



Interagency collaboration and identifying mental health needs in child welfare: Findings from Los Angeles County[☆]



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ABSTRACT

Research has indicated that disparities between the need for and receipt of mental health services are in part due to challenges in identifying mental health problems in this population. Interagency collaboration between the child welfare system (CWS) and mental health organizations shows promise in circumventing these challenges. To this end, Los Angeles County's Department of Children and Family Services (DCFS) and Department of Mental Health (DMH) engaged in interagency collaborative efforts that included the development of a collaborative model detailing steps for systematic screening, assessment, referral, and continuum of care for mental health needs of DCFS-involved children. DCFS and DMH also developed a uniform agency mental health screening tool to be used by the DCFS staff to enhance identification of needs and expedite services for CWS-involved children at risk of mental health problems. This article describes the processes of interagency collaboration between DCFS and DMH, development of a uniform agency mental health screening tool, and demographic descriptors of an ethnically diverse cohort of CWS-involved children who received the mental health screening protocol (N = 4694) between 2011 and 2012. Findings indicate that collaborative efforts between DCFS and DMH facilitated the mental health screening of a large cohort of CWS-involved children, which resulted in the detection of need and referral for services.

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1. Introduction

The prevalence of mental health needs is high among children served by the child welfare system (CWS; Burns et al., 2004; Hurlburt et al., 2004). Research has indicated that children in the United States who come into contact with the CWS are at greater risk of poor mental health outcomes than those in the general population (Burns et al., 2004). Risk factors that often coincide with child maltreatment, such as prenatal drug and alcohol exposure and exposure to interpersonal violence and other trauma (Raviv et al., 2010), place many stressors on children's mental health (Kaplow & Widom, 2007). The CWS hence faces increasing organizational pressure (e.g., via lawsuits or federal mandates) to collaborate with specialized mental health service providers to provide timely and appropriate screening and assessment of mental health needs among CWS-involved children (Bonta, 2006;

Petersen et al., 2013). For example, as part of a settlement agreement from a class-action lawsuit (Bonta, 2006) to enhance identification of needs and expedite referral to mental health services for CWS-involved children, the Los Angeles County Department of Children and Family Services (DCFS) and Los Angeles County Department of Mental Health (DMH) adopted a model of interagency collaboration with the goal of providing streamlined services to CWS-involved children. This interagency collaboration (henceforth referred to as collaboration) is a significant landmark given the legal implications and the fact that DCFS and DMH provide services in Los Angeles County, one of the most populated and ethnically diverse locations in the United States.

This descriptive study highlights key collaborative practices and policies between these two large service systems in their efforts to meet client needs and address legal and organizational mandates to provide appropriate mental health services to CWS-involved children. First, we present an overview of the impetus for and strategies of the collaboration between DCFS and DMH. Next, we describe the uniform agency mental health screening tool (MHST) developed through this collaboration; this tool was intended for use by DCFS staff members (non-mental-health specialists) to help capture the mental health needs of children in the CWS. We also depict the establishment of a dual-agency referral and linkage team intended to coordinate mental

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health services for CWS-involved youths. Finally, we provide a description of demographics and child welfare characteristics of children who received this mental health screening in the context of collaboration.

2. Interagency collaboration: DCFS and DMH

2.1. Impetus for and strategies of collaboration between DCFS and DMH

The need to develop collaboration practices that increase coordinated mental health screening, assessment, and service provision for CWS-involved children is particularly salient in Los Angeles County. In 2002, several public interest law firms brought a child welfare reform class-action suit (Bonta, 2006) against the state of California and Los Angeles County, seeking the establishment and implementation of a community-based mental health service delivery system for California's children in foster care or at imminent risk of out-of-home placement. The suit challenged county and state agencies for neglecting their duties to provide necessary and legally mandated services to treat the mental health conditions of California's foster children. Los Angeles County entered into negotiations and settled the case in March 2003. The settlement obligated the county to enact comprehensive reforms, including better identification of mental health needs and prompt provision of services designed to promote stability and ensure quality care for children under the supervision of DCFS.

