



Post-investigation service need and utilization among families at risk of maltreatment



James David Simon ^{*}, Devon Brooks

School of Social Work, University of Southern California, United States

ARTICLE INFO

Article history:

Received 23 September 2015
Received in revised form 22 August 2016
Accepted 23 August 2016
Available online 24 August 2016

Keywords:

Home-based, post-investigation services AKA
postreponse services
Family assessment
Matching needs and services
Child protective services
Child welfare
Bridging services
Child abuse and child maltreatment prevention
Differential response AKA alternative response

ABSTRACT

This study examined the relationship between different areas of family need and the utilization of home-based, post-investigation services (HBPS) following a child protective services (CPS) investigation. The sample consisted of 2598 families with children who remained at home after an initial CPS investigation between July 2006 and April 2011. Family need was measured in three areas (concrete, clinical, and educational) using the Family Assessment Form (FAF), and families received one or more of the following HBPS: case management, concrete, educational, and clinical services. Pearson chi-square analyses were utilized to identify significant areas of needs to be included in a final multivariate logistic regression for each HBPS while controlling for demographic characteristics.

Numerous areas of family need were associated with receipt of services intended to address those needs. Specifically, concrete need related to financial conditions was met with concrete services, educational need related to child development (an indicator of parenting need) was met with educational services, and clinical need related to interactions between caregivers (a potential indicator of domestic violence) was met with clinical services. In contrast, caregivers with concrete need related to living conditions were less likely to receive both educational and clinical services. Findings from the study highlight that matching concrete needs to related services is relatively straightforward but that the match between educational and clinical needs to respective services is more complex. We discuss the complexities of matching different areas of need and HBPS following a CPS investigation and the importance of "bridging services" to engage families at risk of maltreatment in additional prevention services.

Published by Elsevier Ltd.

1. Introduction

Each year in the United States, child protective service (CPS) agencies investigate millions of referrals for suspected child abuse and neglect. Nationally, CPS agencies received an estimated 3.6 million referrals in 2014 involving approximately 6.6 million children, which represents nearly a 15% increase in referrals since 2010 (U.S. Department of Health & Human Services [USDHHS], 2016). When an investigation reveals that maltreatment has occurred or that the family is at high risk of future maltreatment, CPS typically will open a case and provide mandated services (Waldfogel, 2009). An alternative response (also known as differential response) may be provided to families that are at lower risk of abuse or neglect and do not meet the threshold required for opening a CPS case (Conley, 2007; Conley & Berrick, 2010). This response often involves a referral to a community-based agency that offers voluntary, home-based, post-investigation services (HBPS) designed to prevent maltreatment and re-referral to CPS.

Additionally, this alternative response (or differential response) allows CPS agencies to triage their service response by targeting families in greater need of CPS involvement while referring families at lower risk of maltreatment for services offered by community agencies (Conley, 2007; Conley & Berrick, 2010; Waldfogel, 2009). Although exact numbers are unknown, due in part to variation in service definitions and service provision, it is estimated that more than 1 million families at risk of maltreatment received HBPS in 2014 (USDHHS, 2016).

Despite the availability and receipt of services to prevent abuse and neglect, less is known about families that receive HBPS following a CPS investigation and whether they receive services matched to their needs. National reports on child maltreatment do not account for these families once their CPS investigation is closed unless the families are re-reported to CPS. Alarming, an estimated 22% to 38% of families reported to CPS for the first time for alleged maltreatment are re-reported within 2 years (Fluke, Shusterman, Hollinshead, & Yuan, 2008; Needell et al., 2015). Clearly, a referral for alleged maltreatment represents a critical opportunity to prevent subsequent maltreatment given that children and families have come to the attention of CPS agencies. Prior research has indicated that matching needs and services is associated with positive child welfare outcomes such as decreased substance abuse, lower

^{*} Corresponding author at: School of Social Work, University of Southern California, 669 W 34th St., Los Angeles, CA 90089-0411, United States.
E-mail address: jamesdsi@usc.edu (J.D. Simon).

rates of maltreatment, and increased family reunification (Choi & Ryan, 2007; Ryan & Schuerman, 2004; B. D. Smith & Marsh, 2002). Despite these positive findings, similar studies have shown that some needs are commonly unmet or mismatched with services (Cash & Berry, 2002; Chambers & Potter, 2008; Choi & Ryan, 2007). Prior studies examining the match between needs and services tended to include families with prior or current CPS involvement indicating that maltreatment has already occurred (Bagdasaryan, 2005; Cash & Berry, 2002; Chambers & Potter, 2008; Ryan & Schuerman, 2004; Staudt & Cherry, 2009). Furthermore, the match between needs and services has not been explored in the differential response literature because these studies have focused on outcomes (Conley, 2007; Kaplan & Merkel-Holguin, 2008; Ortiz, Shusterman, & Fluke, 2008).

In response to the aforementioned empirical gaps, we are interested in this population of children and families; that is, families that have not experienced but are at risk of maltreatment and therefore are provided HBPS. The purpose of our study is to advance empirical understanding of the match between need and receipt of HBPS among families at risk of maltreatment with no prior CPS history. Our specific aims were as follows:

- (1) Describe different areas of family need and the numerous HBPS received following an initial child abuse investigation by CPS.
- (2) Identify what areas of areas of need are matched with different types of HBPS.
- (3) Determine the statistical impact of different areas of family need on four specific post-investigation service types to understand the match between needs and services.

2. Background

2.1. Primer on home-based, post-investigation services

Around the mid-1990s, CPS agencies began providing an alternative response consisting of services to lower-risk families as a less adversarial approach to engage families in HBPS and prevent further CPS involvement (Conley & Berrick, 2010; Fuller, 2014; Kaplan & Merkel-Holguin, 2008; Waldfogel, 2009). During the past few decades, various terms have been used synonymously with HBPS, including “family preservation,” “family-based,” “family support,” “family maintenance,” and “community-based” services (see Pecora, Whittaker, Maluccio, & Barth, 2000). As with the terminology, there has been considerable variation in terms of what constitutes HBPS. Generally speaking, HBPS are home-based services designed to strengthen families and prevent maltreatment through the provision of multiple services including case management, concrete, educational, and clinical services (see Cash & Berry, 2002, 2003; Fraser, Pecora, & Haapala, 1991; Lewis, 1991; Pecora et al., 2000).

Case management services are designed to help families access and navigate an array of services (Case Management Society of America, 2010; First 5 L.A., 2010a, 2010b, 2014; National Association of Social Workers, 2013). Typically, these services include planning, seeking, advocating for, and monitoring a variety of services from different service providers (Case Management Society of America, 2010; National Association of Social Workers, 2013). Case management services should be provided in a timely manner to meet a client’s comprehensive needs and necessitate a collaborative process involving assessment, coordination, advocacy, and knowledge of available resources (Case Management Society of America, 2010).

Concrete services are designed to meet the basic needs of families. These services may include, for example, food, clothing, furniture, emergency shelter, financial assistance, transportation, babysitting, respite care, child care, and legal aid (Cash & Berry, 2002, 2003; Chaffin, Bonner, & Hill, 2001; Fraser et al., 1991; Pecora et al., 2000; Ryan & Schuerman, 2004). Sometimes referred to as “hard” services, concrete services are provided to meet a material need (Pecora et al., 2000).

