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Evaluation of a Community-Based Peer-to-Peer Support Program for Parents of At-Risk Youth with Emotional and Behavioral Difficulties

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Abstract Parents of children with emotional and behavioral needs frequently experience difficulty navigating community-based services for their child, as well as experience increased stress and parental strain. Peer-topeer support programs are an emerging approach to assist these parents, and evidence suggests that they are effective in increasing parents' perceptions of social support, selfefficacy, and well-being. However, these programs often focus on parents of youth with diagnosed mental health disorders, despite the potential benefit for parents of youth who are at-risk for significant emotional and behavioral problems. In the current study, we used a pre-post design to evaluate a community-based, peer-to-peer support prevention program delivered via telephone to parents (N = 139) of youth with emerging behavioral and emotional difficulties. We evaluated (1) whether the intervention was delivered as designed, (2) the pre- and postintervention gains in social support and concrete support, and (3) whether parents' level of participation in the intervention and program adherence predicted outcomes. Results indicated that the intervention was delivered as intended and resulted in increased parental perceived social support and concrete support over time. Furthermore, higher levels of parental participation and intervention adherence were associated with increases in perceived social support. Thus, findings suggest that it may be beneficial for parents of at-risk youth with significant emotional and behavioral difficulties to engage in a peer-to-peer phone support prevention program.

Keywords Parent support · Prevention · At-risk youth · Peer-to-peer support

Introduction

Families of children with emotional and behavioral needs face a myriad of barriers to access appropriate mental health services, while also dealing with the burden and stigma of having a "challenging" child (Angold et al. 1998; Owens et al. 2002). Family support programs are one avenue to assist parents during this difficult time. A variety of family support interventions exist, such as family support groups, where groups of parents meet together to offer insight on shared experiences (e.g., national alliance on mental illness support groups), professionally-directed family support activities such as parent classes or support groups, and individual peer-to-peer models. The evidence supporting family support programs for adults with significant mental health disorders is positive and suggests improvements for both the family members and the adult with a mental illness (Lucksted et al. 2012). In contrast, the literature base about family support programs for children with mental health disorders is emerging, with some evidence indicating that family support programs are effective in reducing stress and increasing parents' perceptions of social support, self-efficacy, and well-being (Hoagwood

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et al. 2010). However, family support programs may also be conceptualized within a preventive, public health model (Kutash et al. 2006). In this approach, the parent or primary caregiver (henceforth referred to as parent) can be viewed as a potentially powerful protective factor for the family. The focus of the intervention is to provide a range of emotional supports to the parent to reduce stress and increase self-efficacy. The public health model also emphasizes prevention and early intervention, leading to a focus on children who are at-risk for emotional and behavioral disorders.

Family support programs using a peer-to-peer model are one approach to meeting the needs of parents of youth with or at risk for emotional and behavioral difficulties. The primary goals of peer-to-peer family support programs are to increase parents' self-efficacy, reduce parent stress, and support parents as they seek services to address their child's needs (Hoagwood et al. 2010; Robbins et al. 2008). Peer support programs are unique in that they are led by veteran parents who have the experience of navigating support systems to obtain help they needed for their own child with significant behavioral and emotional concerns. Therefore, the veteran parent becomes a role model who helps to empower the parent to navigate relevant community and school service systems. Often, peer-to-peer family support is delivered in a group format, either led entirely by parents or by a clinician-parent team. Research suggests that these parent-clinician led support groups can reduce parents' stress and youths' conduct problems (McKay et al. 2011).

In contrast to parent support groups, direct peer-to-peer models are another format in which parents can receive support while obtaining services for their child with emotional and behavioral difficulties. One example of a direct peer-to-peer program is the Family Advocates program in New York State (Olin et al. 2010). In this program, family advocates work directly (i.e., face-to-face) with parents to reduce barriers to youth receiving mental health services (e.g., stigma) by empowering parents and encouraging their engagement in services (Olin et al. 2010; Rodriguez et al. 2011). Despite the availability of parent-to-parent support programs (Hoagwood et al. 2010), most focus on parents of youth with disabilities or chronic illnesses (Ireys et al. 2001; Robbins et al. 2008). Therefore, less is known about the potential impact of a peer-to-peer support program for parents of youth who are at-risk for developing mental health disorders.

