even within a training and/or supervision period (Elliott & Mihalic, 2004; Schoenwald, Sheidow, & Letourneau, 2004). Few studies that implement early intervention and/or parent training have assessed such longitudinal changes in provider fidelity within training cohorts and across individual families (see Chiapa et al., 2015, and Forgatch & DeGarmo, 2011, as two exceptions). This lack of reporting and understanding of how fidelity progresses over time is worrisome, as client outcomes may be differentially impacted by provider behavior, and supervision effectiveness may be comprised, resulting in a missed opportunity to best tailor feedback to meet individual provider needs. Therefore, within evidence-based early interventions, more research on how fidelity patterns progress over time is warranted.

Attachment and Biobehavioral Catch-Up

Attachment and Biobehavioral Catch-Up (ABC) is a nationally and internationally disseminated evidence-based early intervention that monitors progress in provider fidelity for 1 year posttraining using observational methods (e.g., videoconferencing, session review, and content coding). ABC has been delivered to families of children Ages 6 to 24 months in the child welfare system (see California Evidence-Based Clearinghouse for Child Welfare, 2014, for objective review). The goal of ABC is to improve parental sensitivity to children’s cues by coaching parents to provide nurturing care in times of distress, follow their child’s lead with delight, and avoid frightening behaviors. Efficacy has been demonstrated in randomized clinical trials with foster mothers (Bick & Dozier, 2013) and birth mothers involved in Child Protective Services who were at risk for neglect (Bernard et al., 2012). Parents who received ABC showed greater increases in sensitivity toward their children (Berlin, Shanahan, & Appleyard Carmody, 2014; Bick, Dozier, Bernard, Grasso, & Simons, 2013; Caron, Weston-Lee, Haggerty, & Dozier, 2016), decreased intrusiveness (Caron, Bernard, & Dozier, 2016), and decreased child abuse potential and parenting stress (Sprang, 2009) than parents receiving a control intervention. More children whose parents received ABC developed secure attachments than children in a control group (Bernard et al., 2012), and children whose parents received ABC showed a more normative pattern of diurnal cortisol sustained for at least several years postintervention (Bernard, Dozier, Bick, & Gordon, 2015; Bernard, Hostinar, & Dozier, 2015; Dozier, Peloso, Lewis, Laurenceau, & Levine, 2008) and better self-regulation (Lewis-Morrarty, Dozier, Bernard, Terracciano, & Moore, 2012; Lind, Bernard, Ross, & Dozier, 2014) than children whose parents received a control intervention.

Building upon these efficacy studies, ABC has moved from university-based trials to community settings. To date, the effect sizes for parent behavior change in community implementation are comparable with those in the university-based trials (Roben, Dozier, Caron, & Bernard, 2017). Effectiveness has been pursued through the use of regular, frequent, and high-quality supervision and fidelity monitoring. A unique aspect of ABC is that supervisors and “parent coaches” who deliver the intervention are trained in video management and coding, digital record keeping, and video conferencing technologies. During video-recorded sessions, coaches meet with families in their homes and deliver session content while also commenting on the behavioral interactions between parents and children. These comments are used to measure coach fidelity to ABC. Coaches and an assigned fidelity-focused supervisor then code the comments made during sessions and discuss three different parameters: commenting rate, quality, and descriptiveness (see Bernard, Meade, & Dozier, 2013, for more information on commenting parameters). Fidelity requirements remain constant across sessions and throughout the training year. These data are tracked and calculated at the end of the year to determine certification in ABC. Once coaches are certified, they are encouraged to continue using coding to self-supervise and monitor their delivery of ABC.

Coaches also meet for weekly, individual, fidelity-focused supervision sessions through video conferencing. During these sessions, supervisors use the coded fidelity data to provide feedback that can then be applied to coaches’ sessions during the following

week. Thus, the quality of ABC delivery is continually being assessed and improved from week to week. This iterative process, consisting of feedback about coding, commenting practice, and goal setting, is designed to ensure that coaches are delivering ABC as intended.