Educational services, sometimes referred to as enabling services (Cash & Berry, 2002), are designed to teach parents a particular set of skills. They often target parenting attitudes, knowledge, and abilities, as well as parent–child interactions (Gershater-Molko, Lutzker, & Wesch, 2003). Agencies that provide educational services may offer parenting classes and groups addressing child development, child discipline, parent–child interaction, skill building for new mothers, family planning, and guidance on obtaining additional resources (Cash & Berry, 2002, 2003; Chaffin et al., 2001).

Finally, clinical services are those designed address the emotional, mental health, and behavioral needs of caregivers and families (Cash & Berry, 2002, 2003; Fraser et al., 1991; Pecora et al., 2000; Ryan & Schuerman, 2004). Primarily therapeutic, these services may consist of mental health treatment to address psychological problems, maladaptive behavior, and other family situations requiring counseling (Cash & Berry, 2002; Palusci & Ondersma, 2012; Ryan & Schuerman, 2004). Examples of clinical services include therapy addressing depression, substance abuse, family violence, and anger management (Cash & Berry, 2003; Fraser et al., 1991; Palusci & Ondersma, 2012; Ryan & Schuerman, 2004).

2.2. Family need and HBPS

Although case management is frequently provided, few studies on this population have considered whether case management meets family needs. Past studies examining how family needs are associated with service receipt suggest that HBPS may not always align with family needs unless they involve concrete needs (Cash & Berry, 2002; Ryan & Schuerman, 2004). For instance, studies found that families with concrete needs related to transportation, housing, and income appropriately receive concrete services (Cash & Berry, 2002; Ryan & Schuerman, 2004). The picture is less clear with respect to whether educational and clinical needs (i.e., needs related to parenting and mental health) are adequately addressed by educational and clinical services, respectively.

A handful of studies found that educational and clinical needs are at least partially matched with related services (Cash & Berry, 2002; Fernandez, 2007). Cash and Berry (2002) studied 115 families with an open family preservation case and found that families with educational needs related to parenting most often received educational services. Families with relationship problems did receive clinical services, but those with substance abuse and domestic violence problems did not receive these services. The authors of the study posited that this partial match might be due to the nature of providing voluntary services, because families are not required to participate in all of the services (Cash & Berry, 2002). Similarly, Fernandez (2007) found that families with educational needs related to parenting received more concrete services and clinical services such as counseling, but were less likely to receive educational services. However, this study was limited (particularly with respect to understanding at-risk families in the United States) by its relatively small sample of 51 families referred to a family support program in Australia.

In addition to the aforementioned findings, results from several studies hint that the educational and clinical needs of family may go unmatched or unaddressed altogether (Bagdasaryan, 2005; Cash & Berry, 2002; Chambers & Potter, 2008; Choi & Ryan, 2007). This appears particularly prevalent among families experiencing substance abuse, mental health, or domestic violence problems, with few exceptions (see Chambers & Potter, 2008). Bagdasaryan (2005) examined need–services match among families receiving family preservation services and found a large variation between caseworker-recommended services and service receipt. Nearly one quarter of the families in the study in need of educational services (i.e., teaching and demonstration) and counseling (i.e., clinical) services did not receive recommended services. Choi and Ryan (2007) found higher percentages of unmet need ranging from 43% to 90% among substance-abusing mothers with co-

occurring problems. The lowest matches occurred for education and family counseling (13.2% and 18.3%, respectively). It should be noted that the studies by Bagdasaryan (2005) and Choi and Ryan (2007) focused on outcomes related to a service match, as opposed to potential predictors of a service match, such as family need.

In a study of open CPS cases, Chambers and Potter (2008) examined the match between different areas of need (referred to as clusters) and various services for families. Families—all of which were referred for child neglect (as opposed to some form of abuse)—were separated into three needs clusters: (a) low needs, (b) substance abuse, and (c) economic, domestic violence, and mental health. They received services in one of four clusters: (a) low services, (b) high services or economic or domestic violence services, (c) moderate or home-based services, and (4) high services or substance abuse or drug court services. The low needs group was found to have an appropriate service match, as did families with substance abuse needs. In contrast, there was a mismatch for the economic, domestic violence and mental health needs group. This group received high/domestic violence services only a quarter of the time and low services half of the time (despite being a high-needs group). Furthermore, mental health services appeared to be delivered randomly with no clear match between needs and services (Chambers & Potter, 2008). Although Chambers and Potter's (2008) study was strengthened by the statistical methods used to develop its needs and services clusters, it was limited by the small sample of 160 high-risk families that were solely reported for neglect (all other types of substantiated abuse were excluded).

Findings similar to those in Chambers and Potter's (2008) study were obtained by Staudt and Cherry (2009), who examined 2109 family child welfare cases from counties throughout the United States. Many caregivers with mental health problems received appropriate clinical services, whereas caregivers with substance abuse problems were less likely to receive clinical services. Furthermore, about one quarter of caregivers received educational and clinical services even though the caregivers were not identified as having related problems. Staudt and Cherry (2009) suggested that the mismatch among educational and clinical need and respective services may have been a result of inaccurate identification of problems by caseworkers. The authors also called for more research to better understand why child welfare caseworkers would offer services to caregivers when there appears to be no need for the services. Although the study benefited from a large sample size and the use of probability sampling methods, statistical analyses were limited to bivariate analyses, so the effects of other areas of need on service utilization were not taken into account.

In summary, the extent to which findings from past studies can be generalized is uncertain given some of the aforementioned limitations, particularly relatively small sample sizes (Cash & Berry, 2002; Chambers & Potter, 2008; Fernandez, 2007; Ryan & Schuerman, 2004) and a focus on specific subgroups of children and families, such as families referred for neglect (Chambers & Potter, 2008). For our purposes, particularly problematic is the inclusion in past studies of families with open CPS cases (Bagdasaryan, 2005; Cash & Berry, 2002; Chambers & Potter, 2008; Ryan & Schuerman, 2004; Staudt & Cherry, 2009) because they typically represent high- or even very high-risk families, often with current or historical child welfare involvement. However, the families that are the focus of our study, namely families without an open CPS case, typically represent high-risk families with no histories of child welfare involvement that are just under the threshold of CPS involvement. Our study adds to the existing knowledge base on child maltreatment prevention by examining on three areas of family need—concrete, clinical, and educational need. Given the complexity of the relationship between different types of need and a services match, an examination of the nature of this relationship, with a large and culturally diverse sample of families with no prior histories of maltreatment or CPS involvement, is warranted.

3. Methods

3.1. Overview

This analysis used data collected as part of a longitudinal study of the Partnerships for Families (PFF) initiative in Los Angeles County—a community-based child maltreatment prevention program offering HBPS to pregnant women and families with children aged 5 years or younger who were at risk of child maltreatment (Brooks, Sessoms, et al., 2011; First 5 LA, 2014). PFF is akin to a differential response model (Track 2) in that families needed to be investigated by CPS to access community services (see Conley & Berrick, 2010). To be eligible for PFF, target families must have had an initial CPS investigation that resulted in an unfounded or inconclusive disposition and a determination of high to very high risk of future maltreatment on the Structured Decision Making risk assessment tool (Brooks, Cohen, et al., 2011; Budde et al., 2011; Children's Research Center, 2008). Furthermore, families must not have had any prior referrals to the local CPS agency for any of their children (Brooks, Cohen, et al., 2011). These eligibility requirements were particularly important because PFF focused on families that were at risk of maltreatment, not those that had actually experienced maltreatment.