One promising peer-to-peer family support program developed to increase parents' engagement in their child's educational and mental health services is the Parent Connectors intervention (Kutash et al. 2011, 2013). Core components of Parent Connectors include the provision of emotional support (e.g., to reduce feelings of blame and

stigma), instrumental support (e.g., basic needs such as clothing, food, and housing assistance), informational support (e.g., special education regulations and procedures, strategies to support academic and behavioral success), and the promotion of positive attitudes toward building social support networks and positive relationships with community providers. The fourth component is consistent with the theory of planned behavior (Ajzen 1991) and is addressed by considering the family's level of social support, their perceived benefit of engagement in services for their child, and their perception of control surrounding aspects of their child's behavior and the services they receive (see Kutash et al. 2012 or Kutash et al. 2013 for additional information). The core components of this intervention are delivered to participants through weekly phone calls from veteran parents, referred to as Parent Connectors, or PCs. PCs are trained in the program model, effective communication skills, and appropriate self-disclosure over the course of 3 days using a manualized training curriculum. During the provision of services, a licensed mental health practitioner (referred to as the PC Coach) provides weekly supervision to PCs to monitor implementation of the intervention (Kutash et al. 2012).

Findings from the initial randomized controlled trial of Parent Connectors with middle-school youth receiving special education services for emotional/behavioral needs found that for parents who were highly strained, there were improvements in parental social norms in regard to educational services, parental perceptions of the benefits of engagement in mental health services, and parental involvement in mental health services (Kutash et al. 2011). Improvements in youths' outcomes were also reported, such as decreases in the number of times youth were suspended, increases in the number of days youth were enrolled in school, and increases in youths' mental health service use (Kutash et al. 2013). Parent Connectors was originally developed to meet the needs of parents with youth in middle school, given the dearth of programs for this age population and the poor outcomes experienced by youth with behavioral and emotional difficulties (Bradley et al. 2008; Wagner 1995). However, it is plausible that the program would be beneficial to different populations, such as younger youth or as a community-based prevention program for families just beginning to experience difficulties with their children.

One limitation of parenting interventions surrounds difficulties of retention, as research indicates high attrition rates in parent training programs are common (Baker et al. 2011; Kazdin 1997; Sanders and Prinz 2008; Spoth et al. 2007). Many barriers exist for parents to overcome in order to attend support programs, including family characteristics and practical reasons. Family characteristics related to involvement in program services include single-parent



status, ethnic and racial minority status, low socioeconomic status, parent psychopathology, and family history of mental illness (Eisner and Meidert 2011; Utting et al. 2007). More practical barriers to involvement in services include scheduling conflicts, transportation, childcare, and the family's belief that the program will be beneficial (Girio-Herrera et al. 2013; Ingoldsby 2010).

The Parent Connectors program is innovative in adopting a service delivery model based on peer-to-peer support via telephone, which mitigates some of the barriers to participation experienced in other family support programs that rely on face-to-face service delivery (e.g., transportation, childcare). Nonetheless, parents still have to be available and choose to answer the phone when the PC calls, as well as engage in a meaningful conversation with the PC. Intervention fidelity, or the extent to which an intervention is delivered as designed (Dane and Schneider 1998; Domitrovich and Greenberg 2000; Dusenbury et al. 2003; Yeaton and Sechrest 1981), is an important consideration for peer support programs given that outcomes are typically improved when an intervention is delivered with high fidelity (e.g., Eames et al. 2009; Schoenwald et al. 2004). Although there are several dimensions related to intervention fidelity (Dane and Schneider 1998), two important components are participation (which is sometimes referred to as dosage in the literature) and program adherence. For Parent Connectors, participation may be conceptualized as the extent to which parents answer the phone and talk with PCs when they call. There are also two complimentary types of program adherence in the Parent Connectors intervention (Kutash et al. 2012): (1) whether or not each key component of the program model was ever discussed with parents during the intervention (i.e., overall adherence) and (2) the frequency of weekly phone calls in which components of the intervention were discussed (i.e., adherence frequency). Given the importance of intervention fidelity, it is essential to examine the role of parent participation and program adherence within a parent-toparent program delivered via phone and their role in predicting family outcomes.

Presently, there is a dearth of preventive programs for parents of children with emerging behavioral and emotional difficulties. Therefore, the Parent Connectors intervention was modified slightly to meet the needs of these parents. The modified program maintained the key components of Parent Connectors, but was adapted to focus on parents of youth who were at-risk for emotional and behavioral disorders and, thus, could be younger than middle-school aged. Additionally, the intervention was modified to be delivered over the course of approximately 3 months (instead of across the school year), to be more consistent with a prevention model that could be delivered in a community setting. All other components of the Parent

Connectors model were maintained, such as PCs delivering the program over the phone and the PCs working under the weekly supervision of a licensed mental health practitioner.

