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Child Welfare Caseworkers as Service Brokers for Youth in Foster Care: Findings From Project Focus

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Abstract

Youth in the foster care system have substantially higher rates of mental health needs compared to the general population, yet they rarely receive targeted, evidence-based practices (EBPs). Increasingly emerging in the literature on mental health services is the importance of "brokers" or "gateway providers" of services. For youth in foster care, child welfare caseworkers often play this role. This study examines caseworker-level outcomes of *Project Focus,* a caseworker training and consultation model designed to improve emotional and behavioral outcomes for youth in foster care through increased linkages with EBPs. *Project Focus* was tested through a small, randomized trial involving four child welfare offices. Caseworkers in the *Project Focus* intervention group demonstrated an increased awareness of EBPs and a trend toward increased ability to identify appropriate EBP referrals for particular mental health problems but did not have significantly different rates of actual referral to EBPs. Dose of consultation was associated with general awareness of EBPs. Implications for practice and outcomes for youth are discussed.

Keywords

children in child welfare, dissemenation/implementation, child welfare services, evidence-based practice, evidence-based treatment

Introduction

Children and adolescents in foster care have considerably high rates of mental health problems, with between 50% and 80% demonstrating clinically significant treatment needs (Leslie, Hurlburt, Landsverk, Barth, & Slyman, 2004; McMillen et al., 2004). These rates are two to four times those of the general population, in which 20% of youth have significant treatment needs (New Freedom Commission on Mental Health, 2003). For youth in foster care, high rates of mental health problems continue into adulthood if untreated (Courtney, Dworsky, Lee, & Raap, 2010; Pecora et al., 2003). Retrospective studies demonstrate that despite similar need prior to entering foster care, out-of-home placement is associated with higher rates of receiving services, leading some to consider foster care a "gateway" to services (Farmer et al., 2001).

Although entry into foster care may be a gateway to services, youth in foster care often are not linked with specific treatments that are matched to their clinical needs (Landsverk, Burns, Stambaugh, & Reutz, 2006). Currently, a number of evidence-based practices (EBPs) for a range of child and adolescent mental health problems have been developed and, in some cases, effectiveness has been established specifically within the child welfare population (Chaffin & Friedrich, 2004). However, states vary in the degree to which EBPs are available (Bruns & Hoagwood, 2008). These interventions are not routinely provided in community-based mental health settings, the service sector in which most children and adolescents, including those in foster care, receive mental health services (Landsverk et al., 2006). Benefits of EBPs, in line with high-quality service provision, include targeting a specific identified problem or problems (e.g., behavioral problem, depression), strong evidence of efficacy (and growing evidence for effectiveness), and are typically time-limited (Kazdin & Weisz, 2003; Task Force on Promotion and Dissemination of Psychological Procedures, 1995).

Generally, mental health services are a common element of the service plan for youth in out-of-home care. However, recommendations are often nonspecific or formulaic; particular types of mental health service are rarely identified or requested. Prior to the advent of EBP, nonspecific recommendations or referrals for therapy were the only option, aside from referring to a preferred individual provider. Now, advances in research

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and dissemination of EBPs for child and adolescent mental health problems enable specific treatments to be applied for specific mental health problems. However, referral to particular EBPs requires careful assessment of mental health problems and a targeted approach to making referrals.

Ensuring that children receive effective mental health services furthers all three goals of the child welfare system: child safety, permanency, and well-being (Adoption and Safe Families Act of 1997). Clearly, children's well-being is improved with the alleviation of significant emotional and behavioral problems. In addition, because children with significant emotional and behavioral problems are at higher risk of abuse both by their biological parents and while in foster care, addressing their problems lowers risk of harm (e.g., Finkelhor, Omrod, Turner, & Holt, 2009). Finally, emotional and behavioral problems are associated with higher rates of placement disruption and lower rates of reunification and adoption (James, Landsverk, & Slyman, 2004; Landsverk, Davis, Ganger, Newton, & Johnson, 1996). Therefore, reducing mental health problems also promotes permanency planning and long-term stability for children.

Despite the importance of effectively treating mental health problems, child welfare caseworkers receive limited training in assessing mental health needs and identifying appropriate evidence-based treatments. This is due to the relatively recent advancement of EBPs and the fact that few graduate programs or on-the-job training efforts in any area include training specifically in EBPs (Rakovshik & McManus, 2010; Williams & Martinez, 2008). Compounding this lack of familiarity with EBPs is the breadth of caseworker responsibilities for service planning, case management, coordination of visitation, placement monitoring, and permanency planning. Additionally, caseworkers often face systemic barriers to effective mental health service delivery, even when aware of mental health needs and appropriate referral options. These include high turnover in community mental health providers, waitlists, limited appointment hours and, particularly in rural areas, inconvenient or difficult to access settings. These barriers, in addition to limited caseworker knowledge and training, may contribute to low receipt of EBPs by youth in foster care. However, research points to the need to promote both caseworker knowledge of child mental health problems and their ability to serve as informed and collaborative linking agents to mental health services, as ways to increase access (Hurlburt et al., 2004; Leslie et al., 2004).