To fully meet the obligations of the settlement agreement, DCFS and DMH adopted a model of collaboration that included implementation of policies and collaborative practices and strategies such as: (a) the development of a memorandum of understanding for data sharing and linkages, (b) cross-systems training, (c) co-location of DMH staff members in DCFS offices, (d) automated referrals between agencies, (e) development and adoption of a uniform mental health screening tool, and (f) referral and linkages resource teams (composed of DCFS and DMH employees) in each DCFS office. These practices of collaboration (e.g., colocation and development of screening tools) used by DCFS and DMH align with existing literature that identified them as promising strategies in improving the identification of need and provision of mental health services to CWS-involved youths (Bai et al., 2009; Hurlburt et al., 2004). Indeed, one study using nationally representative data of CWS-investigated children suggested that higher engagement in these different types of collaboration strategies, such as information sharing at the agency level, can improve the delivery of mental health services (Bai et al., 2009).

2.2. Mental health screening tool

In addressing the stipulations of the *Katie A.* settlement, DCFS and DMH acknowledged that a key element of delivering mental health services is adequate and accurate mental health screening. However, among CWS agencies, delivery of expedited mental health screening is complicated by the fact that child welfare workers are not mental health practitioners; this likely contributes to the high variability in referral and receipt of mental health services among CWS-involved children. Additionally, although mental health screening tools abound, those with a current evidence base must typically be administered by trained mental health professionals (Day). Given the legal stipulations put forth by the *Katie A.* settlement, policy changes that required DCFS social workers to provide the initial screening for mental health needs, as well as organizational constraints to not overburden DCFS workers' workload, DCFS and DMH collaborated to adapt a mental health screening tool developed by the California Institute for Mental Health. This adapted screening tool (the MHST) was originally intended for use with children in the general population and modified specifically for DCFS staff members so that it was user-friendly for non-mental-health specialists or clinicians, required minimal formal training to use, and could be administered quickly to DCFS-involved children.

The MHST was first rolled out in 2009 in three service planning areas (SPAs) in Los Angeles County (of nine total SPAs), with full rollout to all SPAs in 2011. Only children with opened or newly substantiated DCFS cases qualified to receive the screening. Prior to using the MHST, all workers received approximately 2 h of training, during which they were instructed to complete the screening instrument using information provided in vignettes. To date, approximately 35,000 to 40,000 children have been screened using the MHST.

Two DCFS uniform agency screening tools were developed: one for children aged 0–5 and another for children older than 5. Items in the MHST assess for indicators of psychological or behavioral problems and environmental risk factors associated with the development of mental health care needs. The screening tool for children aged 0–5 includes questions such as: “Does this child exhibit unusual or uncontrollable behavior?”, “Does this child seem to be disconnected, depressed, excessively passive, or withdrawn?” and “Does this child reside with a parent/caregiver with a known recent mental health, drug and/or alcohol problem?” Questions for children aged 6 or older are similar, but include additional items such as: “Does the child have problems with social adjustment?”, “Does this child have significant functional impairment?”, “Does this child have significant problems managing his/her feelings?” and “Is this child known to abuse alcohol and/or drugs?” These items were included based on input from workgroups composed of representatives from county and community agencies and experts in child development, and represent guided questions and indicators to identify children most in need of mental health services.

The MHST was designed to be administered by DCFS workers to children and their caregivers and was available only in English. Based on child and caregiver responses, the DCFS worker checks off potential mental health need indicators on the MHST; the tool then guides the social worker to make informed decisions regarding whether or not the child is at risk of mental health needs and thereby would benefit from a more thorough mental health assessment. Children who are considered to be at risk due to signs or presence of risk factors associated with psychological or behavioral problems are screened as positive on the MHST. Positive MHST cases are triaged to co-located DMH workers to receive more in-depth assessment.