Although only slight modifications to Parent Connectors were made, the overall impact of this prevention-focused program on parent outcomes was unknown, as were the details about program participation and adherence and how those components were related to the outcomes of increased positive social support networks and support for obtaining concrete services. Therefore, this study had four aims: (1) evaluate intervention fidelity by describing parents' level of participation in Parent Connectors, whether PCs addressed key program components with parents (overall adherence), and the frequency of phone calls in which PCs discussed each program element (adherence frequency); (2) evaluate the pre-intervention and post-intervention gains in parents' social support and concrete support to determine overall program impact; (3) investigate whether parents' participation predicted intervention outcomes; and (4) investigate whether PCs' adherence frequency predicted intervention outcomes. As Parent Connectors has several complimentary, yet distinct objectives (i.e., improving use of social supports and the family's ability to meet basic needs), we hypothesized that parents' social support and concrete support would increase from pre-test to post-test. Furthermore, we hypothesized that greater participation in phone conversations would be related to improved outcomes for both social supports and basic needs. Regarding adherence frequency, we hypothesized that greater frequency of calls related to social support topics would be related to an improvement in parents' perception of social support; and likewise, greater frequency of calls about basic needs would be predictive of improvements in parents' ability to meet their basic needs. Thus, this study extends the literature by examining the effectiveness of an adaptation of a parent-to-parent intervention with a prevention-focused and community-based application. This study also begins to examine the role of parent participation and program adherence within this community-based prevention program and whether participation and program adherence predict outcomes.

Method

Participants

Participants were 139 parents who were enrolled in the Parent Connectors program provided by a community service organization (described below). Data for this study was obtained from the first 20 months of program implementation. On average, parents were 40.60 years old (SD = 9.73; range 18.00-67.25 years) and 92.8 % were



mothers. Most parents (70.5 %) were Hispanic or Latino and 21.7 % were White, 3.9 % were African-American, and 3.9 % were Asian. Just over half of parents primarily spoke Spanish (53.4 %), 44.4 % spoke English as a primary language, and 2.3 % primarily spoke another language. The demographic data on youth included all the children in the household, which was available for nearly all families (n = 135). The number of children in each household ranged from 1 to 6 (M = 2.23, SD = 1.87). The youth were predominantly male (55.8 %, n = 173) and were, on average, 11.07 years old (SD = 5.08).

The Parent Connectors program was delivered by a community organization located in the western United States. This host organization provides a myriad of prevention and early intervention services to meet the needs of parents and youth with emotional and behavioral difficulties. The services provided by this community organization range in intensity and include peer-to-peer parent support, parenting classes, in-home parent training, and therapeutic services within a behavioral health clinic. All Parent Connectors activities were provided as routine services by the community organization and operated independently of this study.

Procedures

Parents were eligible for the Parent Connectors program if they resided in the county in which the host community organization was located. Parents either self-referred to the host organization or were referred by others. For instance, professionals at local agencies were made aware of the Parent Connectors program and were asked to make referrals to the program. When making a referral, these professionals provided the Parent Connectors program supervisor (a staff member at the host community organization) with the contact information of potential participants after discussing the goals of the program with parents and obtaining their permission to make the referral. Referrals were reviewed by staff at the organization and if it was determined that the Parent Connectors program would be a good fit for the family, the program supervisor contacted parents to invite them to participate in the Parent Connectors program. If the parent agreed, they were assigned to a trained PC that spoke their primary language. Pre-test and post-test measures were administered in the parent's preferred language. Each PC carried a caseload of approximately ten parents and aimed to have weekly phone calls with each parent over the course of 3 months. Phone calls were focused on addressing the four primary intervention components (Kutash et al. 2011). PCs received 3 days of initial training in the intervention through a manualized training curriculum and weekly 2-h supervision sessions by a trained PC Coach, who was a licensed mental health practitioner.

Measures

Protective Factors Survey (PFS)

The PFS is a 20-item self-report measure designed to assess protective factors in five areas: social support, concrete support, family functioning/resiliency, nurturing and attachment, and knowledge of parenting/child development. For the purposes of this study, only the social support and concrete support subscales were used, given that they align with the goals of the program. The social support domain (three items) measured perceived informal support from others (e.g., friends, family) and the concrete support domain (three items) measured perceived access to services and tangible goods to assist the family in coping with stress in times of need or crisis. Parents rated each of the six items on a 7-point Likert-like scale from 1 (strongly disagree) to 7 (strongly agree) to indicate the degree to which they agreed with each item. Previous research indicates that the PFS has adequate psychometric properties (Counts et al. 2010). In the present study, the internal consistency of the Social Support scale was adequate at intake ($\alpha = .78$) and discharge ($\alpha = .80$). Similarly, the Concrete Support scale had adequate internal consistency at intake ($\alpha = .85$) and discharge ($\alpha = .79$).