The importance of "brokers," "boundary spanners," or "gateway providers" of services is increasingly emerging in the literature (Stiffman, Pescosoledo, & Cabassa, 2004). Child welfare caseworkers, who serve as the legal representatives for guardianship of youth in foster care, are ideally positioned to facilitate the link between youth experiencing mental health problems and the appropriate EBP. However, like other potential brokers (e.g., physicians and teachers), the research literature has consistently demonstrated low rates of recognition of need (Burns et al., 1995; Stiffman et al., 2000) and inconsistent targeted referrals (Stiffman et al., 2000).

Like any broker of services, a child welfare caseworker needs to have the knowledge and skills necessary to make appropriate linkages (Stiffman et al., 2000). Specifically, caseworkers should be able to

- identify emotional or behavioral problems that require intervention;
- be knowledgeable about EBPs for common, specific mental health problems;
- know which EBPs are available and how to access them in the community;
- know questions to ask to assess provider appropriateness for the mental health need and how to maintain contact throughout treatment to ensure progress toward identified treatment goals;
- when necessary, identify incentives or supports to facilitate engagement and participation in treatment.

Unfortunately, these skills are rarely taught to caseworkers during their graduate or professional training, despite their ability to play a critical role in connecting children and adolescents in foster care to mental health treatment (Barth et al., in press; Rubin, 2011; Thyer & Myers, 2011). One of the few studies directly investigating brokering found that both caseworker perception of mental health needs and awareness of available services were directly and positively related to connecting youth with services. However, large caseloads, gaps in services, and excessive paperwork requirements were inversely related (Stiffman et al., 2001).

Caseworkers as Brokers of Mental Health Services: Project Focus

One strategy for improving mental health and permanency outcomes for youth in foster care involves enhancing the capacity of child welfare caseworkers to serve as effective brokers. Our team developed a caseworker training and consultation model, *Project Focus*, to build caseworker capacity to serve as EBP brokers (see Kerns, Dorsey, Trupin, & Berliner, 2010, for detailed information on the *Project Focus* model). *Project Focus* involves enhancing the skills of caseworkers through training and case-based consultation, enabling them to better recognize mental health needs and link youth with effective mental health treatment (i.e., EBPs). In examples of related initiatives, graduate students in social work at the University of Maryland and the University of Washington are being trained in specific EBPs that address commonly occurring difficulties and in common elements among EBPs (Barth et al., in press; Forehand, Dorsey, Jones, Long, & McMahon, 2010).

Project Focus was designed to test whether an increase in caseworker capacity to identify commonly occurring classes of mental health problems and to refer to EBPs would improve child well-being. In *Project Focus*, caseworkers received in-person training on common mental health problems among youth in foster care; central principles and components of EBPs and good practice for particular mental health problems (e.g.,

externalizing problems require changing environmental contingencies; structured, time limited); and on specific EBPs available in their community. Training was followed by case-specific consultation.

In a previous article (see Kerns et al., 2010), we describe feasibility testing of the *Project Focus* model. Feasibility testing involved both a small pilot trial with one office and examining key early stage implementation outcomes (Proctor et al., 2010) of *Project Focus* for the two intervention offices involved in the randomized trial. Outcomes examined include satisfaction, appropriateness, and acceptability of the intervention.

Qualitative and quantitative methods (i.e., semistructured exit interview, thematic coding, attendance at training/consultation) were used, and findings suggested that caseworkers and their supervisors were very satisfied with *Project Focus,* finding it both appropriate and acceptable in terms of goals, the training and time required, and knowledge gained.

The purpose of the current investigation is to report on caseworker-level outcomes for the randomized trial involving four child welfare offices. It was hypothesized that caseworkers in the two offices that received the *Project Focus* intervention would demonstrate increased knowledge of EBPs and increased referral of youth to EBPs at the post-assessment. We also hypothesized that caseworkers in the intervention offices would demonstrate improved ability to classify mental health problems and identify EBP referral options on a vignette-based knowledge test. In addition, given findings from the implementation and training literature that consistently suggest that consultation and supervision are critical for knowledge and practice change (e.g., Beidas & Kendall, 2010; Herschell, Kolko, Baumann, & Davis, 2010), we conducted exploratory analyses to examine the dose effect of consultation on knowledge and referral practices.