Current Study

It has been well established that maintaining intervention fidelity as well as providing regular supervision posttraining are key components of successfully disseminating university-developed interventions to community settings (Durlak & DuPre, 2008; Edmunds et al., 2013; Schoenwald et al., 2011). Additionally, given the impact of fidelity on intervention outcomes (including both client and staff outcomes), understanding longitudinal patterns of fidelity during provider training appears to be an important gap in the current literature. ABC uses fidelity coding, focused on coach commenting during ABC video-recorded sessions, and weekly supervision for 1 year posttraining to promote high fidelity to the model. Thus, dissemination staff collect a large amount of weekly quantitative commenting data as coaches progress throughout the year. The current study explores patterns of these fidelity data gathered through the supervision process and seeks to better understand the observed changes across the year as well as implications for future supervision strategies and implementation.

Commenting rate (i.e., the number of comments made in an ABC session) is one key indicator of ABC fidelity that has been found to predict increases in parental sensitivity and following the lead as well as decreases in intrusive behavior directed toward the child (Caron et al., 2016). Frequent comments are thought to provide a high level of “real time” feedback to parents, serving to either reinforce the ABC target-related behaviors or help parents successfully change their behavior. Making consistent comments is a central point of fidelity-focused supervision sessions, and so in the current study, we assessed change in parent coach commenting rate over time. Because coaches were receiving weekly supervision regarding their commenting during ABC sessions, we predicted that commenting rate would increase across 1 year of supervision. However, there is often variability in provider fidelity within community implementations of evidence-based interventions (McHugo et al., 2007). Given potential individual differences across coaches, we also predicted that there would be within-coach variability in commenting. We hypothesized that coaches would differ in their initial rates of commenting (i.e., during early sessions of ABC) and in how they progressed over the year of supervision.

Method

Participants

Data were collected from 31 parent coaches, representing the coding of 222 different families across two training cohorts. One cohort ($n = 13$) was trained through a nonprofit organization in a major metropolitan city where parent coaches delivered ABC full time. The other cohort ($n = 18$) was structured as a statewide implementation of ABC across a state in the southeastern part of the United States. In this cohort, parent coaches were predominantly recruited from Department of Social Services agencies that

each carried one to two ABC cases at a time and balanced the delivery of ABC with other work responsibilities. In both cohorts, coaches typically delivered ABC to birth parents who were referred by the local Department of Social Services agency or foster parents of children with a history of early adversity.

The majority (90.3%) of coaches were female. Fifty-five percent of coaches identified as White, 39% identified as Black/African American, and 6% identified as biracial. The mean age of coaches was 33 years old (range = 22–52 years old). At both sites, parent coaches typically had bachelor’s-level degrees and varied in their years of experience providing services for children and families (e.g., range = 0–30 years). Within the total sample of 31 coaches, coding was included from four coaches who did not complete the supervision year. These coaches dropped out because of changes in employment at their dissemination sites (e.g., promotions, leaving their positions) and not because of inability to implement ABC.

Measures

Fidelity data, as measured by commenting rate, were collected using the in-the-moment (ITM) coding system. This system codes for parent and parent coach behaviors: First, intervention-targeted parent behaviors (e.g., nurturance, following the lead, frightening behavior) are coded, and second, parent coach responses (or lack of responses) to these behaviors are coded. Summary statistics from the coding sheet are provided for each coded clip. Commenting rate (i.e., the number of on-target comments per minute in a 5-min clip) is calculated by dividing the total number of parent behaviors by the number of comments made during the clip. To meet fidelity standards, coaches must produce at least one on-target comment per minute (i.e., five comments across the 5-min coding clip).