Participation

PCs documented their weekly calls to parents using a standardized form, the Family Contact Log (FCL; Kutash et al. 2012). For calls lasting longer than 5 min, the PC completed an FCL to record details of each call, such as the date, duration of each call, and the topics discussed during the call. For the purposes of this study, the number of calls at least 5 min long was used as the measure of parent participation.

Program Adherence

PCs also recorded the frequency with which each of the four program components (i.e., emotional support, promotion of positive attitudes towards engagement, informational support, and instrumental support) were discussed in each call by using a 14-item checklist provided on the FCL (see Kutash et al. 2012). The completed FCLs were collected weekly during supervision and were used by the PC Coach to review the content and quality of each call and provide recommendations to the PC for future calls with the parent. PCs' overall program adherence was defined as the percent of participants who discussed each of the four program components during the intervention. Adherence frequency was defined as the average number of calls in which each specific program component (reflected



in the 14-item checklist on the FCL) was discussed over the course of the intervention.

Data Analysis

Intervention fidelity was examined using descriptive statistics of the program adherence and participation data. Paired samples *t* tests were used to evaluate differences in participants' social support from pre-test to post-test. Finally, multiple regression analyses were conducted to evaluate the relation between program participation and outcomes. The regression analyses were conducted in Mplus 7.3 (Muthén and Muthén 1998–2012) using maximum likelihood estimation with robust standard errors (MLR) in order to adjust for non-normality of the variables and to account for missing data.

Results

The first aim of this study was to describe two components of intervention fidelity, program participation and adherence, as it relates to Parent Connectors. Parents participated in an average of 8.39 calls that were at least 5 min in length (SD = 5.20, range 0-32), which resulted in parents talkingwith their PC for an average of 4.44 h (SD = 3.88, range 0-24.65 h) over the course of 12.71 weeks (SD = 2.77, range 2.86-19.86 weeks). Regarding adherence, overall adherence and adherence frequency data are presented in Table 1. Results indicated high fidelity to the model, as PCs provided emotional support to 96.76 % of parents, promoted positive attitudes toward engagement in services with 92.33 % of parents, discussed instrumental support (i.e., concrete support) with 86.81 % of parents, and discussed informational support with 77.90 % of parents. Examination of the adherence frequency data (see Table 1) revealed that PCs talked with parents most about topics related to the importance of social support (M = 6.84calls), adequate self care (M = 6.64 calls), the benefits of engaging in services (M = 6.29 calls), and their own experience of raising a child with emotional and behavioral difficulties (M = 6.12 calls). Less frequently discussed were topics related to informational support, such as ways to partner with teachers (M = 3.09 calls) and support academic success at home (M = 3.17 calls).

The second purpose of this study was to evaluate participants' improvement from intake to discharge on the PFS. Results of the paired samples t tests indicated a significant increase in participants' perception of social support t(98) = -10.31, p < .001 from pre-test (M = 3.17, SD = .84) to post-test (M = 4.53, SD = .88) on the PFS. There was also a significant increase in participant reported

concrete support t(98) = -20.40, p < .001, from pre-test (M = 2.86, SD = .98) to post-test (M = 5.50, SD = .89) on the PFS.

To address the third research aim, multiple regression analyses evaluated the effect of overall participation (total number of calls), on PFS post-test scores for social support and concrete support, while controlling for participants' pre-test scores. After controlling for pre-test PFS Social Support scores, the total number of calls significantly predicted parents' post-test PFS Social Support ratings (p = .004), explaining 8 % of the variance (see Table 2). Conversely, the regression model including the overall number of calls failed to significantly predict post-intervention PFS Concrete Support scores (p = .099); see Table 2).

The final purpose of this study was to examine the relation between adherence frequency and associated program outcomes. This was addressed by examining the average number of calls during which topics related to social support and concrete support were discussed by PCs (see Table 1). Over the course of the intervention, PCs discussed social support in an average of 6.84 calls and discussed concrete support in an average of 4.45 calls. When controlling for pre-test PFS Social Support scores, the number of calls related to social support significantly predicted post-test social support scores on the PFS (p = .015), which explained 7 % of the variance (see Table 2). In contrast, the number of calls related to concrete support did not significantly predict parents' posttest PFS Concrete Support ratings, after controlling for their pre-test PFS Concrete Support scores (p = .368; see Table 2).

