

Abuse and Young Children With Disabilities: A Review of the Literature

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Abstract

Legislation in the United States, such as the Child Abuse Prevention and Treatment Act and the Individuals With Disabilities Education Improvement Act, mandates service system collaboration to meet the complex needs of young children with disabilities who have experienced abuse. This literature review examines extant literature related to young children with disabilities who have experienced abuse. Gaps in the literature are identified and future directions are discussed.

Keywords

infants and toddlers, young children, disabilities and developmental delays, Part C services, components of practice, child abuse

Introduction

In the United States, one in eight children will experience maltreatment by his or her 18th birthday (Wildeman et al., 2014). According to the National Child Abuse and Neglect Data System, 5,689,900 state-confirmed cases of child maltreatment were reported between 2004 and 2011 (U.S. Department of Health & Human Services, Administration for Children & Families, Administration on Children, Youth & Families, Children's Bureau, 2010). While the report includes children ranging from birth to 18 years of age, the risk for maltreatment is highest in the first few years of life as half of confirmed reports of child maltreatment took place within the child's first 5 years (Wildeman et al., 2014). Furthermore, abuse and disability often coexist in the lives of young children, as children who are abused are at a higher risk for developing a disability, and children with a disability are at a higher risk for being abused and neglected (Larson & Anderson, 2006; Jones et al., 2012; Musheno, 2006; Sedlak et al., 2010; Sobsey, 2002).

Individuals With Disabilities Education Act and Child Abuse Prevention and Treatment Act (CAPTA)

The Individuals With Disabilities Education Improvement Act (IDEIA; 2004) mandates that states receiving federal funding provide services for families of infants and toddlers who have disabilities or developmental delays. More specifically, Part C of the IDEIA allocates funding to

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states to operate comprehensive statewide Early Intervention (EI) programs for infants and toddlers with or at risk for developmental delays or disabilities and their families.

The CAPTA was established in 1974 in response to a multitude of young children experiencing and often dying as a result of abuse, neglect, and/or maltreatment (Stein, 1984). In 2003, the Keeping Children and Families Safe Act amendment to CAPTA was passed. This act requires states to conduct developmental screening for children younger than the age of 3 who are victims of abuse and neglect. As a result, referrals to IDEIA Part C programs for an evaluation to determine EI eligibility became required for these children (U.S. Department of Health & Human Services, Administration for Children & Families, Administration on Children, Youth & Families, Children's Bureau, 2012).

The EI system was established to (a) enhance the development of infants and toddlers with disabilities, (b) reduce educational costs by minimizing the need for subsequent special education, (c) minimize the likelihood of institutionalization and maximize independent living, and (d) enhance the capacity of families to meet their children's needs (Division for Early Childhood [DEC], 2014; Hebbeler et al., 2007). In contrast, the child welfare (CW) system was established to (a) provide assistance to states to develop child abuse and neglect identification and prevention programs, (b) authorize government research into child abuse prevention and treatment, (c) create the National Center on Child Abuse and Neglect (NCCAN), (d) create the National Clearinghouse on Child Abuse and Neglect Information, and (e) establish basic state and demonstration grants for training personnel and supporting innovative programs aimed at preventing child maltreatment and treating its effects on children and families (CAPTA, 1974).

The Need for Collaborative Systems

No one system is designed to solely meet the complex needs of families and young children with disabilities who have experienced abuse. Therefore, cross-system collaborations should aim to improve access, coordination, and provision of services for this unique population (U.S. Department of Health & Human Services, Administration for Children & Families, Administration on Children, Youth & Families, Children's Bureau, 2012). These collaborations can optimally cut across systems including, but not limited to, EI, early childhood education, child care, health and nutrition, mental health, and other community programs (e.g., park district programs, Women, Infants, and Children [WIC], and after school programs) (Corr & Santos, 2016).