Procedure

Parent coaches in each cohort attended a 2-day in-person training (both occurring in October 2015) led by the same team of individuals and following the same training protocol for both trainings. During this time, coaches received an introduction to ABC, including summaries of research support for the intervention, explanations of ITM commenting and coding, and overviews of manualized content. Training was delivered through didactic and active learning strategies (e.g., role-playing, commenting practice, live coding of video clips). Upon completing the 2-day training, parent coaches received weekly, remote supervision, via video conferencing, for approximately 1 year. Coaches were required to video record each ABC session, which lasted approximately 60 min. The video-recorded sessions were then reviewed in individual fidelity-focused supervision led by a highly trained staff member. During fidelity-focused supervision, parent coaches’ commenting statistics and coding were reviewed, and supervisors tailored feedback relative to each coach’s progress in commenting and coding as well as the needs of the family. As coding has been found to be associated with an increase in parent coach commenting frequency over time (Meade, Dozier, & Bernard, 2014), both the parent coach and the fidelity-focused supervisor coded the clip.

Fourteen fidelity-focused supervisors provided supervision, and all were female. These supervisors were either undergraduate research assistants or research staff who had been selected by a

laboratory coordinator to be trained in the ITM coding system. Prior to meeting with coaches, fidelity-focused supervisors attended weekly training meetings for approximately 3 months, and were then required to complete a set of coding and reach at least 70% agreement with a “master coder” (i.e., the codeveloper of the coding system) on several indicators of parent behaviors (e.g., nurturance, following the lead, frightening behavior) and coach comments. During the time they provided fidelity-focused supervision, these supervisors met in weekly, 1-hr consultation groups with a staff member trained to reliability in the coding system and provided written summary feedback to other supervisors of the parent coaches. Although coaches also coded their ABC session videos, they were not trained to reliability in ITM, and their coding was only used to guide their fidelity-focused supervision.

Parent coach fidelity data from a randomly selected 5-min video clip were entered into Excel spreadsheets using the coding scheme previously described. A random number generator (www.random.org) was used to choose the 5-min clip. Specifically, the fidelity-focused supervisor randomly generated a number (from the range of time covering the whole clip) and assigned coding starting at that time. For example, if the coach’s session lasted for 60 min, the coach randomly generated a number between the Minutes 0 and 55 (to account for the potential to code the first or last 5 min of the session). If the program generated the number 15, then the supervisor and coach coded Minutes 15 to 20. This practice was done to encourage coaches to comment consistently through the entire session, even during times when it might be difficult to make comments (e.g., at the beginning or end of the session).

Only the coding from the fidelity-focused supervisors was used in data analyses. For coaches who carried one case at a time, each session video was coded for fidelity. To account for coach ability to code and meet for supervision each week, only one session video was typically coded, even for coaches who carried a high caseload of families. These videos were usually chosen by the fidelity-focused supervisor, who attempted to code a variety of cases and sessions across the year. If coaches had a particularly difficult case, these sessions might have been coded for weeks in a row before moving on to a different case. Fidelity data were originally collected for program evaluation purposes, and thus were considered exempt by the University of Delaware Institutional Review Board, as they were archived, deidentified, and used for program evaluation.

Data Analysis

Multilevel linear modeling was used to examine change in coach commenting over time, accounting for coaches’ individual cases. For all analyses and graphs, parent coach commenting rate was analyzed in relation to time since beginning supervision, referred to as “time” from here forward, in which the first supervision session was coded as “0,” and each subsequent supervision was coded as the number of days since the initial supervision session. Additionally, each unique case was given its own identifier. Mplus Version 7 (Muthén & Muthén, 2004) was used to model multilevel linear growth, and SPSS 24.0 was used to model individual graphs.

Results

Video clips were coded by fidelity-focused supervisors for 656 sessions across the 31 parent coaches. On average, 21.6 sessions

per parent coach were coded (range = 4–59). The low end of the range can be attributed to coach dropout. As coaches were not always able to see families (e.g., because of cancellations), the average number of video clips account for the average number of weeks ABC was implemented.