Discussion

Parent Connectors is a promising peer-to-peer program that aims to engage parents of middle-school aged youth with an Individualized Education Program for behavioral and emotional needs into services. Given the emerging support for this program (e.g., Kutash et al. 2013) and the lack of prevention-focused peer-to-peer parent support programs, minor modifications were made to the Parent Connectors program. This modified program maintained the essential components of Parent Connectors, but was adapted to focus on younger, at-risk youth with emotional and behavioral difficulties and be delivered within a community service agency over a much shorter timeframe of 3 months. Our results provide insight into the implementation of this Parent Connectors program, as well as provide some support for our hypotheses that perceived social support and concrete support would increase over time and that greater parent participation and program adherence would be predictive of these changes.



Table 1 PC adherence to the Parent Connectors model

Program component/family contact log item	% of participants who ever discussed program topics with a PC (overall adherence)	Mean (SD) number of calls participants discussed program topics with a PC (adherence frequency) 6.29 (4.08)	
Emotional support	96.76		
Item 1: Share own experience to reduce isolation and stigma	98.56	6.12 (3.91)	
Item 2: Causes of emotional and behavioral disorders	94.96	5.57 (3.96)	
Item 3: Encourage adequate self-care	96.40	6.64 (4.28)	
Item 4: Importance of social support	97.12	6.84 (4.19)	
Promotion of positive attitudes towards engagement	92.33	5.14 (3.75)	
Item 5: Expected benefit of engagement in services	95.68	6.29 (4.06)	
Item 6: Belief that parent can influence services	89.93	4.85 (3.90)	
Item 7: Encourage participation in school meetings	91.37	4.28 (3.30)	
Informational support	77.90	3.35 (3.11)	
Item 8: School-based mental health services	76.26	3.35 (3.20)	
Item 9: Community-based mental health services	85.61	3.81 (3.33)	
Item 10: Supporting academic success	75.54	3.17 (2.92)	
Item 11: Partnership with teacher	74.10	3.09 (3.00)	
Instrumental support	86.81	4.45 (3.42)	
Item 12: Concrete support—providing resources	84.89	4.41 (3.46)	
Item 13: Concrete support—skills for accessing services	86.33	4.02 (3.19)	
Item 14: Concrete support—problem solving skills	89.21	4.91 (3.62)	

Table 2 Summary of linear regressions using participation and adherence to predict intervention outcomes

Model	Predictor	b	β	p value	R^2
Outcome:	PFS social support				
A.	Number of calls	.044	.256	.004	.08
	Pre-test PFS social support	127	113		
B.	FCL social support	.052	.244	.015	.07
	Pre-test PFS social support	081	076		
Outcome:	PFS concrete support				
A.	Number of calls	027	156	.099	.03
	Pre-test PFS concrete support	.065	.072		
В.	FCL concrete support	025	092	.368	.01
	Pre-test PFS concrete support	.045	.052		

PFS Protective Factors Survey, FCL Family Contact Log

We measured two components of intervention fidelity, program participation and program adherence, to better understand the implementation of this prevention-focused and community-based Parent Connectors program and to determine whether it was implemented as designed. Results indicated that, overall, parents participated in the intervention at high levels, as measured by the number of calls at least 5 min in length that resulted in parents talking with PCs for nearly 4½ h on average during the 3-month program. Regarding overall program adherence high fidelity with the program model was found, as PCs provided emotional support to almost all parents (97 %) and

promoted the benefits of engagement in services with over 90 % of parents. Instrumental (concrete) and informational support were also discussed with most parents (87 and 78 %, respectively), in accordance with the Parent Connectors model. Furthermore, given the expectation that the frequency of discussions regarding program topics are tailored to the needs of each family, adherence frequency findings revealed more phone calls included the topics of emotional support and discussion of the benefits of engagement in services than informational or instrumental support. These results also suggest that the various program components of Parent Connectors may require different



levels of intensity or time, in order to address each family's unique circumstances. Therefore, findings from this study offer insight into how this prevention-oriented Parent Connectors program was delivered within a community-based setting and provide some evidence that the program was delivered as intended.