Method

Overview

Project Focus was conducted in Washington State and included four child welfare offices (two urban and two rural) of the 46 offices statewide. The selected offices were block randomized by randomly selecting one urban and one rural office for each condition. The trial included offices situated in more EBP ''resource rich'' areas and in more EBP ''resource poor'' communities. Population size for the ''resource rich'' communities surrounding the urban offices (defined as larger population size, greater ethnic diversity, more EBP access) ranged from approximately 40,000 to 100,000 people (note: the smaller of the two communities is in close proximity to Seattle, which offers access to a wide range of EBPs), while the ''resource poor'' communities surrounding the rural offices ranged from 16,000 to 30,000 people. Participating offices were a convenience sample and were chosen based on two factors, without a concern for distance from the study site. These factors included availability of sufficient numbers of youth in foster care who could be enrolled in the study (based on review of state administrative data) and state child welfare recommendations and interviews with office administrators regarding willingness and capacity to participate in the trial. All research procedures and instruments were approved by the Washington State Department of Social and Health Services Institutional Review Board. Recruitment occurred in September and October of 2008 for the Intervention offices and in November and December of 2008 for the waitlist control (WLC) offices. Assessments for the study began in the month following recruitment for both conditions. Training for the intervention group offices occurred in October 2008 and consultation occurred between November 2008 and June 2009. The WLC did not receive any training.

Participants

Participants included 51 child welfare caseworkers, 24 of whom were in the intervention group and 27 of whom were in the WLC group (two offices in each condition; one urban and one rural). Sixty-seven caseworkers were approached for participation, with 51 enrolled (see Figure 1). Enrollment rates for the intervention and WLC conditions were 73% and 79%, respectively. Caseworkers were predominantly female, Caucasian, and for the most part, had over 5 years of experience. Most reported receiving some prior training in EBPs. Caseworkers in the two conditions (intervention vs. WLC) differed only in years of experience, $t(47) = -2.42$, $p < .05$, with those in the intervention condition having more experience (see Table 1).

All caseworkers on units that serve youth in foster or kinship care in the participating offices were invited to take part in the study. In the intervention offices, caseworkers were invited first by e-mail and were then mailed a study introduction packet that included two copies of the consent form and all baseline measures. Caseworkers returned the consent forms and measures by mail prior to the first in-person training; for a limited number of workers in the intervention group, consent, and measures were completed on the first day of training, prior to training initiation. Caseworkers in the WLC offices were recruited following a presentation on the research study, after which they were provided with the study introduction packet in person or through their supervisor (for workers who were unable to attend the research presentation).

Data Collection

Caseworkers were assessed at two time points: once prior to training initiation for the intervention offices (i.e., baseline) and again after the intervention condition offices received 4 months of biweekly phone consultation (i.e., post-assessment). All measures were self-reported and completed via paper and pencil, aside from the exit interview, which was administered in interview format only to caseworkers in the intervention condition at the post-assessment. Individuals who completed the baseline assessment made up the intent-to-train (ITT) sample. Of the 51 caseworkers who completed the baseline assessment, 44 (intervention $n = 20$; WLC $n = 24$) completed the

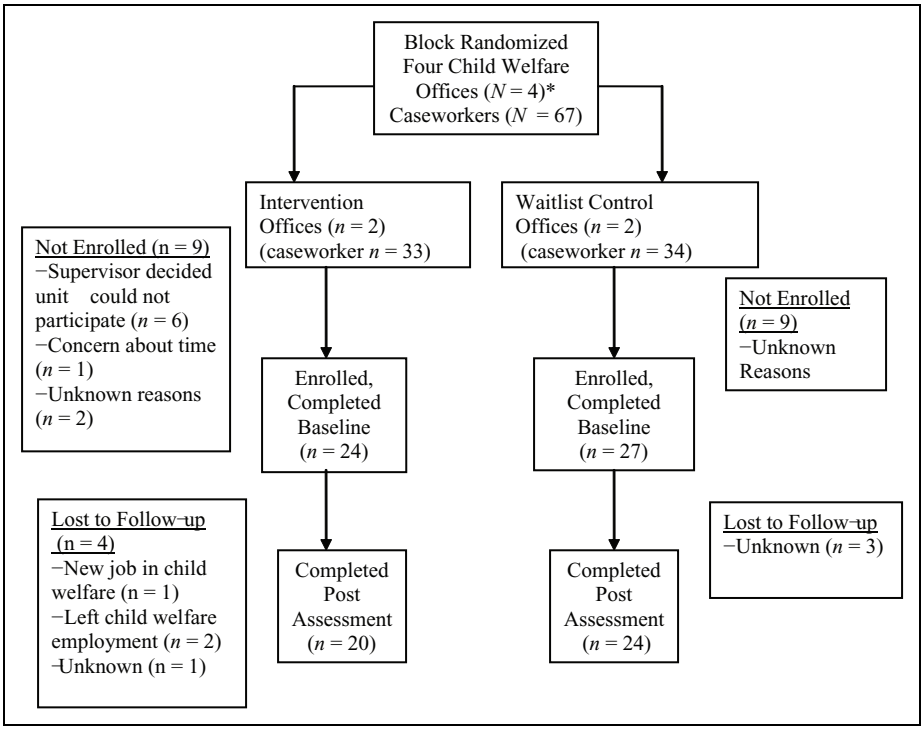

Figure 1. CONSORT Diagram. *Note.* Four child welfare offices were block randomized to two conditions: intervention and waitlist control. Caseworkers were randomized to condition by office. There was no attrition for the offices, only for caseworkers within offices.