Overall Group Change in Commenting Rate Across Time

As a first step in examining patterns of change in commenting rate across time, we modeled the linear growth of commenting rate. In this three-level growth model, accounting for time within coach within case, 656 observations of rate for 31 coaches were modeled across time. There was a significant linear slope of 0.001 (i.e., a change of 0.001 comments per minute for each day of training, $p < .05$, or an average increase of 0.37 comments per minute for the year of training). The average intercept was 1.18, and the goal after a year of supervision is a consistent rate of 1.0 comments per minute. Of note, results also indicated a significant amount of between-individual variance ($p < .0001$) in rate. As expected, because training was discontinued because of organizational changes rather than coach skill, the results did not differ when the four coaches who did not complete training were removed from the analyses.

Individual Parent Coach Change Across Time

The high levels of between-individual variance suggested that there is important within-coach change that was not accounted for in the model. In order to take a preliminary look at individual coaches’ change in rate across time, we graphed each coach’s data. Figure 1 shows individual case examples of commenting rate for each of the 31 parent coaches across the supervision year, starting at the first time each coach’s session was coded and ending at either the completion of the certification year or when the coach dropped from training. As seen in Figure 1, certain coaches immediately made comments at a high frequency (e.g., Coaches 3 and 10) and maintained or increased this already high rate of commenting. Other coaches struggled with comment frequency early but then improved steadily over time (e.g., Coaches 5 and 14). Still other coaches struggled to make comments during ABC sessions, thus failing to meet fidelity initially, only to improve commenting frequency at the very end of the supervision year (e.g., Coach 30). Notably, it seems important to continue in training beyond a few supervision sessions, as our coaches who dropped out because of changes in their positions (Coaches 2, 4, 6, and 9) showed little positive change, or even a decrease in rate, with the few supervisions that they had. We also provide each individual’s slope in Table 1. Consistent with the individual graphs, there was individual variation in the coaches’ intercept (i.e., where they started) and their slopes (i.e., their progress across the training year).

Association Between Commenting Frequency and Slope Over Time

In order to determine whether parent coach slope (rate of change across the training year) was associated with the initial commenting frequency (intercept), we conducted a regression analysis and