Families meeting all eligibility criteria were subsequently referred by a CPS worker to a PFF agency. An in-home outreach counselor (IHOC) then met with the family to offer PFF services. If the family agreed to participate, the IHOC collaborated with the family to establish treatment goals based on an assessment of the family's strengths and needs. The IHOC visited the family at least twice a month for 6 to 12 months and engaged the family a variety of services as outlined in the service plan. The case was closed once the IHOC determined that the family had completed all of the goals agreed upon during the initial assessment. If a family moved out of the area, refused services, or was re-reported to CPS for alleged maltreatment, services were terminated prematurely (Budde et al., 2011).

Table 1
Sample characteristics (N = 2598).

	n	Valid %	M	SD
Caregiver ethnicity	2581			
African American	378	14.7		
Caucasian	259	10.0		
Hispanic	1944	75.3		
Caregiver age	2575		30.9	7.6
18–25	673	26.1		
26–35	1223	47.5		
36–75	679	26.4		
Caregiver education	2230			
Less than high school	1423	63.8		
High school or GED	452	20.3		
College degree	355	15.9		
Household income	2598		\$8867	\$12,593
Less than \$10,000	1791	68.9		
\$10,000–\$20,000	497	19.1		
More than \$20,000	310	11.9		
Number of caregivers	2598		1.3	0.5
1	1827	70.3		
2 or 3	771	29.7		
Number of children	2460		2.7	1.5
1	687	26.7		
2 or 3	1182	48.1		
4 or more	621	25.2		
Caregiver history of abuse ^a	2549			
No	1744	68.4		
Yes	805	31.6		

^a History of abuse indicated by a mean score ≥ 3 at baseline assessment on FAF Factor G. As a reminder, although these caregivers had a history of abuse, they did not have any prior CPS reports.

3.2. Participants

Our initial sample consisted of 3324 families who enrolled in PFF between July 2006 and April 2011. Of these families, 2813 had data on the services they received between their initial and follow-up assessments. Due to missing or incomplete data, 215 families were subsequently excluded. The final sample for this analysis consisted of 2598 CPS-referred families, which represents 78% of families that initially enrolled in PFF during the study period.

Table 1 displays the characteristics of the sample. Caregivers were predominantly Hispanic (75%), almost half were between the ages of 26 and 35 (48%), and the mean age was 30.5 ($SD = 7.7$). Nearly 70% of the caregivers had a household income of less than \$10,000 a year ($M = \8839, $SD = \$12,596$) and 64% had less than a high school education. Most households consisted of one caregiver (70%), slightly under half of the sample had two to three children (48%), and a little over one third (32%) had a history of childhood stability or physical, sexual, or substance abuse.

3.3. Measurement

We obtained data for our analysis from the local CPS agency and the lead agency in the PFF network of community agencies. CPS provided demographic data on the children and caregivers in each household. PFF lead agencies provided additional demographic data and data related to family functioning, service plans, contact notes, and closing summaries (Children's Bureau of Southern California, 2011). These data were collected using a web-based version of the Family Assessment Form (FAF), a practice-based instrument designed to help service providers standardize the assessment of family functioning and service planning for families (Children's Bureau of Southern California, 2011; McCroskey & Meezan, 1997; McCroskey, Nishimoto, & Subramanian, 1991). The FAF measures family functioning using multiple items within six factors (i.e., domains): (a) living conditions, (b) financial conditions, (c) caregiver support, (d) caregiver-child interactions, (e) developmental stimulation, and (f) interactions between caregivers. The FAF also measures caregiver history and personal characteristics. Prior research indicated that the FAF's subscales have interrater reliability between 75% and 80% and high interitem reliability (Cronbach's alpha) ranging from 0.68 to 0.93 (Children's Bureau of Southern California, 2011; McCroskey, Sladen, & Meezan, 1997).

3.4. Areas of need

The IHOC utilized the FAF to measure family functioning in the aforementioned FAF factors and on several items within each factor. Each FAF factor contains multiple items rated on the following five-point Likert scale: (1) *above average functioning*, (2) *generally adequate functioning*, (3) *moderate problem functioning*, (4) *major problem functioning*, and (5) *poor functioning* (see Appendix for a shortened version of the FAF). IHOCs could indicate indecision between two categories by using a half-point such as 2.5 (McCroskey & Nelson, 1989).

For the present analysis, need was indicated by a mean score of 3 or greater across all of the items within each factor because it indicated moderate problem functioning (Brooks, Cohen, et al., 2011). These scores were used to create dichotomous variables indicating need if the mean FAF factor score was 3 or higher and no need if the mean FAF factor score was less than 3. These scores were used to create indicators of need in one of the following areas: concrete need (either Factor A, B, or C), educational need (either Factor D, E, or F), or clinical need (Factor H except item H3, which measures substance abuse). H3 was measured separately (not included in Factor H) because prior research indicated that item H3 does not appropriately discriminate the construct of personal characteristics (Franke, Christie, Ho, & Du, 2013). We included FAF Factor G measuring caregiver history as a demographic

characteristic rather than an indicator of need due to the historical nature of the factor.

3.5. Home-based, post-investigation services

Families participating in PFF were offered a range of services that were documented in the FAF case notes (see First 5 LA, 2014). Following the baseline assessment and prior to the first follow-up assessment, the IHOC recorded the various services that were provided. We used this information to create dichotomous variables indicating receipt or nonreceipt of four types of HBPS: (a) case management, (b) concrete, (c) educational, and (d) clinical services. Case management services consisted of in-home support, system navigation, and access to other support services. Concrete services addressed basic needs such as housing, food, clothing, financial assistance or income support, medical care, and transportation. Educational services consisted largely of parenting instruction that focused on child development and family support. Clinical services generally involved receipt of one or more of the following: child and family therapy, mental health treatment, domestic violence treatment, and substance abuse treatment (First 5 LA, 2010a, 2010b). It is imperative to note that the service receipt categories were not mutually exclusive; that is, families often received more than one service (see Table 2).

3.6. Caregiver demographic characteristics

We controlled for the following caregiver demographics obtained from the FAF: (1) ethnicity (African American, Asian, and Hispanic vs.

Table 2
Areas of need and services (N = 2598).^a

	n	Valid %	Sample %
Concrete need	1334	51.4	
Living conditions	688	26.7	
Financial conditions	1018	39.4	51.4
Support to caregivers	736	28.6	
Educational need	1201	46.9	
Caregiver-child interactions	954	37.3	46.9
Developmental stimulation	955	38.4	
Clinical need	1067	41.6	
Interactions between caregivers	795	48.3	
Mental health	592	23.1	41.6
Substance abuse	192	7.7	
Any service received			
Case management	1974	74.2	
Concrete	1451	55.0	
Educational	1784	66.7	
Clinical	1692	62.7	
Total number of services			
One	585	22.5	22.5
Case management	330	56.4	12.7
Concrete	18	3.1	0.7
Educational	117	20.0	4.5
Clinical	120	20.5	4.6
Two	645	24.8	24.8
Case management and concrete	176	27.3	6.8
Case management and educational	88	13.6	3.4
Case management and clinical	101	15.7	3.9
Concrete and educational	39	6.0	1.5
Concrete and clinical	36	5.6	1.6
Educational and clinical	205	31.8	9.0
Three	626	24.1	24.1
Case management, concrete, and educational	200	31.9	7.7
Case management, concrete, and clinical	83	13.3	3.2
Case management, educational, and clinical	207	33.1	8.0
Concrete, educational, and clinical	136	21.7	5.2
Four	742	27.9	27.9
Case management, concrete, educational, and clinical	742	100.0	28.6

^a Need indicated by a mean score ≥ 3 at baseline assessment using the FAF.