Table 1. Caseworker Demographics

	Research Condition			
	Intervention		WLC	
	(*n* = 24)		(n = 27)	
Demographic Variables	*N*	%	*N*	%
Office setting				
Urban	14	56	14	51.85
Rural	10	44	13	48.15
Caseworker gender				
Male	5	21	1	3.70
Female	19	79	26	96.30
Caseworker ethnicity				
Hispanic	5	21	4	14.82
Caucasian	18	75	20	74.10
American Indian/American native	0	0	3	11.11
Asian American	1	4	0	0
Previous training in EBPs[a]				
Yes	18	82	24	88.89
No	4	18	3	11.11
Years of experience as caseworker	*M* = 7.79*; *SD* = 5.26		*M* = 12.56*; *SD* = 9.21	

Note. [a]Two participants in the intervention condition did not respond to this item. WLC = waitlist control; EBPs = eveidence-based practices.
*$p < .05$.

post-assessment, resulting in an 86% sample retention rate (see Figure 1). All caseworkers who participated received a gift bag after each assessment point (approximate value of $25).

Project Focus Intervention

Training. For the intervention offices, participation in *Project Focus* training and consultation, but not participation in the research, was required by the office administrator (although, as detailed in Figure 1, one unit was allowed to opt out). The training involved building awareness of (a) common mental health needs of youth in foster care; (b) using available screening information to identify needs; and (c) available EBPs in the local community. Three main classes of mental health problems (vs. diagnoses) were covered: internalizing (e.g., depression and anxiety), externalizing (e.g., disruptive behavior), and attention-related problems. Strategies for accurate screening were discussed, including the particular importance of obtaining caregiver input for externalizing disorders and youth input directly for internalizing disorders, as internalizing difficulties are less readily observable. Classes of disorders were covered—not specific diagnoses—as the goal was for caseworkers to be oriented toward primary difficulties and not necessarily to become diagnostic specialists. These broad classes were linked to similarly broad groups of EBP approaches: cognitive behavioral approaches for internalizing problems, behavior therapy and parent-mediated interventions for externalizing problems, and psychopharmacological and behavior therapy for attention-related problems. Within each broad treatment class, a more specific overview of "name brand" approaches (e.g., parent-mediated interventions: parent–child interaction therapy [PCIT]; Triple P Positive Parenting Program) available in the local community was provided (Eyberg & Robinson, 1982; Sanders, 1999).

The training included lecture with power point, small group activity (e.g., reviewing assessment results using a vignette), and discussion. As part of the training, the trainers also provided short modeling and video demonstration of a few of the available EBPs (e.g., a 5-min clip of a PCIT coaching session; role-play of exposure with a child as part of Trauma-focused Cognitive Behavioral Therapy). Caseworkers also received engagement training to more effectively involve foster parents and to collaborate with clinicians (e.g., strategies for evaluating treatment options when an EBP was not available).

Consultation. Following the training, child welfare caseworkers received 4 months of biweekly, 1-hr, case-specific consultation. Goals involved identifying the primary needs of specific youth and determining and following through on EBP referral options, as available in the community. Consultation was provided by three PhD-level psychologists and one masters-level social worker with more than 30 years experience in mental health. Consultation involved reviewing screening data for youth and discussing its implications, appropriate treatment options, and developing an "action plan" for each youth (e.g., administer an additional brief screening measure; refer to a particular clinic that offers Triple P, initiate engagement discussion with a reticent foster parent). Consultation followed a developmental progression in which consultants initially provided more direction, guidance, and suggestions. Over time, however, caseworkers were more involved in staffing cases and generating referral possibilities. Ideally, by the completion of the calls, caseworkers were able to flexibly generalize information to other youth.

Community-capacity building in EBP. Because of the nature of our training and consultation framework, it was necessary to ensure that there were a range of EBPs to which caseworkers could refer, when needed. As mentioned above, some communities served by the field offices had few EBPs available. Therefore, in addition to caseworker training and consultation, our team offered training and consultation to community clinicians in Modular Approach to Therapy for Children with Anxiety, Depression, Trauma or Conduct (MATCH-ADTC; Chorpita & Weisz, 2010) , a manualized program designed for youth between the ages of 8 and 14. The treatment approach was developed through analysis of components within EBPs in the scientific literature in an attempt to identify and distill common elements and simplify training for clinicians (for more information, see Chorpita, Daleiden, & Weisz, 2005). Clinicians who regularly received referrals from child welfare offices were invited to participate in order to increase referral options in the communities in which the intervention offices were located (see Kerns et al., 2010, for more information). The first, second, and fifth authors were involved in training and consultation with participating clinicians (along with MATCH-ADTC experts). Clinical consultation calls involved application of MATCH-ADTC with youth referred as part of *Project Focus* and with other youth on the clinicians' caseload.