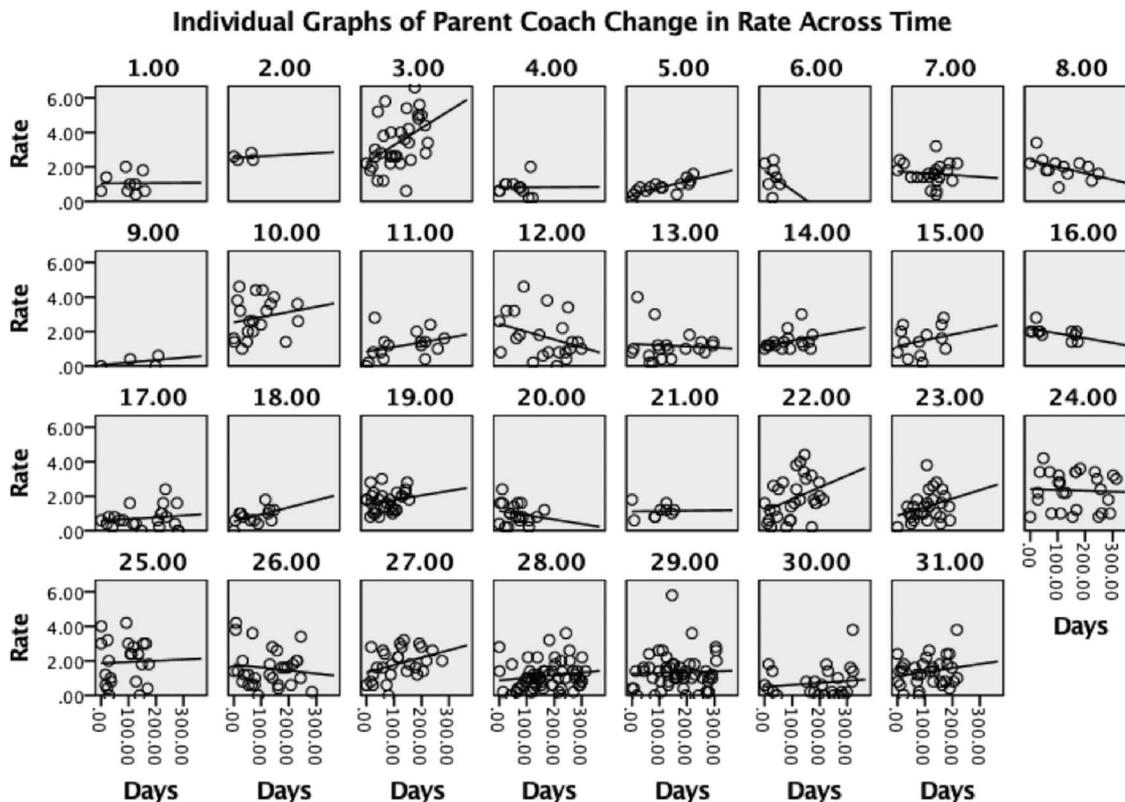


Figure 1. Individual graphs of parent coach change in rate across time. Numbers at the top of each graph are IDs for each parent coach.

found that individuals' initial commenting frequencies (intercept) predicted the rate of change across the training year (slope), extracted from Table 1. Intercept was a significant predictor of slope ($\beta = -.23$, $R = .55$, $\text{adj. } R^2 = .28$), $F(1, 29) = 12.41$, $p < .001$, suggesting that lower initial commenting frequencies were associated with higher rates of change across the training year.

Discussion

ABC is an evidence-based early intervention that is disseminated nationally and internationally. A strength of the ABC training process is that fidelity progress is measured in a precise and rigorous way using video review and content coding. This process enables supervisors to understand week-to-week coach commenting trajectories and provide regular supervision, which allows for implementation with a high degree of effectiveness in creating change at community sites across the nation and globe (Roben et al., 2017).

Given the impact of fidelity on intervention outcomes (Dusenbury et al., 2003), and because few studies have reported on how fidelity changes over time (Chiapa et al., 2015), the current study assessed patterns of change in one indicator of ABC fidelity: rate of commenting. The first step in understanding coach progress was to model growth across the training year, accounting for individual cases. On average, coaches in this sample showed an increase in commenting rate and met fidelity requirements (i.e., 1.0 comments per minute in a 5-min clip), as demonstrated by an average

intercept of 1.18. However, individual variation in patterns of change suggested that this average change is not reflective of individual progress. For example, some coaches began the training year commenting at a high rate and maintained this rate over time. Other coaches struggled to meet the commenting rate requirement, only to improve at the end of the training year.

Results also suggest that initial individual levels of commenting rate affected coach progress. Overall, coaches who began training with a higher rate of commenting showed smaller increases in commenting than coaches who started with lower commenting rates, with some coaches demonstrating a decrease in commenting from where they initially started. Interestingly, the majority of these coaches began the year with a commenting rate of 1.0 or more comments, so the decrease could have been attributable to several factors, including a ceiling effect (i.e., if coaches start higher, there is not as much room to grow), regression to the mean, or coach fatigue in learning a new skill. Future work investigating ABC provider fidelity trajectories could benefit from collecting qualitative data (in addition to the weekly quantitative fidelity data) to inform patterns in coach commenting.