Although young children with disabilities are well documented as recipients of services from both the EI and CW systems, there is a dearth of research on how to best support these children across these two systems (Orelove, Hollahan, & Myles, 2000). The existing research, although scant, calls for collaborative, systemic approaches to meet the complex needs of young children with disabilities who have experienced abuse. However, Lightfoot and LaLiberte (2006) noted that when a child with a disability is served by the CW system, "a complicated collaboration must take place between professionals who understand disability and those whose responsibility is child protection" (p. 10).

Although systems collaboration is recognized as an essential piece to meet the needs of young children with disabilities experiencing abuse, obstacles remain. Lightfoot and LaLiberte (2006) identified four obstacles, including (a) systemic barriers, (b) lack of empirical knowledge about supporting young children with disabilities experiencing abuse, (c) the need for CW and EI professionals to have disability/abuse competence, and (d) cross-system collaboration. Complicating matters, families of young children with disabilities experiencing abuse must navigate the intricate process of intake, assessment, and receipt of ongoing services from both EI and CW service providers. Navigating both the EI and the CW system can be difficult for families (Corr & Santos, 2016).

Thus, the purpose of this literature review is to identify what is known and what gaps exist in the literature regarding the experiences of young children with disabilities who have experienced abuse, their families, and their service professionals. To better understand the provision of

services, it was important to consider both successes and barriers to the provision of services as experienced by young children with disabilities who have experienced abuse, their families, and the professionals who support them. Of particular relevance to this review were research studies focused on (a) the prevalence of young children with disabilities who have experienced abuse, (b) the experiences of the child and family receiving EI and CW services, and (c) the experience of EI and CW professionals providing services.

Selection Criteria and Procedures

Articles included in the review met the following criteria: (a) the study included participants identified as young children with disabilities who have experienced abuse and their families and/or participants identified as EI and/or CW professionals who work with young children with disabilities who have experienced abuse, (b) the study was conducted in the United States, and (c) the article was published in a peer reviewed, English-language journal. Because of the lack of empirical studies focused on cross-system EI and CW collaborations, several position statements were included in the literature review.

To identify articles, we searched electronic databases, including Social Work Abstracts, Social Service Abstracts, EBSCOHost, ERIC, PsycINFO, PubMed, Dissertation Abstracts, and Google Scholar, using the following search terms: *child abuse, neglect, maltreatment, child welfare, Child Abuse Prevention and Treatment Act (CAPTA), Individuals With Disabilities Education Improvement Act (IDEIA), early intervention, Part C*, or the aforementioned in combination with age (e.g., *infant, baby, toddler, and very young child*). We also conducted a hand search of the table of contents of several journals, including *Infants and Young Children, Journal of Early Intervention, Topics in Early Childhood Special Education, Child Abuse and Neglect, Child Maltreatment, Child, Youth, and Services Review, and Pediatrics*. When an article met the inclusion criteria, we also examined the reference list and articles that cited the originally identified article for additional sources. Through a combination of these methods, the 23 articles included in this review were identified. Of those articles, 18 were empirical research studies while five were conceptual or position papers, policy briefs, and reports.

The Connection Between Children and Families Served by EI and Child Welfare Systems

The maltreatment of children with disabilities has been an ongoing social concern in the United States (Hibbard & Desch, 2007). There is a rich body of evidence describing the risk factors that lead to infant/toddler maltreatment and CW involvement (e.g., Gaudiosi, 2003; Knitzer & Lefkowitz, 2006; Shonkoff & Phillips, 2000). In the following section, we synthesize the literature utilizing Bronfenbrenner's (1979) ecological systems framework. We begin with a review of the literature related to the macrosystem factors contributing to the maltreatment of young children with disabilities. Subsequently, we reviewed the literature related to exo-, meso-, and microsystem factors. Bronfenbrenner's framework, while in place for organizational purposes, is not intended to suggest that the literature selected only coheres to the prescribed level. Approaching the literature from this perspective closely represents the multifaceted nature of the current research regarding the service provision for young children with disabilities who have experienced abuse and neglect.