Caucasian); (2) primary caregiver's age (26–35 and 36 or older vs. 18–25); (3) number of caregivers in the household (2 or 3 caregivers vs. 1 caregiver); (4) number of children (2 or 3 children and 4 or more children vs. 1 child); (5) household income (\$10,000–\$20,000 and more than \$20,000 vs. less than \$10,000); and (6) history of abuse (history of abuse vs. no history of abuse). Although level of education was provided for descriptive purposes, it was not included in multivariate analyses due to missing data.

3.7. Analytic strategy

We conducted univariate analyses to describe demographic characteristics, family needs, and HBPS utilization. Pearson chi-square analyses were utilized to identify significant demographic characteristics and needs to be included in final, multivariate modeling—one for each type of HBPS utilization (i.e., case management, concrete, education, and clinical). For each model, we used multivariate logistic regression analysis to determine the impact of different areas of family need on the utilization of HBPS while controlling for caregiver demographic characteristics. All statistical analyses were conducted using Stata version 12.

4. Results

4.1. Areas of need and services received

Table 2 describes the different areas of family need (as indicated by a FAF mean score of 3 or greater at baseline assessment) and the various HBPS received. Slightly more than half of the caregivers had need in at least one of the three areas of concrete need (51%). This ranged from slightly more than one quarter for living conditions (27%) and caregiver support (29%) to 40% for financial conditions. Almost half of the caregivers (47%) had at least one of the two educational needs; this was roughly 38% for caregiver–child interactions and developmental stimulation. Slightly more than 40% had at least one of the three clinical needs—nearly 50% for interaction between caregivers, 23% related to mental health, and 8% related to substance abuse. The most prevalent areas of need included clinical need related to interactions between caregivers (48%), followed by concrete need related to financial conditions (40%) and educational need related to developmental stimulation (38.4%), an indicator of need related to parenting.

When examining any service receipt, 74% of caregivers received case management services, 55% received concrete services, 67% received educational services, and 63% received clinical services. With regard to the total number of services received, the sample was almost evenly distributed in fourths, with roughly 25% receiving one, two, three, or four services. The percentage of families receiving only one service ranged from

3% (concrete services) to 56% (case management services). The percentage of families receiving two services ranged from 6% for concrete and clinical services to 32% for educational and clinical services. For families receiving three services, services ranged from 13% for case management, concrete, and clinical services to 33% for case management, educational, and clinical services. Slightly more than one quarter of caregivers (28%) received all four services.

4.2. Association between areas of need and HBPS receipt

Table 3 displays the results of bivariate analyses examining the association between any area of need and HBPS by service type. A match was considered appropriate if it met its respective need, i.e., concrete services for a concrete need, educational services for an educational need, and clinical services for a clinical need. Because case management services involved referral to additional services, no hypothesis was made regarding a match. For most areas of need, more families with need received services compared to families without the need. For example, 58% of families with a concrete need (i.e., any concrete need) received concrete services compared to 52% of families without a concrete need ($\chi^2 = 47.1, df = 1, p < 0.001$). Similarly, 69% of families with an educational need received educational services compared to 65% without an educational need ($\chi^2 = 5.3, df = 1, p < 0.05$) and 68% of families with clinical need received clinical services, compared to 59% of families without a clinical need ($\chi^2 = 26.3, df = 1, p < 0.001$). This pattern was similar for concrete need and educational need for case management services. Concrete need had a reverse trend with educational and clinical services; fewer families with concrete needs received these services. Educational need was not associated with concrete services, nor was clinical need for case management and concrete services.

Table 4 focuses on the association between the different areas of need and HBPS by service type. As a reminder, significant bivariate associations were examined to determine inclusion in the final multivariate models. Results are presented by area of need per service type, and a similar trend to Table 3 emerged whereby more families with need received appropriate services relative to their need compared to those without the need. However, interpretations should be made cautiously because there was significant overlap among the areas of need.

All areas of concrete need and educational need were significantly associated with the receipt of case management services. In contrast, only one area of clinical need, substance abuse, was associated with the receipt of case management services ($\chi^2 = 4.2, df = 1, p < 0.05$).

Concrete need (as indicated by financial conditions) was associated with the receipt of concrete services ($\chi^2 = 29.1, df = 1, p < 0.001$). Similarly, one area of educational need (developmental stimulation) was associated with concrete service receipt ($\chi^2 = 13.7, df = 1, p < 0.001$). Clinical need related to mental health and substance abuse was

Table 3 Association between any area of need and HBPS by service type.^a

Areas of need (Yes) ^a	Home-based, post-investigation services (HBPS)											
	Case management			Concrete			Educational			Clinical		
	No (%)	Yes (%) ^a	χ^2	No (%)	Yes (%) ^a	χ^2	No (%)	Yes (%) ^a	χ^2	No (%)	Yes (%) ^a	χ^2
Any concrete need												
No	31.9	68.1	47.1***	48.3	51.7	10.8**	30.5	69.5	8.7**	35.3	64.7	4.1*
Yes	20.1	79.9		41.8	58.2		35.9	64.1		39.1	60.9	
Any educational need												
No	29.1	70.9	18.9***	45.8	54.2	2.0	35.2	64.8	5.3*	41.8	58.2	24.5***
Yes	21.6	78.4		43.1	57.0		30.9	69.1		32.3	67.7	
Any clinical need												
No	26.8	73.2	3.1	45.3	54.7	0.7	35.1	65.0	5.7*	41.5	58.5	26.3***
Yes	23.7	76.3		43.6	56.4		30.6	69.5		31.6	68.4	

Note. One degree of freedom for all Pearson chi-2 statistics.

^a Need indicated by a mean score ≥ 3 at baseline assessment.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

Table 4
The association between need and HBPS by service type.^a

Areas of need (Yes) ^a	Home-based, post-investigation services (HBPS)											
	Case management			Concrete			Educational			Clinical		
	No (%)	Yes (%) ^a	χ^2	No (%)	Yes (%) ^a	χ^2	No (%)	Yes (%)	χ^2	No (%)	Yes (%)	χ^2
Concrete need												
Living conditions												
No	27.8	72.2	17.1***	44.5	55.5	0.1	31.7	68.3	6.8**	35.5	64.5	10.8**
Yes	19.8	80.2		45.2	54.8		37.2	62.8		42.6	57.4	
Financial conditions												
No	31.0	69.0	59.4***	49.0	51.0	29.1***	31.9	68.1	3.4	33.9	66.1	19.6
Yes	17.5	82.5		38.2	61.8		35.4	64.6		42.5	57.5	
Support to caregivers												
No	28.0	72.0	18.8***	45.3	54.7	1.0	32.7	67.3	0.6	37.8	62.2	0.5
Yes	19.7	80.3		43.1	56.9		34.2	65.8		36.3	63.7	
Educational need												
Caregiver/child interactions												
No	27.2	72.8	6.6**	44.2	55.8	0.1	34.5	65.5	3.5	40.6	59.4	20.0***
Yes	22.6	77.4		45.0	55.0		30.9	69.1		31.8	68.2	
Developmental stimulation												
No	28.4	71.6	22.8***	47.4	52.6	13.7***	35.1	64.9	4.4*	40.9	59.1	16.6***
Yes	19.9	80.1		39.8	60.2		31.0	69.0		32.8	67.2	
Clinical need												
Interactions between caregivers												
No	26.5	73.5	1.3	41.2	58.8	2.2	30.5	69.5	0.3	36.5	63.5	4.2*
Yes	24.0	76.0		44.8	55.2		29.3	70.7		31.7	68.3	
Mental health												
No	25.9	74.1	0.8	45.8	54.2	5.1*	33.8	66.2	2.1	39.5	60.5	16.7***
Yes	24.2	75.8		40.5	59.5		31.1	68.9		30.2	69.8	
Substance abuse												
No	26.0	74.0	4.2*	45.1	54.9	4.1*	33.2	66.8	0.5	36.7	63.3	0.0
Yes	19.3	80.7		37.5	62.5		30.7	69.3		37.0	63.0	

Note. One degree of freedom for all χ^2 statistics.