The second aim of the present study was to examine the pre- and post-intervention improvements of the adapted Parent Connectors program on parents' ratings of perceived level of support for concrete services and social support. Consistent with our hypothesis, strong support was found for gains in both social support and concrete support from pre-test to post-test. Thus, findings from this study provide initial evidence of the effectiveness of the Parent Connectors program for a community-based sample of parents of at-risk youth with significant behavioral and emotional needs. These findings are consistent with previous studies demonstrating that parent-to-parent support programs increase parents' perceived levels of social support (Hoagwood et al. 2010).

The final purposes of this study were to determine whether participation in the intervention and adherence frequency predicted subsequent outcomes. This was accomplished by examining whether the total number of calls and the frequency of calls in which social support and concrete support were discussed with participants predicted PFS rating at the end of the program. Findings partially supported our hypotheses regarding whether participation and adherence frequency predicted outcomes. Consistent with previous research demonstrating that components of intervention fidelity predict outcomes (Eames et al. 2009; Schoenwald et al. 2004), parents' level of participation in Parent Connectors significantly predicted improvement in their report of social support. This finding is encouraging, given that one of the primary goals of the Parent Connectors program is to increase parents' social support. Results of this study also provide some insight into the relation between PCs' adherence to the program model and its relation to outcomes. More specifically, our findings indicated that the number of calls in which social support topics were discussed was related to improved social support outcomes for parents. Together, these findings are encouraging as they suggest that increased participation in this intervention, as well as greater frequency in the amount of social support content discussed, were associated with better outcomes for parents.

In addition to its relation to social support outcomes, we also examined whether levels of participation and program adherence was related to concrete support. Interestingly, contrary to our hypotheses, neither total number of phone calls made nor the number of calls that specially addressed the topic of concrete service needs significantly predicted parents' perceived concrete support at post-test. Whereas it

is not surprising that overall number of calls was not predictive of changes in perceived levels of concrete resources, it is curious that our adherence frequency measure of the number of calls including conversations related to concrete services was not predictive of parental report of access to concrete services at the end of the intervention. Perhaps this is due to the lower frequency of occurrence with which concrete support services were discussed in conversations. It may be that once parents accessed the concrete support they needed, it was not necessary to devote as much time during phone calls to provide resources or problem solve around getting the family's basic needs met.

Limitations

Although the findings of this study are promising, there are several limitations that must be acknowledged. First, this study employed a single group pre-post design without a comparison group. Therefore, it is possible that differences over time may be due to natural changes in parents' perception of social support and concrete support. Second, all of the outcomes were obtained solely by parent report. Although it would be helpful if future studies could include perspectives of other respondents (e.g., teachers), obtaining such data is extremely costly and can be difficult to obtain. A third limitation is that PCs self-reported details of their conversations with parents after each call. As such, there may be bias in PCs' recollection of the call details. However, there are not many viable alternatives for collecting such information aside from provider report. It would also be beneficial if future research included additional outcome measures (e.g., youth's engagement in mental health services), so other goals of the intervention could be assessed. Another limitation is that parents in the study may have received other supports from other community agencies or the host organization, which may have impacted their perception of supports. Accessing services that address basic needs from the referring agency is a rival argument that possibly explains gains in reported concrete services that were not related to participation in the intervention or PCs' adherence to the program. Finally, replication of this study with other populations is warranted, to determine whether these findings generalize to parents with different demographic characteristics and geographic locales.

Implications and Directions for Future Research

Despite the limitations of the present study, findings suggest that it may be beneficial for parents of youth at-risk for emotional and behavioral disorders to engage in a peer-to-peer phone support intervention that is implemented within a prevention framework and within a short period of time



(i.e., 3 months). This is of particular importance at a time when officials in both the mental health and education systems face the challenges posed by increased recognition of the necessity to address the mental health needs of America's children (Kutash et al. in press). Programs that are effective and easy to adapt and implement will be highly valued in this endeavor. Findings from the current study are encouraging, given this intervention is feasible to implement and disseminate. That is, this study provides evidence that the Parent Connectors program model can be implemented with fidelity by community agency staff as a stand-alone program not supported by a research grant or run by program developers. Further, the acceptability by participants documented by the developers (Kutash et al. 2012) was also evident in the current effort, given that few parents terminated services prior to the end of the program. Therefore, it is important that future research empirically test the Parent Connectors prevention program with a comparison group to see if the program results in improved outcomes over services as usual. Future research would also benefit from the investigation of additional outcomes such as parents' self-efficacy, parents' empowerment, and youths' engagement in mental health services. Finally, it would be beneficial if future research on peer-to-peer support could extend the efforts of examining factors related to fidelity of implementation in relation to family outcomes.