Macrosystem Factors

Within Bronfenbrenner's ecological framework, the macrosystem refers to the overarching institutional patterns of the culture or subculture. Most relevant to the macrosystem here is the intersection between abuse and young children with disabilities in the United States across the fields of

medicine, education, social work, and law (Sullivan & Knutson, 2000). Although CAPTA was established in 1974, its purpose of protecting children from abuse has gone unfulfilled, and the abuse of children is still of great concern in the United States (Wulczyn, Hislop, & Harden, 2002).

In 2008, 6 million children were referred to Child Protective Services (CPS) agencies in the United States. Of these children, 3.7 million were included in an active investigation and over 700,000 were deemed victims of abuse, neglect, and/or maltreatment (U.S. Department of Health & Human Services, Administration for Children & Families, Administration on Children, Youth & Families, Children's Bureau, 2010). Notably, children younger than the age of 4 were disproportionately represented, with the first year of a child's life documented as the period for the highest rate of occurrence of maltreatment (Wulczyn et al., 2002; Wulczyn, Kogan, & Harden, 2003). The United States has placed value on protecting children through the establishment and enactment of legislation safeguarding them from abuse and neglect. Nonetheless, instances of child abuse and neglect still occur, and, as a result, studies of the prevalence of child abuse and neglect within the United States are worthy of attention here.

The prevalence of abuse and neglect has been documented as higher, although at varied rates, among children with disabilities when compared with children without disabilities (Crosse, Kaye, & Ratnofsky, 1992; Sullivan & Knutson, 2000). Sullivan and Knutson (1998) found that children with disabilities were 3.4 times more likely to be maltreated than their peers without disabilities. Similarly, Westat (1993) conducted a key study with the NCCAN on the prevalence of maltreatment among children with disabilities. Data were collected from 35 child protection agencies across multiple states, selected to be nationally representative, and included comparison groups (i.e., abuse among children with and without disabilities). In this study, the researchers determined that the prevalence of abuse among children with disabilities was 1.7 times higher than among children without disabilities. In 2000, Sullivan and Knutson examined two databases (the Public and Archdiocese School Districts of Omaha [Kindergarten to 12th grade] and the Central Registry of the Nebraska Department of Social Services) containing a total of 50,278 cases, to (a) identify abuse and neglect among a population of children with a disability and (b) relate specific types of disabilities to specific types of abuse. The researchers found that 25% ($n = 12,568$) of maltreated children across the preschool, elementary, and high school years have a diagnosed disability. Interestingly, they found that communication disorders and health impairments were indicators of maltreatment in the early childhood years, whereas behavior disorders and intellectual impairments were indicators of maltreatment in later years. Disability status puts a child at an increased risk for experiencing abuse and neglect, while abuse and neglect increased the likelihood that a child acquires disability status (Larson & Anderson, 2006).

The recent work of Putnam-Hornstein and Needell (2011) and Hill, LaLiberte, and Lightfoot (2011) linked administrative CW and population-level birth data in California ($N = 533,992$) and Minnesota ($N = 6,270$) to prospectively identify children who were at greatest risk for maltreatment before the age of 5. Putnam-Hornstein and Needell reported that the type of risk varied during the first year of life. Risk experienced by young children included, from most to least frequent, (a) neglect, (b) maltreatment, (c) physical abuse, (d) emotional abuse, and (e) sexual abuse. While children at older ages experience these risks, children experience them at different frequencies; for example, older children are more likely to experience physical and sexual abuse (Putnam-Hornstein & Needell, 2011). However, for the youngest children, it is most striking that almost 14% ($n = 74,1820$) of all the children born alive in California in 2002 were at risk for possible child abuse or neglect before turning 5 years of age. Of those children at risk, 35% ($n = 25,964$) experienced abuse before their first birthday, and once more, children with disabilities were overrepresented among the children at risk for experiencing abuse before the age of 5 (Putnam-Hornstein & Needell, 2011).