Caseworker intervention participation. Caseworkers in the intervention condition were asked to participate in two training events held on consecutive weeks. Approximately 70% ($n = 17$) of the caseworkers participated in the first 3-hr training and 66% ($n = 16$) participated in the second 3-hr training, despite training being required by the participating offices. Only 42% ($n = 10$) participated in both training days. Caseworkers who missed a training day were asked to watch a video of the training that they missed, and the study team followed up with supervisors to support follow through; however, the study team was unable to ensure or verify that workers viewed the training video.

Participation in the biweekly, 1-hr, small group consultation calls (provided for 4 months) was high, overall. Of the 24 intervention caseworkers who completed the baseline assessment, 23 participated in at least one consultation call. On average, workers attended 6.3 calls ($SD = 2.3$; range = 0–9) and received an average 304 min of consultation. Across all calls, consultation was provided for nearly 85 youth. Each youth was discussed for an average of 55 min, over several calls to review assessment data, identify the primary mental health problem/problems, consider referral options and follow-up on treatment engagement or disengagement.

Measures

Demographics. Caseworkers reported on their age, sex, educational attainment, years of experience, and prior training in EBPs.

EBP awareness, availability, and referral questions. The Evidence-Based Practices Questionnaire (EBPQ), developed by our team, was used to assess awareness of EBPs and actual referrals to EBPs. The EBPQ provided a list of 18 EBPs available in Washington State. The EBPQ has 54 items and a Chronbach's α of .74. This list was compiled in collaboration with Washington State Children's Administration (i.e., child welfare) and the Department of Social and Health Services Division of Behavioral Health and Recovery (i.e., mental health), and also involved queries to community and private practice providers in the communities served by the field offices. The resulting list of practices was compared against existing national EBP lists (e.g., National Registry of Evidence-based Programs and Practices; Association for the Advancement of Behavioral and Cognitive Therapies). The questionnaire asked caseworkers to respond in three ways to each of the 18 EBPs on the list: (a) identify EBPs of which they were aware/had heard of (despite its availability in their community); (b) identify those that were available in their community; (c) provide the number of children or adolescents on their caseload, if any, referred to each EBP in the past 4 months.

Mental health problem identification and appropriate EBPs. A vignette-based knowledge test was developed for this study. Questions assessed: (a) classification of the primary mental health problem; (b) ability to match mental health symptoms to need characteristics of treatment (i.e., broad treatment class),

Table 2. Means and Standard Deviations for Dependent Variables by Study Condition and Time

	Research Condition				
	Intervention ($n = 24$)		WLC ($n = 27$)		ANCOVA (Between Groups) Baseline to Posttest
Dependent Variable	Baseline *M* (*SD*)	Posttest *M* (*SD*)	Baseline *M* (*SD*)	Posttest *M* (*SD*)	*F*
Awareness of EBPs	9.25 (3.49)	12.70 (2.79)	9.56 (3.20)	10.04 (3.99)	$F(1, 43) = 9.37$*
Caseworker referral to EBPs	2.58 (2.70)	6.15 (4.99)	2.87 (3.30)	4.75 (5.04)	$F(1, 43) = 2.38$
Classification primary problem	6.54 (2.06)	6.89 (1.34)	6.06 (1.65)	6.48 (2.06)	$F(1, 39) = 0.13$
Ability to match symptoms to needed characteristics of treatment	0.26 (0.54)	0.48 (0.59)	0.52 (0.80)	0.41 (0.69)	$F(1, 48) = 0.30$
Knowledge of appropriate EBP referrals	0.20 (0.50)	0.72 (0.79)	0.26 (0.59)	0.37 (0.57)	$F(1, 48) = 3.90$

Note. ANCOVA = Analysis of covariance; EBPs = evidence-based practices; WLC = waitlist control.
*$p < .01$.

and (c) ability to identify a specific EBP available in the community. The reliability estimates for the vignette knowledge test were somewhat low, with a Chronbach's α of .59. The same vignettes were used for both the baseline and the post-assessment. The vignette knowledge test contained descriptions of mental health assessments for two children, mirroring the format of actual assessment reports provided to caseworkers for each child coming into foster care. Information included basic demographic information about each child, a brief description of physical, developmental, and educational needs and a more detailed description of emotional and behavioral needs, as indicated by several standardized measures (e.g., Child Behavior Checklist; Achenbach, 1991).