The high levels of interindividual variation in starting levels and slopes of change across the training year are consistent with past work that has shown varying rates of fidelity in community-based providers (McHugo et al., 2007). Thus, results from this study point to the potential for an individualized process of supervision within evidence-based interventions based on a data-informed

Table 1
Individual Intercepts and Slopes of Rate Across Time for Each Parent Coach

Coach	Intercept ^a	Slope ^b
1	1.04	.01
2	2.52	.17
3	2.26	.45
4	.80	.01
5	.41	.76
6	1.76	-.27
7	1.74	-.10
8	2.37	-.48
9	.07	.45
10	2.53	.19
11	.83	.35
12	2.44	-.34
13	1.28	-.08
14	1.19	.33
15	1.16	.26
16	2.17	-.55
17	.57	.16
18	.53	.49
19	1.52	.21
20	1.14	-.19
21	1.12	.03
22	1.14	.38
23	.87	.30
24	2.42	-.05
25	1.86	.03
26	1.79	-.14
27	1.32	.38
28	.86	.16
29	1.25	.04
30	.50	.14
31	1.11	.20

Note. Coaches must have a rate of 1.0 comments per minute for certification.

^a Indicates where coaches started with commenting rate. ^b Indicates how coaches progressed over the year.

approach. This type of approach could vary supervision frequency (e.g., weekly vs. monthly supervision) and also type (e.g., specific strategies that are used) based on individual provider need. For example, for providers who initially struggle, supervisors could use strategies like modeling and role play, practice worksheets, or video review early in training to strengthen the individual's fundamental understanding of the intervention. For providers who consistently struggle, supervisors could use strategies like pairing weekly exercises with quarterly structured fidelity check-in meetings with other dissemination staff and agency supervisors. ABC dissemination staff have begun to test a potential process for scheduled check-in meetings about fidelity progress at 3, 6, and 9 months into the training year. The goal is for such a system to recognize coaches who are struggling, clearly communicate the coach's areas of strengths and improvements, and then use this information to implement additional supports (e.g., added commenting practice; coding and discussing multiple sessions each week) as early as possible. The current study did not specifically test the impact of type or frequency of supervision on coach fidelity, so follow-up work is warranted to understand how these factors support individual providers in either increasing or maintaining an already high level of intervention fidelity.

The use of this data-driven approach to monitor fidelity could also be used as providers are practicing independently. Dissemination staff could work with community-based agencies to set up a system of fidelity monitoring that occurs on a regular (i.e., weekly or monthly) basis. At the lowest level of support, providers could be trained in fidelity measurement (e.g., coach coding in ABC) and to be responsible for their own self-supervision. If they are working with other individuals at their agency, peer supervision groups could be established. These practices are encouraged and discussed with ABC coaches before they reach certification. Because coaches are trained to code their own sessions, the practice of self- and peer supervision has been successfully implemented with coaches (many of whom balance ABC delivery with other work responsibilities) at several agencies. At higher levels of support, community-based agencies could continue to collaborate with the treatment developer, including submitting their video-recorded sessions for review, and then using that feedback to guide local supervision efforts. Session review could also inform which providers continue to need a high level of support and which providers can practice with minimal intervention. Within ABC specifically, a similar approach is currently being implemented successfully at an agency employing full-time coaches. At this agency, coaches submit their video-recorded sessions to the ABC treatment developers, who code the sessions and then provide feedback, which informs the level of support each provider receives, based on a tiered approach to supervision.

The practice of focused coding and regular, quantitative, observational-based fidelity monitoring is rare within evidence-based interventions and is a unique strength of ABC. However, because this practice is not widely used, more work is needed to understand the financial impact of fidelity monitoring and how best to support community-based sites in having the resources, funding, and staff to sustain this practice. Indeed, fidelity monitoring both during and after training may be initially costly to agencies (e.g., training of on-site staff members in fidelity coding and supervision), and agencies may have to determine how to bill for staff time. However, it could be argued that incorporating and sustaining fidelity monitoring into evidence-based intervention training could be cost-effective for several reasons. For one, given the impact of fidelity on client outcomes (Dusenbury et al., 2003), it may be warranted to support providers in delivering interventions with high fidelity so community-based outcomes that are similar to research-based trials are achieved. Additionally, fidelity-focused feedback has been shown to decrease provider turnover (Aarons et al., 2009), and so may serve to retain trained agency staff where an investment in the evidence-based intervention was already made. Finally, training providers in the fidelity measurement itself (e.g., ABC coaches are trained to code their own sessions and learn the fidelity requirements during training) may help staff feel invested in the intervention and work to maintain high fidelity during delivery.