Similarly, Hill et al. (2011) used administrative data from the state of Minnesota to determine the prevalence of children with disabilities in the CW system. Consistent with Putnam-Hornstein

and Needell's findings, Hill et al. reported that, of the substantiated reports of maltreatment among children, 22% ($n = 1,380$) had a disability. Of those children, emotional disturbance was the most common disability reported. Notably, disability type was not specified for 37% ($n = 465$) of children identified as having a disability. An additional 5% ($n = 69$) of children were reported as currently being evaluated for a disability. The work of Putnam-Hornstein and Needell (2011) and Hill et al. (2011) indicate that children with disabilities regularly make up a higher percentage of children identified as being maltreated. Yet, the sporadic nature of disability identification, including the severity and type, indicates that the CW system has, at best, a partial understanding of the children with disabilities they serve (Casanueva, Cross, & Ringeisen, 2008; Kendall-Tacke, Lyon, Tailferro, & Little, 2005). Therefore, although children with disabilities have been well documented as victims of child abuse and neglect, other than prevalence rates, little is actually known about the experiences of young children with disabilities who have experienced abuse.

While the variations in prevalence findings indicate the influence of sampling, setting, and methodological choices (Sobsey, 1994), it is clear that young children with disabilities experience abuse at consistently higher rates than children without disabilities. Thus, at the macrosystem level, the extant literature suggests that while legislation to protect children from abuse is in place, child abuse is still regularly occurring and the prevalence of abuse is noted as higher for children with disabilities (Crosse et al., 1992; Johnson-Reid, Drake, & Kohl, 2009; Sullivan & Knutson, 2000; Westcott & Jones, 1999). More research is needed to better understand how children with disabilities who have been abused are actively involved in the CW system (Lightfoot & LaLiberte, 2006) and the EI system (Dicker & Gordon, 2006; Jones, 2009; Moxley, Squires, & Lindstrom, 2012). Furthermore, more research is needed to understand how disability status increases a child's risk for experiencing abuse, especially during the first few years of life (Dicker & Gordon, 2006; Jones, 2009).

Exosystem Factors

The exosystem is defined as specific social structures, both formal and informal, that encompass the immediate settings in which a child is found. For the purpose of this review, the exosystem factors will focus on literature that addresses the provision of services for young children with disabilities, from eligibility and referral to the act of providing services, including professional development related to supporting young children with disabilities who have experienced abuse and neglect.

Identification, referral, and enrollment. Robinson and Rosenberg (2004) examined the rate of identification and enrollment of children involved in the Colorado CW system and the EI system using the Colorado Child Welfare Eligibility Service Tracking data set (CWEST; $n = 5,473$). They found that more than half of the children served by both the CW and EI systems had not been identified as having a developmental delay or disability in the CW system. However, of the children with an identified disability ($n = 688$), only 17% ($n = 113$) of children in the CW system were also enrolled in EI services. The authors emphasized the underidentification of children with disabilities in the CW system and the underenrollment of these children in the EI system.

Despite these issues of underidentification and underenrollment, Derrington and Lippitt (2008) prospectively estimated a 25% increase in referrals from CW to the EI system for more than three quarters of the states in the United States. Using a variety of data sources (i.e., national administrative data; Robinson & Rosenberg, 2004; Massachusetts Early Childhood Linkage Initiative), Derrington and Lippitt estimated that the rates of enrollment in EI would increase in all states, but range dramatically from 2% in Pennsylvania to 87% in Florida. Findings from this study highlight the fact that, while referral to EI is mandated when a child experiences

a substantiated case of abuse, enrollment is not. Increases in CW referrals do not necessarily translate to higher levels of enrollment in EI, despite the ultimate goal of the mandated referral being the provision of EI services to children who need them. The researchers also noted that the unfunded CAPTA referral mandate legally requires these systems to interact but does not provide incentives for training or interagency collaboration.