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References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211. doi:10.1016/0749-5978(91)90020-T.
- Angold, A., Messer, S. C., Stangl, D., Farmer, E. M. Z., Costello, E. J., & Burns, B. J. (1998). Perceived parental burden and service use for child and adolescent psychiatric disorders. *American Journal of Public Health*, 88, 75–80. doi:10.2105/AJPH.88.1.75.
- Baker, C. N., Arnold, D. H., & Meagher, S. (2011). Enrollment and attendance in a parent training prevention program for conduct problems. *Prevention Science*, 12, 126–138. doi:10.1007/ s11121-010-0187-0.
- Bradley, R., Doolittle, J., & Bartolotta, R. (2008). Building on the data and adding to the discussion: The experiences and outcomes of students with emotional disturbance. *Journal of Behavioral Education*, 17, 4–23. doi:10.1007/s10864-007-9058-6.
- Counts, J. M., Buffington, E. S., Chang-Rios, K., Rasmussen, H. N., & Preacher, K. J. (2010). The development and validation of the protective factors survey: A self-report measure of protective factors against child maltreatment. *Child Abuse and Neglect*, 34, 762–772. doi:10.1016/j.chiabu.2010.03.003.

- Dane, A. V., & Schneider, B. H. (1998). Program integrity in primary and early secondary prevention: Are implementation effects out of control? *Clinical Psychology Review*, 18, 23–45. doi:10.1016/ S0272-7358(97)00043-3.
- Domitrovich, C. E., & Greenberg, M. T. (2000). The study of implementation: Current findings from effective programs that prevent mental disorders in school-aged children. *Journal of Educational and Psychological Consultation*, 71, 193–221. doi:10.1207/S1532768XJEPC1102_04.
- Dusenbury, L., Brannigan, R., Falco, M., & Hansen, W. B. (2003). A review of research on fidelity of implementation: Implications for drug abuse prevention in school settings. *Health Education Research*, 18, 237–256. doi:10.1093/her/18.2.237.
- Eames, C., Daley, D., Hutchings, J., Whitaker, C. J., Jones, K., Hughes, J. C., & Bywater, T. (2009). Treatment fidelity as a predictor of behaviour change in parents attending group-based parent training. *Child: Care, Health and Development, 35*, 603–612. doi:10.1111/j.1365-2214.2009.00975.x.
- Eisner, M., & Meidert, U. (2011). Stages of parental engagement in a universal parent training program. *The Journal of Primary Prevention*, 32, 83–93. doi:10.1007/s10935-011-0238-8.
- Girio-Herrera, E., Owens, J. S., & Langberg, J. M. (2013). Perceived barriers to help-seeking among parents of at-risk kindergarteners in rural communities. *Journal of Clinical Child and Adolescent Psychology*, 42, 68–77. doi:10.1080/15374416.2012.715365.
- Hoagwood, K. E., Cavaleri, M. A., Olin, S. S., Burns, B. J., Slaton, E., Gruttadaro, D., & Hughes, R. (2010). Family support in children's mental health: A review and synthesis. *Clinical Child* and Family Psychology Review, 13, 1–45. doi:10.1007/s10567-009-0060-5.
- Ingoldsby, E. M. (2010). Review of interventions to improve family engagement and retention in parent and child mental health programs. *Journal of Child Family Studies*, *19*, 629–645. doi:10. 1007/s10826-009-9350-2.
- Ireys, H. T., Chernoff, R., Stein, R. E. K., DeVet, K. A., & Silver, E. J. (2001). Outcomes of community-based family-to-family support: Lessons learned from a decade of randomized trials. *Children's Services: Social Policy, Research, and Practice*, 4, 203–216. doi:10.1207/S15326918CS0404_04.
- Kazdin, A. E. (1997). Parent management training: Evidence, outcomes, and issues. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36, 1349–1356. doi:10.1097/00004583-199710000-00016.
- Kutash, K., Cross, B., Madias, A., Duchnowski, A. J., & Green, A. L. (2012). Description of a fidelity implementation system: An example from a community-based children's mental health program. *Journal of Child and Family Studies*, 21, 1028–1040. doi:10.1007/s10826-012-9565-5.
- Kutash, K., Duchnowski, A. J., & Green, A. L. (in press). Meeting the mental health needs of youth with emotional and behavioral disorders. *Beyond Behavior*.
- Kutash, K., Duchnowski, A. J., Green, A. L., & Ferron, J. M. (2011). Supporting parents who have youth with emotional disturbances through a parent-to-parent support program: A proof of concept study using random assignment. Administration and Policy in Mental Health and Mental Health Services Research, 38, 412–427. doi:10.1007/s10488-010-0329-5.
- Kutash, K., Duchnowski, A. J., Green, A. L., & Ferron, J. M. (2013). Effectiveness of the Parent Connectors program: Results from a randomized controlled trial. *School Mental Health*, 5, 192–208. doi:10.1007/s12310-013-9106-4.
- Kutash, K., Duchnowski, A. J., & Lynn, N. (2006). School-based mental health: An empirical guide for decision-makers. Tampa, FL: University of South Florida, The Louis de la Parte Florida Mental Health Institute, Department of Child & Family Studies, Research and Training Center for Children's Mental Health.