2.3. Coordinated services action team

Additionally, to create continuity of care for children identified as having mental health needs, DCFS and DMH collaborated to establish a referral and linkages resource team, known as the Coordinated Services Action Team (CSAT), in each DCFS regional office. Each CSAT consists of both DCFS and DMH resource and service coordination staff members and was designed to accomplish the following goals: ensure the consistent, effective, and timely screening and assessment of mental health needs across all populations of children served by DCFS; coordinate mental health services among DCFS and DMH staff members who link children to services within and across offices; and ensure the most appropriate service linkage. Overall, the CSAT staff members served as points of contact to ensure that there were no lapses in services as cases proceeded from initial screening by DCFS workers, to DMH assessment for further mental needs, to referrals for formal mental health evaluation. CSAT members were notified of lapses in services through automatic staff reports and worked with both DCFS and DMH staffs and supervisors to ensure continuity of mental health care for dually served children.

Fig. 1 outlines the screening, assessment, and referral steps overseen by the CSAT, from when a child first receives a MHST screening to processes for referral, assessment, and linkages to mental health services. In Step 1, the MHST is administered by a DCFS children's social worker to determine if a child is at elevated risk of mental health problems. Informed by responses by a child and his or her caregiver(s) to the MHST items, the DCFS worker makes a guided decision regarding whether or not the child is at risk of mental health needs and therefore would

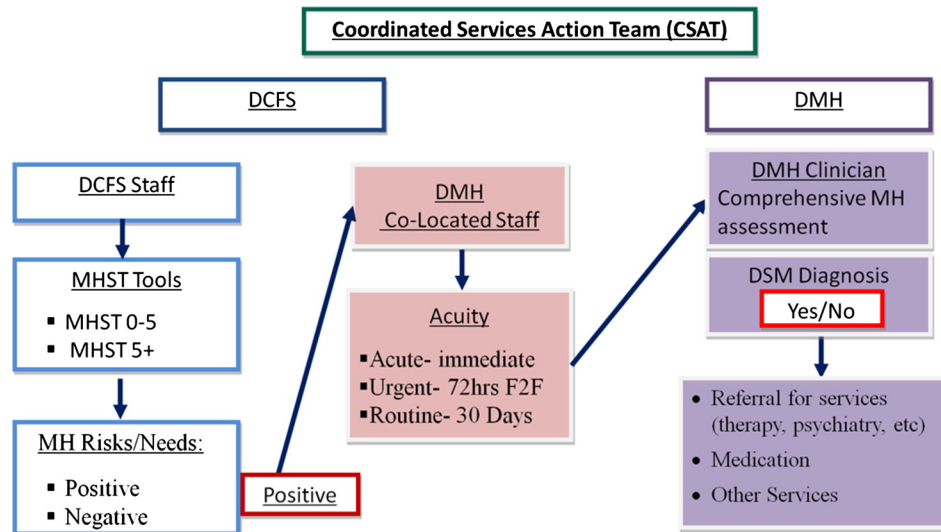


Fig. 1. MHST screening and referral process.

benefit from a more thorough mental health assessment. Positive MHST cases are evaluated for acuity (routine, urgent, and acute), which determines the time frame for subsequent in-depth mental health assessment by DMH workers. Routine cases are required to receive the assessment within 30 days from the completion of the screening, urgent cases within 72 h, and acute cases within 24 h. In Step 3, the child receives an in-depth mental health assessment by licensed mental health professionals (including DMH clinicians and DMH contracted mental health providers), who make a determination regarding the presence or absence of a psychiatric disorder, assess need for appropriate mental health services, and provide linkages to services. Psychiatric diagnoses are determined by licensed mental health professionals (e.g., social workers, psychologists, marriage and family therapists, and psychiatrists) after a comprehensive mental health assessment and based on criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; DSM-IV-TR; American Psychiatric Association, 2000), which standardizes the diagnosis of psychiatric disorders across mental health settings. This is the most acceptable and cost-effective way to assess for mental disorders in most mental health settings. Diagnostic assessments are performed to facilitate linkage to appropriate mental health services. In California, licensed mental health professionals have earned credentials to diagnose and treat mental health disorders.