Significant areas of need were included in the final multivariate models presented in Table 5.

^a Need indicated by a mean score ≥ 3 at baseline assessment.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

associated with the receipt of concrete services ($\chi^2 = 5.1$, $df = 1$, $p < 0.05$ and $\chi^2 = 4.1$, $df = 1$, $p < 0.05$, respectively).

Concrete need related to living conditions was associated with the receipt of educational services ($\chi^2 = 6.8$, $df = 1$, $p < 0.01$). Likewise, educational need related to developmental stimulation was associated with the receipt of educational services ($\chi^2 = 4.4$, $df = 1$, $p < 0.05$). In

contrast, no areas of clinical need were associated with the receipt of educational services.

Concrete, clinical, and educational need were all associated with the receipt of clinical services at the bivariate level. This was evident for concrete need measured by living conditions ($\chi^2 = 10.8$, $df = 1$, $p < 0.001$) and educational need measured by caregiver–child interactions and

Table 5
Impact of need on the receipt of home-based, post-investigation services.^a

Need	Case management		Concrete		Educational		Clinical	
	(n = 2274)		(n = 2291)		(n = 2321)		(n = 1515)	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Concrete								
Living conditions	1.15	0.86, 1.54	--	--	0.60***	0.48, 0.76	0.47***	0.34, 0.65
Financial conditions	1.72***	1.34, 2.22	1.39**	1.14, 1.69	--	--	0.91	0.69, 1.21
Support to caregivers	1.03	0.77, 1.39	--	--	--	--	--	--
Educational								
Caregiver–child interactions	0.92	0.70, 1.21	--	--	--	--	0.95	0.69, 1.32
Developmental stimulation	1.16	0.88, 1.55	1.22	0.99, 1.51	1.37**	1.10, 1.71	1.83**	1.30, 2.58
Clinical								
Interaction between caregivers	--	--	--	--	--	--	1.37*	1.04, 1.80
Mental health	--	--	0.85	0.66, 1.10	--	--	1.43	0.98, 2.08
Substance abuse	0.99	0.65, 1.53	1.07	0.75, 1.52	--	--	--	--
Model χ^2	105.7		55.0		145.9		238.8	
Pseudo R ²	0.04		0.02		0.05		0.12	

Note. CI = confidence interval; OR = odds ratios adjusted for all demographic characteristics except for level of education due to missing data. Missing values (–) indicate variable was not significant in bivariate models and thus excluded from final models (see Table 4).

^a Need indicated by a mean score ≥ 3 at baseline assessment.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

developmental stimulation ($\chi^2 = 20.0$, $df = 1$, $p < 0.001$ and $\chi^2 = 16.6$, $df = 1$, $p < 0.01$, respectively). Clinical need related to caregiver interactions emerged as significant for the receipt of clinical services ($\chi^2 = 4.7$, $df = 1$, $p < 0.05$) as did clinical need related to mental health ($\chi^2 = 16.7$, $df = 1$, $p < 0.001$). Substance abuse did not emerge as significantly associated with the receipt of clinical services.

4.3. Impact of need on receipt of each HBPS

Table 5 examines the impact of different areas of need on service receipt, utilizing a multivariate logistic regression while controlling for demographic characteristics. As a reminder, areas of need that were not significant in bivariate chi-square analyses were not included in the final models. Results are presented by service type and then area of need.

For case management services and concrete services, only one area of need emerged as a significant predictor. Caregivers with concrete need related to financial conditions were more likely to receive case management services ($OR = 1.72$; 95% CI = 1.34, 2.22). Similarly, concrete need related to financial conditions was significantly associated with increased odds of receiving concrete services ($OR = 1.39$; 95% CI = 1.14, 1.69). No other areas of need were significantly associated with either case management or concrete services.

For educational services, concrete need related to living conditions (a proxy indicator of poverty) was associated with decreased odds of receiving educational services ($OR = 0.65$; 95% CI = 0.48, 0.76). Educational need related to developmental stimulation, that is, caregivers who had difficulty understanding and facilitating child development were more likely to receive educational services ($OR = 1.37$; 95% CI = 1.10, 1.71). Clinical need was not significantly associated with the odds of receiving educational services at the bivariate level and therefore was not included in the final model.

Regarding clinical services, concrete need related to living conditions was associated with decreased odds of receiving clinical services ($OR = 0.47$; 95% CI = 0.34, 0.65). Caregivers with educational need related to development stimulation had an increased likelihood of receiving clinical services ($OR = 1.83$; 95% CI = 1.30, 2.58). Similarly, caregivers with clinical need related to caregiver interactions were more likely to receive clinical services ($OR = 1.37$; 95% CI = 1.04, 1.80). Clinical need related to mental health problems was not significantly associated with clinical services, although it trended toward significance ($OR = 1.43$; 95% CI = 0.98, 2.08). Clinical need related to substance abuse was not included in the final model because it was not significantly associated with clinical services at the bivariate level.

5. Discussion and implications

Our study adds to the knowledge base on HBPS by delving into the complex relationship between need and the receipt of voluntary HBPS among culturally diverse families at risk of maltreatment. Our findings indicate that families tend to receive numerous types of HBPS following a CPS investigation. Very few families only received concrete assistance (<1% of the sample), indicating that families at risk of maltreatment receive more than just financial assistance. Families receiving only one service mostly received case management, educational, or clinical services. Beyond one service, a few services tended to group together with respect to their frequency. For example, case management and concrete often grouped together, as did educational and clinical services. It is possible, therefore, that grouped services may have resulted in increased parental engagement in additional services. This would be consistent with the notion that bridging services—that is, services that engage parents because they are not only helpful but because they facilitate parental involvement (Kemp, Marcenko, Hoagwood, & Vesneski, 2009)—are instrumental in engaging families in other services. Bridging services are believed to enhance trust and the therapeutic alliance between service providers and clients by helping families

meet basic needs, improving client satisfaction, and increasing parental involvement (Faver, Crawford, & Combs-Orme, 1999; Kemp et al., 2009; Marsh, Cao, Guerrero, & Shin, 2009; B. D. Smith & Marsh, 2002; Stevens, Ammerman, Putnam, Gannon, & Van Ginkel, 2005). Whether the provision of bridging services is associated with the receipt of additional services should be examined more directly in future studies given its potential to engage families in voluntary services. Furthermore, social workers should continue to provide an array of services to engage families with multiple needs.

Our study sought to understand the empirical match between different areas of need and the receipt of voluntary HBPS for families at risk of maltreatment. Although many studies have found that concrete services meet concrete needs (Cash & Berry, 2002; Fernandez, 2007; Ryan & Schuerman, 2004), few studies have predicted the receipt of case management services. Our results indicate that concrete need related to financial conditions is met by both case management and concrete services, because they were more likely to go to families that had financial difficulty. These results are particularly interesting considering their statistical significance even after controlling for income. This suggests that social workers should consider whether caregivers are having difficulty paying bills as a better indicator of financial need, relative to income alone, because some families may not be experiencing financial stress even though they have low income.