The individual differences in commenting rate in the current study may also indicate the importance of knowing early how coaches will deliver an intervention. Initial interviews or a screening measure could be incorporated into "prework" prior to providers receiving training in an intervention. These measures could address providers' understanding and buy-in of the intervention or even assess skills that might relate to successful delivery. In ABC, we include a screening interview prior to coaches being accepted

into training, which is predictive of coach success in delivering ABC (including making ITM comments; Caron, Roben, Yarger, & Dozier, 2018).

The current study is limited by the small sample size; although over 650 coded sessions were used in analyses, data were only collected from 31 coaches, which prohibited the ability to ask more complex questions about patterns of individual trajectories. Growth mixture modeling, using fidelity data from future cohorts of certified parent coaches, could examine trajectories of change in commenting rate across time, which could inform supervision. For example, such common trajectories may be a “steady increasing,” “slow increase,” “good start and maintaining,” or an “inconsistent” profile. Coach and site characteristics could then be examined as correlates of these common profiles.

Additionally, the small sample size and limited variables that were collected prohibited investigating additional covariates that may have affected commenting rate. Future investigations, using larger and broader samples, should include covariates such as session- (e.g., balancing delivering manualized content with making comments), coach- (e.g., buy-in to evidence-based interventions, cognitive flexibility; Aarons, Hurlburt, & Horwitz, 2011; Blake, Schein, Roben, Yarger, & Dozier, 2018; Palinkas et al., 2008), supervisor- (e.g., which supervisory strategies are used; Caron, 2017), logistical- (e.g., size of caseload), and organization-level (e.g., agency support for evidence-based interventions, resources available to the coach; Aarons et al., 2011; Fixsen, Naoom, Blase, & Friedman, 2005) predictors. Nevertheless, despite these limitations, the current study demonstrated individual differences in coach commenting, assessed using fidelity data from a relatively small cohort of coaches.

Conclusion

ABC is an evidence-based early intervention that has been disseminated to children and families within the child welfare and foster care systems—systems that have historically lacked access to such interventions (Hurlburt et al., 2004). Given the need for high-quality services within child welfare, it is critical that interventions such as ABC are being delivered with high fidelity. ABC is unique in that coach fidelity to the model is carefully tracked across a year of supervision. Because of the rigorous process of measuring and monitoring coach fidelity, we have seen strong positive outcomes within the community in parent behavior that are similar to laboratory-based trials (Roben et al., 2017). The current study found that using weekly fidelity data to inform supervision was helpful in supporting coach growth across the year. However, this study demonstrated that even when providers can meet fidelity standards by the end of the training year, there is still a high level of individual variability. Future work to understand what covariates may impact coach fidelity to an evidence-based intervention, as well as how coaches are progressing during training, is warranted.

Results from the current study point to the importance of consistent monitoring of coach fidelity using individualized feedback. Incorporating session fidelity data into supervision is a practice that could be done on a regular (e.g., weekly or monthly) basis, by either dissemination staff working with the treatment developer or on-site agency staff in a variety of evidence-based interventions. Currently, few interventions appear to incorporate fidelity moni-

toring into intervention training and delivery, and even fewer have described how fidelity looks over time. Given the link between high-intervention fidelity and positive client and staff outcomes, regular monitoring and maintenance of fidelity is critical. This careful support can set providers up for success as they deliver laboratory-based interventions to community settings.

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