While the aforementioned studies focused primarily on referrals from the CW system and enrollment in the EI system, Manders and Stoneman (2009) used a series of vignettes to examine how disability status affected processes and outcomes of CW investigations. Participants provided services in the CW system were asked questions regarding (a) the extent to which an investigation was warranted, (b) the cause of the abuse, (c) empathy with the alleged abusive parent, and (d) recommended services. Manders and Stoneman reported frequent misunderstandings about how a child's disability contributed to a rationale for why a child was not referred to CPS. For example, vignettes describing children with cerebral palsy who experienced patterns of bruising on their bodies were less likely to be referred to CPS than children with the same bruising patterns without cerebral palsy. Manders and Stoneman noted that child protective caseworkers often reported uncertainty about whether or not an abusive incident took place or if the abuse in question was a manifestation of the child's disability; for instance, a child with cerebral palsy displaying bruising might be due to lack of coordination of body movement rather than an abusive parent. The identification, referral, and enrollment of young children with disabilities who have experienced abuse are complex. While the EI and CW systems are legally mandated to interact, neither system has established well-coordinated efforts to support young children with disabilities who have experienced abuse.

Provision of services. Issues related to the provision of EI and CW services to young children with disabilities who have experienced abuse have also been identified in the literature (Allen, Hyde, & Leslie, 2012; Herman-Smith, 2009, 2011). Researchers used survey (regional and national) and semi-structured interviews to document wide-ranging barriers to service provision. Six major issues were identified and organized into two categories, professional roles and systemic structures.

Professional roles. Three issues emerged from the literature about how EI providers define and understand their professional roles. These issues can contribute to complications in service delivery for young children with disabilities who have experienced abuse. First, EI professionals reported that, while families of young children who experienced abuse should be referred to EI, they were less certain about the necessity of providing EI services for children who did not have developmental delays. For instance, children who had experienced abuse who are at risk for but not diagnosed with a disability were thought of as less likely to need or benefit from EI services (Herman-Smith, 2009, 2011). Although EI providers recognized the legal necessity of referring children from CW to EI, they may not fully understand the connection between disability and abuse. Given the prevalence of young children who experience abuse and develop a disability or developmental delay, and the particular susceptibility of young children with disabilities to experiencing abuse, understanding these connections is paramount.

Second, EI professionals regularly expressed concerns about not having enough professionals who are properly prepared to meet the needs of families referred from CW (Herman-Smith, 2009). This has important implications regarding the quantity and quality of EI services available to young children with disabilities who have experienced abuse. Given the estimates and the actual increases in referrals from CW to EI, providers are uncertain about the quantity of EI providers available to meet the increased service demands. Furthermore, EI providers are concerned about whether professionals are properly prepared and capable to meet the complex needs of families referred from the CW system.

Third, EI providers reported that parents of children who have experienced abuse and neglect may be better served by programming other than EI (Herman-Smith, 2011). Undoubtedly, children and families in abuse and neglect situations have complex needs that will ultimately be addressed by multiple service systems (Landy & Menna, 2006). However, given the prevalence of and relationship between disability and abuse among young children, it is concerning that EI professionals do not identify their role as essential for young children who have experienced abuse. Overall, EI providers recognized the importance of referring children from CW to EI but did not identify their primary professional role, nor the EI system's role, as meeting the needs of young children with disabilities who have experienced abuse.

Systemic structures. Beyond how EI providers understand and define their professional roles, three other issues emerged related to EI and CW systemic structures. First, EI providers reported that a lack of support regularly impeded service provision for young children with disabilities who have experienced abuse (Allen et al., 2012; Herman-Smith, 2011). Support needs included regular financial reimbursement, local program buy in, and advanced training about child abuse topics.