Against a backdrop of this DCFS–DMH collaboration that resulted in the development of the MHST and CSAT, the following section provides descriptive characteristics of the cohort of DCFS-involved children who received the mental health screening between 2011 and 2012.

3. Methods

3.1. Data

Data were gathered from linked administrative records from DCFS and DMH. Assessment records from DCFS and mental health treatment records from DMH were probabilistically linked using a seven-tiered set of demographic factors such as name, Social Security number, gender, and age with clerical review in SAS Data Flux. This strategy has been verified as a superior method for linking files that do not have a common unique identifier, as is true of these data (Campbell et al., 2008). Data from DCFS consisted of demographic information, type of maltreatment allegation, history of out-of-home placement, and mental health screening outcomes. Data from DMH (only available for positive cases) included DSM-IV-TR psychiatric diagnosis following the MHST

screening. The linked dataset was stripped of identifiers and had minimal missingness ($n \leq 5$). Data on type of maltreatment allegation had the highest amount of missing values ($n = 168$). No data imputations were performed for these missing values. Data used in this study consisted of information for 4694 maltreated children who received the mental health screening between July 2011 and July 2012. This subsample of children was chosen because it included the first complete wave of children assessed during a yearlong period by DCFS since initial rollout in 2009 (i.e., children from all nine SPAs); it was restricted to children who had opened or substantiated DCFS-cases and had not previously received the MHST.

Demographic characteristics assessed in this study consisted of age at time of MHST screening, gender, race and ethnicity, and language. Race and ethnicity was grouped into the following categories: Black, Hispanic, White, and other groups (e.g., Asian and Pacific Islander). Language was categorized as English, Spanish, or other. Substantiated maltreatment types¹ were grouped into the following categories: neglect (including caretaker absence or incapacity, general neglect, and severe neglect), risk due to sibling abuse, emotional abuse, physical abuse, or sexual abuse. Experience out-of-home placement was assessed as a dichotomous variable with *yes* and *no* as the response categories. MHST screening results included: (a) negative or no referral necessary, (b) positive or needing referral to DMH for in-depth assessment, and (c) positive and met DSM-IV-TR diagnostic criteria. Univariate analyses resulted in descriptive statistics. All analyses were performed with STATA 13.0.

This study was reviewed and approved by the institutional review board of [redacted for review] and the Human Subject Research Committee at DMH. A waiver of confidentiality and authorization to release information was obtained because the study involved the collection and analysis of existing data from DCFS and DMH.

4. Results

Table 1 presents the sample characteristics of the 4694 dually served children who receive the MHST between July 2011 and July 2012. The average age of the sample was 9.25 years ($SD = 5.97$, range = 0–22) and 48% of participants were boys. The sample was racially and ethnically diverse, with Hispanics constituting the greatest segment of the sample (58%), followed by Blacks (21%), Whites (14%), and other

¹ Per definitions of child abuse and neglect in California Penal Code section 11165.6.

Table 1
Demographic and service characteristics of the sample (N = 4694).

	n	%
Age, M (SD)	9.25	5.97
0–5	1557	33.17
6–10	1091	23.24
11–14	944	20.11
15+	1103	23.48
Male	2237	47.73
Race and ethnicity		
White	662	14.10
Hispanic	2718	57.90
Black	982	20.92
Other ^a	332	7.07
Primary language		
English	3431	73.22
Spanish	1190	25.39
Other	65	1.39
Type of maltreatment allegation		
Neglect ^b	2660	60.58
Risk due to sibling abuse	299	6.81
Emotional	657	14.96
Physical	512	11.66
Sexual	263	6.81
Experience of out-of-home placement	3203	68.24
MHST screening outcome		
Negative	1500	31.96
Positive	490	10.44
Positive with DSM diagnosis	2704	57.61

Note. DSM = diagnostic and statistical manual of mental disorders; MHST = mental health screening tool.

^a Includes Asian, Pacific Islander, Alaskan Native, and other ethnicities.