Both vignettes were followed by nine questions, three of which were analyzed for the present study. The first question was, "In an overall sense, how would you characterize [youth's] emotional and behavioral health (not including attentional problems)?" and included four possible responses: "mostly internalizing-type problems," "mostly externalizing-type problems," "a pretty even mix of internalizing and externalizing," and "I'm not sure, I'd need more information." The second question was open ended: "What characteristics of treatment would you want to see for you to feel confident that [youth] is receiving appropriate treatment for emotional and/or behavioral issues?" The third question was, "Do you know of any existing evidence-based services or practices available in your community that could address at least some of [youth's] emotional and/or behavioral issues?" For this question, if caseworkers indicated yes, they were asked to list to the service. Scores were summed across the two vignettes creating item total scores that ranged from 0 to 2. A coding system was developed for two qualitative items by the second author and was reviewed by the research team (score range 0–2 for each item). A consensus coding process was used to determine coding of responses.

Results

Data Analysis

Analysis of covariance (ANCOVA) was used for all primary analyses using statistical package for the social sciences 17.0. The independent variable of condition involved two levels: intervention and WLC. The dependent variables were post-assessment scores on the outcome measures. Baseline scores and years experience were included as covariates in all analyses involving both conditions. Interaction terms (examining condition by years of experience) were evaluated but did not significantly contribute to the models and, subsequently, were removed from further analyses. In analyses examining the impact of consultation dose, minutes of consultation and number of training days attended were included as covariates. All analyses were intent to treat, with all workers who participated in the study included ($N = 51$) regardless of participation in training and consultation. Because of the relatively small sample size, all available data were analyzed for each outcome. There was variation in measure completion within subjects, and therefore, the *n*'s for each analysis vary.

All data were analyzed in a disaggregated form, despite caseworkers effectively being nested within offices. This approach was chosen due to the limited number of participating offices ($N = 4$). Empirical justification for this approach comes from a lack of significant differences between the offices on measures of organizational climate and low intraclass correlation coefficients on measured caseworker demographic characteristics (years experience; attitudes toward EBPs; single measures = −.01, average measures = −.02), suggesting that disaggregating the data was an acceptable approach (analyses available from the first author), although one with weaknesses, as it does not account for any unmeasured caseworker, office, or condition-level differences.

Preliminary Analyses

Baseline scores on all outcome measures were examined (see Table 2). Caseworkers who were retained and those who were lost to follow-up were examined. There were no statistically significant differences between the two conditions at baseline on outcome measures nor on any demographic characteristics or baseline scores on dependent variables.

Primary Analyses

Caseworker-reported years of experience, which was significantly different across the two conditions, was included as a covariate in all analyses including both conditions.

Awareness of EBPs. An ANCOVA that included baseline scores on awareness of EBPs as a covariate (and years of experience, as included in all analyses involving both conditions) revealed a significant increase in awareness of EBPs for the intervention group compared with the WLC group at post-assessment, $F(1, 43) = 9.37$, $p < .01$, partial $\eta^2 = .19$. On average, awareness of EBPs for caseworkers in the intervention condition improved from 9.25 EBPs at baseline ($SD = 3.49$) to 12.70 at post-assessment ($SD = 2.79$), compared with the WLC condition, for whom awareness of EBPs largely remained constant, 9.56 at baseline ($SD = 3.20$) to 10.04 at post-assessment ($SD = 3.99$).

Caseworker referrals to EBPs. An ANCOVA that included baseline number of referrals to EBPs as a covariate was not significant, $F(1, 43) = 2.38$, $p > .05$, partial $\eta^2 = .06$. Although not significant, the intervention group had over a twofold increase in the number of referrals ($M = 2.58$, $SD = 2.70$ at baseline; $M = 6.15$, $SD = 4.99$ at post-assessment), while the WLC group had approximately a 1.5-fold increase ($M = 2.87$, $SD = 3.30$ at baseline; $M = 4.75$, $SD = 5.04$ at post-assessment).

Classification of primary mental health problem. An ANCOVA with baseline classification scores included as a covariate was not significant. Caseworkers in the two conditions did not differ on their ability to identify primary mental health problems, $F(1, 39) = 0.13$, $p > .05$, partial $\eta^2 = .004$.

Ability to match symptoms to needed characteristics of treatment. An ANCOVA with baseline ability to match symptoms included as a covariate was not significant. Caseworkers in the two conditions did not differ in their ability to match symptoms to particular characteristics of EBPs or treatment, $F(1, 48) = 0.30$, $p > .05$, partial $\eta^2 = .007$.

Knowledge of appropriate EBP referrals. An ANCOVA with baseline knowledge included as a covariate revealed that caseworkers in the intervention group had greater gains in knowledge of appropriate EBP referrals for particular mental health problems at the post-assessment compared with the WLC group, $F(1, 48) = 3.90$, $p = .055$, partial $\eta^2 = .081$.