- Lucksted, A., McFarlane, W., Downing, D., Dixon, L., & Adams, C. (2012). Recent developments in family psychoeducation as an evidence-based practice. *Journal of Marital and Family Therapy*, 38, 101–121. doi:10.1111/j.1752-0606.2011.00256.x.
- McKay, M. M., Gopalan, G., Franco, L., Dean-Assael, K., Chacko, A., Jackson, J. M., & Fuss, A. (2011). A collaboratively designed child mental health service model: Multiple family groups for urban children with conduct difficulties. *Research on Social Work Practice*, 21, 664–674. doi:10.1177/1049731511406740.
- Muthén, L. K., & Muthén, B. O. (1998). *Mplus user's guide* (7th ed.). Los Angeles, CA: Muthén & Muthén.
- Olin, S. S., Hoagwood, K. E., Rodriguez, J., Ramos, B., Burton, G., Penn, M., & Jensen, P. S. (2010). The application of behavior change theory to family-based services: Improving parent empowerment in children's mental health. *Journal of Child* and Family Studies, 19, 462–470. doi:10.1007/s10826-009-9317-3.
- Owens, P. L., Hoagwood, K., Horwitz, S. M., Leaf, P. J., Poduska, J. M., Kellam, S. G., & Ialongo, N. S. (2002). Barriers to children's mental health services. *Journal of the American Academy of Child and Adolescent Psychiatry*, 41, 731–738. doi:10.1097/00004583-200206000-00013.
- Robbins, V., Johnston, J., Barnett, H., Hobstetter, W., Kutash, K., Duchnowski, A. J., & Annis, S. (2008). Parent to parent: A synthesis of the emerging literature. Tampa, FL: University of South Florida, The Louis de la Parte Florida Mental Health Institute, Department of Child & Family Studies.
- Rodriguez, J., Olin, S. S., Hoagwood, K. E., Shen, S., Burton, G., Radigan, M., & Jensen, P. S. (2011). The development and

- evaluation of a parent empowerment program for family peer advocates. *Journal of Child and Family Studies*, 20, 397–405. doi:10.1007/s10826-010-9405-4.
- Sanders, M. R., & Prinz, R. J. (2008). Ethical and professional issues in the implementation of population-level parenting interventions. *Clinical Psychology: Science and Practice*, 15, 130–136. doi:10.1111/j.1468-2850.2008.00121.x.
- Schoenwald, S., Sheidow, A., & Letourneau, E. (2004). Toward effective quality assurance in evidence-based practice: Links between expert consultation, therapist fidelity, and child outcomes. *Journal of Clinical Child and Adolescent Psychology, 33*, 94–104. doi:10.1207/S15374424JCCP3301_10.
- Spoth, R., Clair, S., Greenberg, M., Redmond, C., & Shin, C. (2007).
 Toward dissemination of evidence-based family interventions:
 Maintenance of community-based partnership recruitment results and associated factors. *Journal of Family Psychology*, 21, 137–146. doi:10.1037/0893-3200.21.2.137.
- Utting, D., Monteiro, H., & Ghate, D. (2007). *Interventions for children at risk of developing antisocial personality disorder*. London: Policy Research Bureau.
- Wagner, M. M. (1995). Outcomes for youths with serious emotional disturbance in secondary school and early adulthood. Future of Children, 5, 90–112. doi:10.2307/1602359.
- Yeaton, W. H., & Sechrest, L. (1981). Critical dimensions in the choice and maintenance of successful treatments: Strength, integrity, and effectiveness. *Journal of Consulting and Clinical Psychology*, 49, 156–167. doi:10.1037/0022-006X.49.2.156.