^b Includes general and severe neglect and caretaker absence or incapacity.

racess and ethnicities (7%). The majority of participants indicated English as their primary language (73%). Approximately 68% of participants had prior experiences with out-of-home placement. Neglect (61%) was the most common type of child maltreatment in this sample, followed by emotional (15%) and physical (12%) abuse.

Of the 4694 maltreated children who received the MHST, about 32% ($n = 1500$) were identified as negatives cases and 68% ($n = 3194$) screened positive on the MHST. Among those who screened positive, more than 85% received a DSM-IV-TR diagnosis ($n = 2,704$), whereas the remainder ($n = 490$) did not meet criteria for any DSM-IV-TR diagnosis. Table 2 shows the mental health services received by children with positive cases after an in-depth mental health assessment. Children diagnosed with a psychiatric disorder generally received more mental health services than children who did not meet criteria for any DSM-IV-TR diagnosis.

Table 2
Positive cases: types of mental health services received following a positive MHST screening ($n = 3194$).

	No diagnosis		Presence of psychiatric disorder	
	$(n = 490)$		$(n = 2704)$	
	n	%	n	%
Administrative ^a	227	46.33	1522	56.29
Diagnostics and screening ^b	215	43.88	1200	44.38
Targeted case management	44	8.98	728	26.92
Individual ^c	9	1.84	1189	43.97
Family ^d	8	1.63	365	13.50

^a Administrative services include case conference attendance, case consultation, collateral, no contact and report writing, record review, and team plan development.

^b Diagnostics and screening services include behavioral health screening, brief medical visits, diagnostic services, and psychological testing.

^c Individual services include crisis intervention, day treatment, individual and group rehabilitation, individual and group therapy, play therapy, and behavioral services.

^d Family services include individual and group family therapy.

5. Discussion

Located in a county with more than 2.3 million children (U.S. Census Bureau, 2013), DCFS provides case management services to more than 37,000 children and handles more than 134,000 allegations of child abuse and neglect on an annual basis (Needell et al., 2014). Against the backdrop of a class-action lawsuit and large institutional changes, this study described the collaborative efforts of a county child welfare department and a county mental health department to provide coordinated mental health services to these children.

Collaboration of this magnitude was a monumental undertaking given the organizational changes that needed to occur for DCFS. For example, prior to the establishment of collaborative strategies between DCFS and DMH (e.g., use of the MHST and establishment of the CSAT), DCFS-involved children were referred out for screening and assessment; combined with nonuniform referral and assessment practices in the nine DCFS SPAs throughout the county, this contributed to extensive wait times for mental health screening and assessment. However, historically and since engaging in collaborative practices, the rate of DCFS-involved children receiving DMH services has steadily increased. For example, whereas only 21% of DCFS-involved children received DMH services between 2002 and 2003, this rate increased each subsequent year to more than 51% in 2010–2011 (Los Angeles County Department of Children and Family Services, 2012; see Table 3).

Collaborative policies and practices adopted by DCFS and DMH, including adaptation and use of the MHST and the establishment of the CSAT, provide insight into how these strategies contributed to increases in mental health service delivery for CWS-involved children. For example, although other mental health screening tools were available, DCFS and DMH collaborated to adapt the MHST to create a tool that was user-friendly to DCFS social workers (required little training) and did not overburden DCFS workers (took minimal time to complete). The MHST also featured a screening protocol so that identification of mental health needs was no longer left solely to worker discretion but guided by a uniform mental health tool. Ease of use and guided steps of the MHST may have promoted more accurate and consistent screening, contributing to increases to mental health assessment and referral, and subsequent receipt of services.

The establishment of collaborative resource teams such as the CSAT also enabled tracking of the screening and referral process between agencies and assisted in ensuring the identification of mental health needs among CWS-involved children and referral to appropriate mental health services. The creation of this referral and linkages coordination team may have promoted continuity of mental health care and reduced lapses in services for children dually served by DCFS and DMH.