Similarly, CW caseworkers recognized accountability and documentation as an integral part of the CW system but expressed struggles with documentation and accountability requirements when working with young children with disabilities (Allen et al., 2012). Both the amount and type of documentation required were reported as barriers to the provision of service for young children with disabilities who have experienced abuse.

Finally, researchers noted that the different and distinct nature of service provision within the EI and CW systems often served as a barrier to service provision. Notably, EI providers attributed successes of working with families involved in child abuse and neglect cases to the voluntary nature of their home visits (e.g., voluntary participation, parent involvement, use of toys and daily routines; Allen et al., 2012), whereas, CW professionals noted feelings of animosity from parents because of the mandatory and often adversarial roles they take when charged with removing children from the home (Allen et al., 2012). The voluntary nature of EI and mandatory nature of CW services can be confusing for families and difficult for providers to manage, thus complicating the delivery of services to these children (Allen et al., 2012).

Professional development. Over the years, researchers have recognized the need for professional training for those who work with young children with disabilities who have experienced abuse and neglect (Adams & Tapia, 2013; Dicker & Gordon, 2006; Greytak, 2009; Herman-Smith, 2009, 2011). Two issues related to professional preparation have been documented in the literature: (a) the focus of professional training extending beyond mandated reporting of abuse and (b) agency standards regarding the implementation of CAPTA.

As a result of CAPTA, the mandated reporting of child abuse is regularly a topic of training for professionals who work with young children. Orelove and colleagues (2000) developed a survey to examine the training needs of parents of children with disabilities ($n = 101$), educators and early interventionists ($n = 199$), and CPS professionals and law enforcement personnel ($n = 125$) in Virginia. These researchers found that parents, educators, early interventionists, and CPS professionals reported having very limited knowledge on how to both recognize and respond to maltreatment in children with disabilities. Although all educators and early interventionists in this study were mandated reporters, less than one third of these professionals reported being knowledgeable about procedures for reporting maltreatment to CPS. While 79% of educators reported that policies regarding maltreatment existed in their workplace, only 25% indicated receiving training regarding those policies within the previous 3 years (Orelove et al., 2000). Despite limited knowledge, 72% of parents, 92% of educators, and 96% of law enforcement officers indicated a willingness to participate in professional training regarding working with

children with disabilities who have experienced abuse and neglect (Orelove et al., 2000). Although training is mandated and recognized as a key and needed support by professionals (Orelove et al., 2000), training opportunities remain limited in quantity and in breadth of content offered (Stahmer, Sutton, Fox, & Leslie, 2008).

Stahmer et al. (2008) explored agency standards related to the implementation of CAPTA. Fifty EI state coordinators were invited to participate in the survey, with 42 of 50 completing the survey. The researchers found that eight of the 42 states offered training to their EI providers on how to work with families referred through CW, while 12 states were in the process of developing training. Thus, more than half of the participating states were not offering training for professionals serving children and families from the CW system (Stahmer et al., 2008). Of note, the focus of training that was being provided was primarily on administrative issues, such as compliance with CAPTA, rather than on intervention or service provision strategies.

At the exosystem level, the extant literature has focused primarily on identification, referral, and enrollment from CW to EI services, the provision of CW and EI services for young children with disabilities who have experienced abuse, and professional preparation. In identification, referral, and enrollment, the research cited here indicated that a child's disability status regularly affected a professional's decision making regarding whether or not child abuse allegations are investigated. CW professionals were more likely to report feelings of empathy with the abusive parent when a child had an identified disability, and EI professionals were more likely to report that providing EI services to children who have experienced abuse was not necessarily a priority of their EI service provision (Herman-Smith, 2011; Manders & Stoneman, 2009). Clearly, literature related to the provision of services for young children with disabilities who have experienced abuse and neglect and the professional training needs for EI and CW professionals remains scarce. Little is known about the successful provision of services for families with needs that span both the EI and CW systems (Herman-Smith, 2011; Manders & Stoneman, 2009).