With regard to educational and clinical need and HBPS, the match between need and services appears to be more complicated and related to multiple areas of need. Educational need related to developmental stimulation, an indicator of parenting need given that caregivers with this need had difficulty understanding and facilitating child development, was associated with the receipt of educational services, similar to past studies (Bagdasaryan, 2005; Cash & Berry, 2002). However, caregivers with concrete need related to living conditions, another indicator of poverty, were less likely to receive educational and clinical services than caregivers without need in this area. Concrete need related to living conditions may affect basic safety needs, which if unaddressed can affect a family's ability to receive additional services to address other needs as posited by Maslow (1943). Alternatively, these caregivers might have received services elsewhere that were not provided by PFF. A reexamination of bivariate findings indicated that more caregivers with concrete needs related to living conditions received case management services but fewer caregivers received all other service types. However, this relationship did not emerge as significant in multivariate models, so this proposition is speculative at best. Future studies should test whether having unmet concrete needs affects the provision of educational and clinical services.

With respect to clinical services, we found that caregivers with clinical need related to interaction between caregivers were more likely to receive clinical services than caregivers without this clinical need. This finding is contrary to other studies (Cash & Berry, 2002; Chambers & Potter, 2008; Choi & Ryan, 2007). Considering that families experiencing severe problems with interactions between caregivers tend to receive an open case as opposed to prevention services, it is possible that caregivers in our sample presenting with early indications of domestic violence (as measured by caregiver interactions) are more amenable to services. If so, this highlights the importance of providing prevention services to families with early signs of domestic violence because this need is commonly unmet in studies involving caregivers for whom this problem is more severe (Cash & Berry, 2002; Chambers & Potter, 2008; Choi & Ryan, 2007). Our findings also reveal that clinical need related to mental health problems was not significantly associated with the receipt of clinical services, although it trended toward significance and toward a match. Clinical need related to substance abuse need was not significantly associated with clinical services in bivariate models, so it was not included in the final multivariate model. Although substance abuse did not emerge as significant, this might have been affected by the fact that caregivers experiencing substance abuse tend to receive an open CPS case as opposed to a referral to voluntary HBPS.

Bivariate findings indicate that caregivers experiencing substance abuse were equally likely to receive clinical services regardless of need, which might also have been affected by service availability. Prior studies have found that an insufficient ratio between the number of preventive slots relative to a community's need can affect service provision in some high-need communities (Stanley & Kovacs, 2003; Wulczyn, Feldman, Horwitz, & Alpert, 2014). Alternatively, caregivers with substance abuse problems might have been difficult to engage in clinical service due to cultural misunderstandings, stigma, coercion, and fear of CPS (Altman, 2008; Faver et al., 1999; Kemp et al., 2009; Marcenko, Brown, DeVoy, & Conway, 2010). Future studies should examine a match more closely for caregivers affected by substance abuse.

Our results further indicate that caregivers who had educational need related to development stimulation—that is, caregivers who had difficulty understanding and facilitating child development—were more likely to receive clinical services than caregivers without this need. This finding is similar Fernandez' (2007) finding of a statistical association between parenting need and receipt of clinical services. Other studies have shown that parenting need is affected by clinical need. For example, a caregiver's mental health has been associated with poorer parenting skills, decreased parental availability and communication, and difficulty maintaining healthy interaction with their children (Barth, 2009; Baydar, Reid, & Webster-Stratton, 2003; M. Smith, 2004). Thus, it is possible that caregivers with parenting need were more likely to receive clinical services because this might have helped alleviate a mental health problem that improved parenting. Future studies should explore how parenting and clinical need interact and how this affects the receipt of different services.

Last, it is important to put this study and PFF in the context of the literature involving differential response and alternative response. California's DR model varies per county but it broadly consists of a three-track system in which services are assigned to one of the following tracks: (1) a community response, (2) a community and child welfare response, or (3) a child welfare response (Conley & Berrick, 2010). Although Los Angeles County does not identify as having a differential response model, PFF closely resembles Track 2 in that eligible families receive services from community-based agencies following an investigation by CPS (Conley & Berrick, 2010). Although caution should be used when comparing PFF to DR models in other states that provide DR in place of a traditional investigation (see Casey Family Programs, 2012; Fuller, 2014; Merkel-Holguín, Kaplan, & Kwak, 2006), results from our study make an important contribution to understanding the match between needs and services for this population. Prior DR studies have not focused on the relationship between need and service receipt, instead primarily focusing on outcomes associated with participation in DR (Conley, 2007; Kaplan & Merkel-Holguin, 2008; Ortiz et al., 2008).

5.1. Limitations

Despite the contributions of our study, several limitations should be noted. Our data provide only a snapshot of the services obtained by families participating in PFF and do not indicate the specific type of service received under the broad categories. Furthermore, our analyses focused on data from the initial assessment conducted by IHOCs. Importantly, it did not include data from subsequent assessments. Thus, our results illuminate the match between need and *early service receipt*. Analyses not presented indicated that some families that did not receive needed services during the initial assessment received services by the time they left the PFF program. Thus it is possible that the observed match only applies because the caregivers might have been ready to address some needs early in the service continuum but not others. Alternatively, the match might also represent what services the caregivers were willing to accept to address their needs that they initially saw as a priority.

Another limitation of our study stems from missing data. As previously mentioned, one fifth of the initial sample did not have either need or services data. Upon comparison of demographic characteristics

of our study sample to the caregivers who were excluded, no significant differences emerged. However, findings might have been different had they been included in this study. Last, the sample size for the four service models was reduced when running the logistic regression models due to listwise deletion. In analyses not shown here, comparisons were made between models with and without covariates that reduced sample size. Results from these analyses were similar in magnitude and direction for the covariates. We therefore are comfortable that these missing data did not significantly affect our results but acknowledge the potential limitation nonetheless.

6. Conclusion

The provision of voluntary HBPS to meet the needs of families at risk of maltreatment continues to be an important function of CPS agencies in partnership with community-based agencies. Findings from this study highlight that families receiving HBPS have multiple needs and receive a multitude of services meant to address them. For example, concrete need was appropriately matched with concrete services and case management services when caregivers had trouble paying bills. Similarly, caregivers with educational need related to developmental stimulation, an indicator of parenting difficulty, were more likely to receive educational services and clinical services; caregivers with clinical need related to caregiver interactions (a potential early indicator of domestic violence) were more likely to receive clinical services. In contrast, caregivers with concrete need related to living conditions were less likely to receive both educational and clinical services. These findings highlight that matching concrete need related to financial conditions is relatively straightforward, whereas the match between educational and clinical need with respective services is more complicated and appears to be related to multiple areas of need. Furthermore, our findings suggest that caregivers with early indications of domestic violence (as measured by caregiver interactions) might be more amenable to services following an initial CPS investigation and that matching different areas of need with HBPS for families at risk of maltreatment may be enhanced by providing "bridging services" to engage caregivers in additional services.

Acknowledgments

We thank First 5 LA (06767) and the Los Angeles Department of Children and Family Services for their support of this study. Furthermore, we would like to thank Dr. Jacquelyn McCroskey, Dr. Penelope Trickett, Dr. Emily Putnam-Hornstein, and Dr. Thomas Lyon for their invaluable feedback on earlier versions of this manuscript.

Appendix A. Family Functioning Factors and Items (Shortened Version)¹

FAF Rating Scale: (1) Above average functioning (2) Generally adequate functioning (3) Moderate problem functioning (4) Major problem functioning (5) Poor functioning

Section A: Living Condition

- A1 Cleanliness/Orderliness — Outside Environmental Conditions
- A2 Cleanliness/Orderliness — Outside Home Maintenance
- A3 Cleanliness/Orderliness — Inside Home Maintenance

¹ Please refer to <http://www.familyassessmentform.com> for more information about the FAF.