Data from DCFS and DMH also provided a unique opportunity to examine the extent to which the mental health needs of CWS-involved children were met. Findings from this study suggest that collaboration between DCFS and DMH facilitated and supported the mental health screening of more than 4500 CWS-involved children and helped

Table 3
DCFS children receiving DMH services 2002–2003 to 2010–2011.
Data source is Los Angeles County Department of Children and Family Services (2012).

Fiscal year	Total DCFS children	With DMH services	%
2002–2003	17,326	3566	21
2003–2004	17,697	3920	22
2004–2005	20,055	4831	24
2005–2006	19,844	5191	26
2006–2007	20,288	6095	30
2007–2008	19,397	6701	35
2008–2009	18,441	7493	41
2009–2010	22,299	10,652	48
2010–2011	23,189	11,880	51

Note. Entry cohort includes children whose DCFS case started in the fiscal year indicated. Children with DMH services are those who received DMH services between 12 months before and 12 months after the case start date.

identify 68% of children who needed more in-depth mental health assessment (positive cases). Indeed, collaborative screening efforts between DCFS and DMH contributed to the delivery of comprehensive mental health screening for particularly vulnerable and high-risk children served by DCFS, including very young (ages 0–5) and ethnically diverse children.

Taken together, the establishment of collaborative policies and practices (including the adaptation of the MHST and creation of the CSAT) between DCFS and DMH were beneficial to the identification of a sub-sample of CWS-involved children at elevated risk of mental health conditions and subsequent referral to appropriate mental health services. This point is further emphasized by the fact that, as previously discussed, receipt of mental health services increased each year following the DCFS–DMH collaboration: 21% in 2002–2003 to 68% in 2011–2012, the period assessed in this study.

Several limitations of the study should be considered. First, we were unable to examine whether specific strategies or practices of collaboration played varying roles in the mental health screening, referral, or assessment process. We were also unable to account for other community, institutional, or legal factors that may have also influenced the receipt or use of mental health services among CWS-involved youths. Future studies could further examine specific processes of collaboration that support both CWS staffs in meeting children's mental health needs and collaborative practices associated with linkages and referrals to mental health services. Additionally, there was no formal testing of the MHST to ensure its appropriateness for non-English speakers, who comprised approximately a quarter of the study sample. Although record linkage was performed by DCFS using a seven-tiered set of factors, less is known about the match rates in this study sample. Consequently, it was not guaranteed that all cases were accurately matched. Finally, because no mental health data were collected (due to agency constraints) for children who had screened negative on the MHST, it was not possible to assess mental health problems among these children, thereby limiting the evaluation of the screening tool's sensitivity, specificity, and negative predictive value. However, this is the first step in a body of research that we are conducting regarding the processes and outcomes of collaboration between DCFS and DMH, including evaluation of the MHST's efficacy. We expect that upcoming studies using multiple waves of the MHST will provide additional means to assess the psychometric characteristics of the MHST. Subsequent studies are also planned to examine profiles of risk for children who are the most vulnerable to mental health problems in the child welfare population; this will also provide additional insight into whether screening results hold across various data points such as ethnicities and language.

Despite these limitations, this study provided preliminary evidence that the collaborative policies and practices adopted by DCFS and DMH contributed to the increase in identification of need and mental health service use among CWS-involved youths in Los Angeles County and that the MHST was generally effective at determining the need for mental health services (i.e., positive predictive value).

6. Conclusion and future implications

This study illustrates the role of collaboration between child welfare and mental health agencies in enhancing identification of CWS-involved children at elevated risk of mental health problems, which subsequently led to referrals for mental health assessments commensurate with the level of need. Without the implementation of policies and practices to promote collaboration between DCFS and DMH, whether through strategies that included co-location of staff members or development of a uniform agency mental health screening tool, it is arguable that much of the mental health needs of this population could have remained

undetected. Given the need for optimal mental health screening and the gaps between mental health needs and service use among CWS-involved children in Los Angeles County, findings from this study not only inform policy and practices for DCFS and DMH but could also have wider implications for other large metropolitan CWS organizations. It should also be noted that although Los Angeles is widely considered to be a metropolitan area, Los Angeles County consists of urban, suburban, and rural areas. Therefore, we maintain that collaborative practices that are feasible in Los Angeles County may also be feasible in both urban and rural communities.