Dose of consultation. Given the small sample size, analyses examining dose are considered exploratory. The impact of dose of consultation, as measured by number of minutes of consultation received and number of training days attended (range 0–2) was examined using an ANCOVA (with dose and baseline scores as covariates and post-assessment scores as the dependent variables) for the intervention group for all outcomes of interest.

Dose was related to the number of EBPs caseworker awareness of EBPs. Specifically, the number of days of training that caseworkers attended was significantly related to awareness, $F(1, 20) = 7.31$, $p = .016$, partial $\eta^2 = .314$. The dose of consultation time was related to knowledge of appropriate EBP referrals, $F(1, 23) = 7.34$, $p = .01$, partial $\eta^2 = .279$. There was a trend for an association between number of training days and knowledge of appropriate EBP referrals, although it did not reach statistical significance, $F(1, 23) = 3.38$, $p = .08$, partial $\eta^2 = .151$. There was no impact of dose for accuracy of assessment, matching symptoms with characteristics of treatment, or self-reported referrals to EBPs.

Examination of intervention completers. Given the low dose of the intervention received by most caseworkers, we also conducted analyses examining a subset of caseworkers who we believed could be characterized as "intervention completers." We defined intervention completers as caseworkers who attended both training days and at least five (i.e., more than half) of the offered consultation calls. Only nine caseworkers met intervention completer status, and intervention completion was only significantly related to improved awareness of EBPs, $F(1, 20) = 5.95$, $p = .026$, partial $\eta^2 = .259$.

Discussion

This study is one of the first to examine a training and consultation approach to enhancing caseworker ability to identity mental health needs and refer to appropriate EBPs. Caseworkers in the *Project Focus* offices who received the intervention demonstrated increased awareness of EBPs, in general, and a trend toward increased ability to identify EBPs that would be appropriate referrals for a child with a particular presenting problem. However, caseworkers who received the intervention did not report increased rates of actual referrals to EBPs compared to the WLC group. Rather, both groups reported increased rates of referrals to EBPs over the study period. Additionally, exploratory analyses indicated that the dose of consultation received was related to awareness of EBPs generally and to knowledge of appropriate EBP referrals for the intervention group, but similar to overall findings, dose was not related to change in referrals.

Our study builds on prior work that has, with some success, provided training and resources to caseworkers to improve their ability to broker general mental health services (not necessarily EBP-specific) for youth (see Stiffman et al., 2004). In *Project Focus*, consultation posttraining was specifically built into the model due to findings from this prior work and a growing body of implementation studies demonstrating that training alone, without follow-up consultation and support, is typically insufficient for changing practice (Beidas & Kendall, 2010; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). In this study, despite supplementing training with consultation, intervention results were found only in the area of increased

knowledge of EBPs, with a trend toward increased ability to identify appropriate EBPs for particular problems. Changes in actual referral practice—our primary goal—was not impacted by the intervention.

Although disheartening, the lack of a significant finding for actual behavior change can potentially be explained a few different ways. First, given our small sample size, we had limited power to detect differences between the two groups. We note that trends were in the desired direction, just not of sufficient strength to demonstrate effects. Second, we utilized only caseworker report for all outcomes—a limitation of our study—and therefore self-report of referrals over the last 4 months was likely subject to recall bias and/or the influence of social desirability, given the state administration's push toward EBPs at the time of the study. Third, the timing of our intervention was less than ideal—it began during the year of the 2008 financial crisis that reverberated through the nation and through states—with Washington's state budget deficit among the five worst in the country. Additionally, our training and consultation efforts overlapped with a new statewide, cross-systems data program that required caseworkers to participate in training and begin using a data system, the timing of which was unknown to our team during the planning phase. Both the budget crisis and the new data system placed additional demands on caseworkers, likely making it more difficult for them to participate in the *Project Focus* study, training, and consultation activities and more difficult, potentially, for those who did participate to shepherd EBP referrals, particularly when systems-level barriers were encountered. Unfortunately, few tangible rewards or incentives are available for caseworkers who are committed to the often challenging work of connecting youth to EBPs, and understandably, caseworkers may have had to make difficult choices given competing demands.

Fourth, as expected, system-level barriers to linking youth with EBPs came up frequently during the consultation calls. These included youth residing in geographically disparate areas (i.e., often over 100 miles away from the field office) which required additional work to identify and connect youth to EBPs. Difficulties also included some specific mental health system challenges that clearly fell outside of caseworker knowledge and skill. These included agencies not always having a mechanism for connecting a referred youth with a particular problem (e.g., posttraumatic stress disorder) to a particular therapist within the agency trained in the appropriate EBP (e.g., Trauma-focused Cognitive Behavioral Therapy), clinician turnover; and/or low fidelity to the EBP. These difficulties, which may contribute to our lack of significant findings between the two groups, also highlight the inherent challenges of conducting these kinds of interventions. However, these difficulties and barriers in some ways make it clear that a caseworker consultation model is important so that caseworkers have skills for advocating and brokering services for youth when barriers are encountered. Although these skills may not always be sufficient in the face of systems barriers, a model like *Project Focus* may be an important component of a more comprehensive organizational intervention.