A4 Safety – Outside Environmental Conditions

A5 Safety – Outside Home Maintenance

A6 Safety – Inside Home Maintenance

Section B: Financial Conditions

B1 Financial Stress

B2 Financial Management

B3 Financial Problem Due to Welfare System/Child Support

B4 Adequate Furniture

B5 Availability of Transportation

Section C: Support to Caregivers

C1 Support from Friends and Neighbors and Community Involvement

C2 Available Child Care

C3 Chooses Appropriate Substitute Caregivers

C4 Available Health Care

C5 Provides for Basic Medical/Physical Care

C6 Ability to Maintain Long-Term Relationship

Section D: Caregiver/Child Interactions

D1 Understands Child Development

D2 Daily Routine for Child(ren)

D3 Use of Physical Discipline

D4 Appropriateness of Disciplinary Methods

D5 Consistency of Discipline

D6 Bonding Style with Child(ren)

D7 Attitude Expressed About Child(ren)/Caregiver Role

D8 Takes Appropriate Authority Role

D9 Quality And Effectiveness of Communication (Caregiver to Child[ren])

D10 Quality And Effectiveness of Communication (Child[ren] to Caregiver)

D11 Cooperation/Follows Rules and Directions

D12 Bonding to Caregiver

Section E: Developmental Stimulation

E1 Appropriate Play Area/Things – Inside Home

E2 Provides Enriching/Learning Experiences for Child(ren)

E3 Ability and Time for Child(ren)'s Play

E4 Deals with Sibling Interactions

Section F: Interactions between Caregivers

F1 Conjoint Problem Solving Ability

F2 Manner of Dealing with Conflicts/Stress

F3 Balance of Power

F4 Supportive

F5 Caregivers' Attitude toward Each Other

F6 Ability to Communicate (Verbal and Nonverbal)

Section G: Caregiver History

G1 Stability/Adequacy of Caregiver's Childhood

G2 Childhood History of Physical Abuse/Corporal Punishment

G3 Childhood History of Sexual Abuse

G4 History of Substance Abuse

G5 History of Aggressive Act as an Adult

G6 History of Being an Adult Victim

G7 Occupational History

G8 Extended Family Support

Section H: Caregiver Personal Characteristics

H1 Learning Ability/Style

H2 Ability to Trust

H3 Current Substance Use

H4 Passivity/Helplessness/Dependence

H5 Impulse Control

H6 Cooperation

H7 Emotional Stability (Mood Swings)

H8 Depression

H9 Aggression/Anger

H10 Practical Judgment/Problem-Solving and Coping Skills

H11 Meets Emotional Needs of Self/Child

H12 Self-Esteem

References

- Altman, J. C. (2008). A study of engagement in neighborhood-based child welfare services. *Research on Social Work Practice*, 18, 555–564. <http://dx.doi.org/10.1177/1049731507309825>.
- Bagdasaryan, S. (2005). Evaluating family preservation services: Reframing the question of effectiveness. *Children and Youth Services Review*, 27, 615–635. <http://dx.doi.org/10.1016/j.childyouth.2004.11.014>.
- Barth, R. P. (2009). Preventing child abuse and neglect with parent training: Evidence and opportunities. *Future of Children*, 19, 95–118. <http://dx.doi.org/10.1353/foc.0.0031>.
- Baydar, N., Reid, M. J., & Webster-Stratton, C. (2003). The role of mental health factors and program engagement in the effectiveness of a preventive parenting program for Head Start mothers. *Child Development*, 74, 1433–1453. <http://dx.doi.org/10.1111/1467-8624.00616>.
- Brooks, D., Cohen, H., Sessoms, A., Felix, S., Budde, S., Kim, H., & Putnam-Hornstein, E. (2011a). *The Partnerships for Families (PFF) initiative: Comprehensive evaluation: Final report*. Retrieved from http://www.first5la.org/files/PFF_USC_F5FinalReport_11302011.pdf
- Brooks, D., Sessoms, A., Cohen, H., Felix, S., Budde, S., & Putnam-Hornstein, E. (2011b). *Change in family functioning and re-referral risk among families participating in the Partnerships for Families (PFF) initiative*. Retrieved from http://www.first5la.org/files/PFF_USC_C6Substudy2Final_09192011.pdf
- Budde, S., Sessoms, A., Brooks, D., Felix, S., Cohen, H., Kim, H., & Putnam-Hornstein, E. (2011). *Engaging culturally-diverse, at-risk families in voluntary, home-based child maltreatment prevention services*. Retrieved from http://www.first5la.org/files/PFF_USC_B7EngageSubStudyRevised_08042011.pdf
- Case Management Society of America (2010). *Standards of practice for case management*. Little Rock, AR: Author Retrieved from <http://www.cmsa.org/portals/0/pdf/memberonly/StandardsOfPractice.pdf>
- Cash, S., & Berry, M. (2002). Family characteristics and child welfare services: Does the assessment drive service provision? *Families in Society*, 83, 499–507. <http://dx.doi.org/10.1606/1044-3894.49>.
- Cash, S. J., & Berry, M. (2003). The impact of family preservation services on child and family well-being. *Journal of Social Service Research*, 29(3), 1–26. http://dx.doi.org/10.1300/J079v29n03_01.
- Chaffin, M., Bonner, B. L., & Hill, R. F. (2001). Family preservation and family support programs: Child maltreatment outcomes across client risk levels and program types. *Child Abuse & Neglect*, 25, 1269–1289. [http://dx.doi.org/10.1016/S0145-2134\(01\)00275-7](http://dx.doi.org/10.1016/S0145-2134(01)00275-7).
- Chambers, R. M., & Potter, C. C. (2008). The match between family needs and services for high-risk neglecting families. *Journal of Public Child Welfare*, 2, 229–252. <http://dx.doi.org/10.1080/15548730802312750>.
- Children's Bureau of Southern California (2011). *Research*. Retrieved from <http://familyassessmentform.com/page.php?id=40>
- Children's Research Center (2008). *The structured decision making model: An evidenced-based approach to human services*. Retrieved from <http://nccdglobal.org/node/466>
- Choi, S., & Ryan, J. P. (2007). Co-occurring problems for substance abusing mothers in child welfare: Matching services to improve family reunification. *Children and Youth Services Review*, 29, 1395–1410. <http://dx.doi.org/10.1016/j.childyouth.2007.05.013>.
- Conley, A. (2007). Differential response: A critical examination of a secondary prevention model. *Children and Youth Services Review*, 29, 1454–1468. <http://dx.doi.org/10.1016/j.childyouth.2007.06.003>.
- Conley, A., & Berrick, J. D. (2010). Community-based child abuse prevention: Outcomes associated with a differential response program in California. *Child Maltreatment*, 15, 282–292. <http://dx.doi.org/10.1177/1077559510376236>.
- Faver, C. A., Crawford, S. L., & Combs-Orme, T. (1999). Services for child maltreatment: Challenges for research and practice. *Children and Youth Services Review*, 21, 89–109. [http://dx.doi.org/10.1016/S0190-7409\(99\)00009-2](http://dx.doi.org/10.1016/S0190-7409(99)00009-2).
- Fernandez, E. (2007). Supporting children and responding to their families: Capturing the evidence on family support. *Children and Youth Services Review*, 29, 1368–1394. <http://dx.doi.org/10.1016/j.childyouth.2007.05.012>.
- First 5 LA. (2010a). *Partnerships for Families: Stories and lessons learned from Los Angeles*. Retrieved from <http://www.first5la.org/files/First%20Five%20Final.pdf>
- First 5 LA. (2010b). *Partnerships for Families: A quick look at stories and lessons from Los Angeles communities*. Retrieved from http://www.first5la.org/files/First%20Five%20PFF%20Exec%20Summary_Final.pdf
- First 5 LA. (2014). *Partnerships for Families (PFF) evaluation*. Retrieved from <http://www.first5la.org/index.php?r=site/article&id=3217>
- Fluke, J. D., Shusterman, G. R., Hollinshead, D. M., & Yuan, Y. -Y. T. (2008). Longitudinal analysis of repeated child abuse reporting and victimization: Multistate analysis of associated factors. *Child Maltreatment*, 13, 76–88. <http://dx.doi.org/10.1177/1077559507311517>.
- Franke, T. M., Christie, C. A., Ho, J., & Du, L. (2013). An item response theory investigation of the Family Assessment Form. *Children and Youth Services Review*, 35, 1780–1788. <http://dx.doi.org/10.1016/j.childyouth.2013.07.009>.
- Fraser, P., Pecora, J., & Haapala, D. A. (1991). *Families in crisis: The impact of intensive family preservation services*. Hawthorne, NY: Aldine de Gruyter.
- Fuller, T. (2014). Beyond investigations: Differential response in child protective services. In J. E. Korbin, & R. D. Krugman (Eds.), *Handbook of child maltreatment* (pp. 443–461). Dordrecht, Netherlands: Springer.
- Gershater-Molko, R. M., Lutzker, J. R., & Wesch, D. (2003). Project SafeCare: Improving health, safety, and parenting skills in families reported for, and at-risk for child maltreatment. *Journal of Family Violence*, 18, 377–386. <http://dx.doi.org/10.1023/A:1026219920902>.
- Kaplan, C., & Merkel-Holguin, L. (2008). Another look at the national study on differential response in child welfare. *Protecting Children*, 23, 5–21.