Mesosystem Factors

The mesosystem is comprised of the interrelations among the major settings a child frequents at a particular point in his or her life (Bronfenbrenner, 1979). This system can be thought of as the bridge between settings in the child's life. Of importance for this review are the settings in which EI and CW services occur. When families of children with disabilities who have experienced abuse are participating in two systems simultaneously, these systems are often distinct in their philosophy, focus, and legal requirements.

Although these two systems are designed to interface legally when children who have experienced abuse are subsequently referred to EI, there are striking differences between the systems. For example, EI is optional for families and provides a set of services that are strengths-based and family-centered by design (Bruder, 2010). Conversely, CW services are legally mandated for families who have been indicated or proven abusive or neglectful with their children. Second, EI-recommended practices (DEC, 2014) encourage EI services be offered in natural environments. In some instance the natural environment is the child's home; however, in some instances, CW services remove children who have been abused from their home because of safety risks. Furthermore, some children who are removed from their biological parents' custody will continue receiving EI services in a foster placement. Depending on the family and circumstance, these systems interact in dynamic ways. However, the juxtapositions for families create unique family service needs and can complicate both EI and CW service delivery. None of the empirical studies included in this review examined the cross-system collaborations between EI and CW. However, the need for collaborative relationships between EI and CW systems is well documented in conceptual literature (e.g., Adams & Tapia, 2013; Azzi-Lessing, 2010; Dicker & Gordon, 2006). Therefore, the mesosystem of this review includes conceptual literature related to

the mandated collaboration of EI and CW systems to serve young children who have experienced abuse and neglect.

Over the years, the call for cross-system collaboration has been consistent across literature spanning the fields of early childhood, social work, pediatrics, and child advocacy (Adams & Tapia, 2013; Azzi-Lessing, 2010; Corr & Danner, 2014; Dicker & Gordon, 2006; Litzelfelner & Petr, 1997). Moving forward, researchers have recommended focusing on (a) understanding the roles and actions assumed by collaborative EI and CW professionals when providing services, (b) identifying optimal models for infants/toddlers with disabilities and their families involved in maltreatment cases, and (c) creating solutions for overcoming systemic barriers to optimal intervention (Adams & Tapia, 2013).

The literature from the mesosystem clearly points to collaborations between EI and CW as essential to supporting young children with disabilities who have experienced abuse. Although cross-system collaborative work is encouraged and viewed as vital, it is also recognized as a very difficult and complex task, despite legal mandates (Dicker & Gordon, 2006). Furthermore, there continues to be a dearth of empirical studies that evaluate or define how to best create and implement cross-system collaborations. This gap indicates that, beyond the need for the EI and CW systems to collaborate, future research should examine empirically how and to what extent the EI and CW systems collaborate to meet the needs of young children with disabilities who have experienced abuse.

Microsystem Factors

The microsystem is comprised of relations between the developing child and the direct setting(s) the child frequents (e.g., home, school, child care), including the interpersonal relationships within these settings (Bronfenbrenner, 1979). We discuss the relevant microsystem factors identified from literature about attachment, domestic violence, and caregiver/housing stability within the context of how these factors affect overall parent–child relationships when a child has been abused and also has a disability.

Attachment. Ainsworth (1980) posited that insecure parent–child attachment can contribute to the etiology of maltreatment. Maltreatment is more likely to occur when a caretaker has negative feelings pertaining to the parenting of a child. This negativity weakens the affective bonds between the child and parent, which can, in turn, increase the risk for the parent to abuse or neglect the child.