Finally, the lack of significant differences may be related to low received intervention dose for the intervention group. However, even intervention completion status did not predict actual change in practice. All dose analyses should be considered exploratory in nature, given the limited sample for dose–response analyses. Findings with the ITT sample indicate that dose of the intervention did play a role in awareness and knowledge, supporting other research examining dose and its relationship to implementation outcomes (Beidas & Kendall, 2010; Beidas, Edmunds, & Kendall, under review; Herschell et al., 2010). Potentially, a higher intervention dose and the inclusion of a structural or organizational intervention at the system level are needed to actually achieve behavioral change. Other research has demonstrated that combining systems-level interventions with EBPs can be particularly effective for implementation of specific EBPs (e.g., Glisson et al., 2010) and could enhance EBP brokering interventions.

Limitations

Despite several strengths and the novelty of the model, there are a number of limitations that should be considered. First, our sample of offices was predominantly convenience-based, limiting our ability to generalize our findings beyond offices that expressed interest in a project of this nature. Second, the small sample size likely limited our ability to identify statistically significant differences between the two conditions (intervention vs. WLC). Third, as detailed in Figure 1, study enrollment rates were relatively low, suggesting that despite not finding significant differences in actual referrals, we still may have had a positively biased sample of participants (i.e., those more interested in mental health). Also of note, as the intervention and WLC group differed on years of experience, we included this variable as a covariate in all analyses; however, the difference in years of experience could mask other unmeasured differences that affect the results. A larger study with a more representative sample is needed to fully test the potential benefits and limitations of a caseworker consultation approach. Fourth, all measures were caseworker self-report. The study would be enhanced by including administrative data or foster parent report of EBP referrals. Fifth, although dose of consultation appeared to be important, these analyses were exploratory, as they were conducted with a smaller subsample (i.e., only those in the intervention group), further limiting power.

In considering our findings and our broker training approach, it is important to note that *Project Focus* was tested in Washington State, a state in which there is a relatively high level of available EBPs and initiatives aimed at increasing awareness of EBPs. Therefore, findings may not be readily generalizable to other states. In states in which EBPs are less prevalent, a broker model like *Project Focus* would be limited by the existing service array and would necessarily require increasing community capacity. As detailed in the *Method* section, our team provided additional EBP training (i.e., MATCH-ADTC) to local clinicians in each community surrounding intervention offices. This combined approach (i.e.,

caseworker training and community capacity building) supplemented already existing EBPs in Washington State, but would be critical in communities in which few, or no, EBPs are available.

Future Directions

Broker models like *Project Focus* may hold promise for improving and sustaining implementation efforts. The majority of implementation efforts focus on actual providers—rarely do implementation efforts focus specifically on brokers (e.g., caseworkers, teachers, and peer counselors) despite their central role in facilitating or impeding referral and access to EBPs. Brokers should be informed consumers of mental health services, thereby increasing the demand on mental health systems to provide EBPs, due to their own demand for appropriate treatments. Child welfare supervisors are a group that deserves more attention. Our intervention focused predominantly on the caseworkers, but all consultants and study staff noted that caseworkers seemed more likely to enroll in the study and to participate more actively in the intervention when their unit supervisor encouraged participation and/or attended consultation calls with caseworkers in their unit. Potentially, greater supervisor involvement, and administrator involvement, in the intervention planning and delivery would increase dose received, uptake and behavioral change as well as serve to provide at least one aspect of an organizational-level focus.

Our findings provide some support for the benefit of training and consultation to improve caseworker knowledge of EBPs for youth in foster care. EBPs are increasingly available as a number of states are incentivizing or mandating EBPs (Bruns & Hoagwood, 2008). Given caseworkers' broad responsibility and their central role in brokering services for youth, continued research and testing of models like *Project Focus* offer one avenue through which youth may have increased access to services that may alleviate mental health concerns. One of the key questions for interventions like *Project Focus* is whether increased knowledge can translate into actual change in referral practice. Findings from *Project Focus* were positive for knowledge change but did not result in actual differences in EBP referrals. However, interventions at the broker level like *Project Focus,* with potentially a more active organizational intervention component or supervisor involvement, deserve additional research attention in the area of EBP access. They offer a promising, and infrequently researched, opportunity for increasing our ability to link youth with effective services, and in turn, improve outcomes.

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