It is our hope that this descriptive paper will provide policy and practice insights for existing and future interagency collaboration between the CWS and mental health service providers and support the development of models of collaboration between child welfare and specialized service providers. For example, following DCFS and DMH's lead, child welfare agencies and policy makers should consider the burden of implementing new practices and encourage the adoption of screening tools (e.g., for mental health or substance use disorders) that fit the skill set, expertise, and workload of child welfare workers. CWS agencies that are dealing with legal or federal mandates involving mental health service delivery could also benefit from exploring the model of collaboration adopted by DCFS and DMH. Finally, the vulnerability toward and potential for revictimization or trauma among children in CWS warrant policies and research that encourage ongoing collaboration between CWS and mental health service providers, particularly to ensure continued child safety and well-being.

References

- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders (4th ed., text rev.)*. Washington, DC: Author.
- Bai, Y., Wells, R., & Hillemeier, M.M. (2009). Coordination between child welfare agencies and mental health service providers, children's service use, and outcomes. *Child Abuse & Neglect*, 33, 372–381. <http://dx.doi.org/10.1016/j.chiabu.2008.10.004>.
- Katie A. v. Bonta, 433 F. Supp. 2d 1065 (D. Cal. 2006).
- Burns, B.J., Phillips, S.D., Wagner, H.R., Barth, R.P., Kolko, D.J., Campbell, Y., et al. (2004). Mental health need and access to mental health services by youths involved with child welfare: A national survey. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43, 960–970. <http://dx.doi.org/10.1097/01.chi.0000127590.95585.65>.
- California Institute for Mental Health (h). CIBHS caring for foster youth project: Mental health screening tool. Retrieved from <http://www.cimh.org/introduction/cibhs-caring-foster-youth-project>
- Campbell, K.M., Deck, D., & Krupski, A. (2008). Record linkage software in the public domain: A comparison of Link Plus, The Link King, and a 'basic' deterministic algorithm. *Health Informatics Journal*, 14, 5–15.
- Census Bureau, U.S. (2013). Annual estimates of the resident population for selected age groups by sex for the United States, states, counties, and Puerto Rico Commonwealth and municipios: April 1, 2010 to July 1, 2012. Retrieved from <http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>
- Day, P. (y). California evidence-based clearinghouse for child welfare. Available at <http://www.cebc4cw.org>
- Hurlburt, M.S., Leslie, L.K., Landsverk, J., Barth, R.P., Burns, B.J., Gibbons, R.D., et al. (2004). Contextual predictors of mental health service use among children open to child welfare. *Archives of General Psychiatry*, 61, 1217–1224. <http://dx.doi.org/10.1001/archpsyc.61.12.1217>.
- Kaplow, J.B., & Widom, C.S. (2007). Age of onset of child maltreatment predicts long-term mental health outcomes. *Journal of Abnormal Psychology*, 116, 176–187. <http://dx.doi.org/10.1037/0021-843X.116.1.176>.
- Los Angeles County Department of Children and Family Services (2012). Katie A data analysis (FY 2002–2003 to FY 2010–2011). Retrieved from http://laccdfs.org/katieA/data_reporting/index.html
- Needell, B., Webster, D., Armijo, M., Lee, S., Dawson, W., Magruder, J., et al. (2014). *California Child Welfare Indicators project reports*. Retrieved from University of California at Berkeley California Center for Social Services Research (website: http://cssr.berkeley.edu/ucb_childwelfare).
- Petersen, A.C., Joseph, J., & Feit, M. (Eds.). (2013). *New directions in child abuse and neglect research*. Washington, DC: National Academies Press.
- Raviv, T., Taussig, H.N., Culhane, S.E., & Garrido, E.F. (2010). Cumulative risk exposure and mental health symptoms among maltreated youth placed in out-of-home care. *Child Abuse & Neglect*, 34, 742–751. <http://dx.doi.org/10.1016/j.chiabu.2010.02.011>.