- Kemp, S. P., Marcenko, M. O., Hoagwood, K., & Vesneski, W. (2009). Engaging parents in child welfare services: Bridging family needs and child welfare mandates. *Child Welfare, 88*, 101–126.
- Lewis, R. E. (1991). What elements of services are related to treatment goal achievement? In M. W. Fraser, P. J. Pecora, & D. A. Haapala (Eds.), *Families in crisis: The impact of intensive family preservation services* (pp. 225–271). Hawthorne, NY: Aldine de Gruyter.
- Marcenko, M., Brown, R., DeVoy, P. R., & Conway, D. (2010). Engaging parents: Innovative approaches in child welfare. *Protecting Children, 25*, 23–34.
- Marsh, J. C., Cao, D., Guerrero, E., & Shin, H. -C. (2009). Need-service matching in substance abuse treatment: Racial/ethnic differences. *Evaluation and Program Planning, 32*, 43–51. <http://dx.doi.org/10.1016/j.evalprogplan.2008.09.003>.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*, 370–396. <http://dx.doi.org/10.1037/h0054346>.
- McCroskey, J., & Meezan, W. (1997). *Family preservation & family functioning*. Washington, DC: CWLA Press.
- McCroskey, J., & Nelson, J. (1989). Practice-based research in a family support program: The Family Connection Project example. *Child Welfare, 68*, 573–587.
- McCroskey, J., Nishimoto, R., & Subramanian, K. (1991). Assessment in family support programs: Initial reliability and validity testing of the Family Assessment Form. *Child Welfare, 70*, 19–33.
- McCroskey, J., Sladen, A., & Meezan, W. (1997). *Family Assessment Form: A practice-based approach to assessing family functioning*. Washington, DC: CWLA Press.
- Merkel-Holguín, L., Kaplan, C., & Kwak, A. (2006). *National study on differential response in child welfare*. Washington, DC: American Humane Association and Child Welfare League of America.
- National Association of Social Workers (2013). *NASW standards for social work case management*. Retrieved from <http://www.socialworkers.org/practice/naswstandards/CaseManagementStandards2013.pdf>
- Needell, B., Webster, D., Armijo, M., Lee, S., Dawson, W., Magruder, J., ... Peng, C. (2015). *California Child Welfare Indicators Project reports*. Retrieved from http://cssr.berkeley.edu/ucb_childwelfare
- Ortiz, M. J., Shusterman, G. R., & Fluke, J. D. (2008). Outcomes for children with allegations of neglect who receive alternative response and traditional investigations: Findings from NCANDS. *Protecting Children, 23*, 57–70.
- Palusci, V. J., & Ondersma, S. J. (2012). Services and recurrence after psychological maltreatment confirmed by child protective services. *Child Maltreatment, 17*, 153–163. <http://dx.doi.org/10.1177/1077559511433817>.
- Pecora, P. J., Whittaker, J., Maluccio, A. N., & Barth, R. (2000). *The child welfare challenge: Policy, practice, and research* (2nd ed.). New York, NY: Aldine de Gruyter.
- Programs, C. F. (2012). *Comparison of experiences in differential response (DR) implementation: 10 child welfare jurisdictions implementing DR*. Retrieved from <http://www.casey.org/media/DifferentialResponseReport.pdf>
- Ryan, J. P., & Schuerman, J. R. (2004). Matching family problems with specific family preservation services: A study of service effectiveness. *Children and Youth Services Review, 26*, 347–372. <http://dx.doi.org/10.1016/j.childyouth.2004.01.004>.
- Smith, M. (2004). Parental mental health: Disruptions to parenting and outcomes for children. *Child & Family Social Work, 9*, 3–11. <http://dx.doi.org/10.1111/j.1365-2206.2004.00312.x>.
- Smith, B. D., & Marsh, J. C. (2002). Client-service matching in substance abuse treatment for women with children. *Journal of Substance Abuse Treatment, 22*, 161–168. [http://dx.doi.org/10.1016/S0740-5472\(02\)00229-5](http://dx.doi.org/10.1016/S0740-5472(02)00229-5).
- Stanley, J., & Kovacs, K. (2003). *Accessibility issues in child abuse prevention services*. Melbourne, Australia: Australian Institute of Family Studies.
- Staudt, M., & Cherry, D. (2009). Mental health and substance use problems of parents involved with child welfare: Are services offered and provided? *Psychiatric Services, 60*, 56–60. <http://dx.doi.org/10.1176/ps.2009.60.1.56>.
- Stevens, J., Ammerman, R. T., Putnam, F. W., Gannon, T., & Van Ginkel, J. B. (2005). Facilitators and barriers to engagement in home visitation: A qualitative analysis of maternal, provider, and supervisor data. *Journal of Aggression, Maltreatment & Trauma, 11*(4), 75–93. http://dx.doi.org/10.1300/J146v11n04_04.
- U.S. Department of Health & Human Services. (2016). *Child maltreatment 2014*. (Retrieved from) <http://www.acf.hhs.gov/sites/default/files/cb/cm2014.pdf>
- Waldfoegel, J. (2009). Prevention and the child protection system. *Future of Children, 19*, 195–210. <http://dx.doi.org/10.1353/foc.0.0037>.
- Wulczyn, F. H., Feldman, S., Horwitz, S. M., & Alpert, L. (2014). Child maltreatment prevention: The problem of resource allocation. In J. E. Korbin, & R. D. Krugman (Eds.), *Handbook of child maltreatment* (pp. 341–350). Dordrecht, Netherlands: Springer.