There is evidence that parenting variables, such as parental control, warmth, and involvement, predict parent–child attachment problems (Frick & Jackson, 1993; Loeber & Stouthamer-Loeber, 1986; Maccoby & Martin, 1983). The presence of a disability is not an inherently negative factor, but intricate and/or specialized care and supervision of young children with disabilities might negatively affect those aforementioned variables (Ammerman, 1998). Although parenting has long been recognized as having a socializing influence on children, there is increasing effort to understand the combined effects of parenting and child characteristics on child well-being (Lengua & Kovacs, 2005; Verhoeven, Junger, van Aken, Deković, & van Aken, 2010). Understanding the bidirectional relationship between child and parent behaviors is essential to facilitate the development of interventions that are sensitive to individual child and family differences (Lengua & Kovacs, 2005).

To illustrate this bidirectional relationship, Knutson, Johnson, and Sullivan (2004) explored the disciplinary choices of mothers of deaf children and mothers of children who were not deaf. Hypothetical situations of children engaging in a range of behaviors (i.e., from typical to challenging) were used, including scenes depicting a child engaged in destructive acts (e.g., stepping on a calculator, tearing pages from a book), dangerous activities (e.g., running

into the street, touching the stove), and age-appropriate acts (e.g., spilling a jar of salsa, messy play with toys). Knutson and colleagues asked mothers to select a course of disciplinary action from several options. They found that mothers of children with hearing loss were more likely to choose physical discipline when the hypothetical situation described a child engaging in dangerous or destructive behaviors. These findings were consistent with prior research that correlated positively disability and harsher parenting of children with disabilities (Gore & Janssen, 2007).

Researchers have documented that abusive parents tend to have unrealistic expectations about child development (Helfer, Kempe, & Krugman, 1997; Klevens, Bayon, & Sierra, 2000; National Research Council, 1993). In addition, researchers have found that abusive parents show more irritation and annoyance in response to their children's moods and behavior; that they are less supportive, affectionate, playful, and responsive to their children; and that they are more controlling and hostile (Bardi & Borgognini-Tari, 2001; National Research Council, 1993). This lack of appropriate expectations, negative affect, and harsher disciplinary methods can negatively affect the overall parent-child relationship and increase the likelihood of maltreatment (Algood, Hong, Gourdine, & Williams, 2011).

Domestic violence. The chronic nature of parent mental health and/or behavior disorder diagnoses places the child at a heightened level of risk for abuse and neglect (Jaudes & Mackey-Bilaver, 2008). Practitioners need to be prepared to thoroughly assess family history of violence, such as child maltreatment and domestic violence. Mothers experiencing domestic violence are more likely to use harsh discipline with their children (Hartley, 2002). Palusci (2011) examined files from the Child Files of the National Child Abuse and Neglect Data System from 2003 to 2007 and found that one third of the files on infants and young children in confirmed maltreatment cases also noted violence between caregivers. This echoes the earlier work of Sullivan and Knutson (2000), who found the presence of domestic violence in 17% of families of children with disabilities who had experienced abuse, a rate 3 times higher than other groups (Appel & Holden, 1998). Therefore, it is not uncommon for domestic violence and maltreatment of children to co-occur in families (Sullivan, 2009).

Caregiver/housing stability. Finally, among children with disabilities who have experienced abuse, both parent and home instability are critical issues that affect the parent-child relationship. In 2008, Casanueva et al. examined the extent of caregiver instability in the lives of infants involved in maltreatment investigations by combining information from caseworkers and caregivers. They found that 84% of infants involved in child maltreatment investigations experienced at least one change in caregiver/household during the first year of life, and 40% of children experienced four or more changes in caregiver/household by the time they entered school. Furthermore, higher caregiver instability was associated with children having chronic health issues and disabilities.

Casanueva and colleagues (2008) identified two influential risk factors for experiencing abuse: (a) having a parent or caregiver who was a victim of domestic violence, an active abuser of substances or illegal drugs, had a childhood history of abuse, poor parenting skills, low educational attainment, or was a teen parent, and (b) experiencing family instability, such as four or more children in the household, use of a homeless shelter, low social support, receipt of child or income support, difficulty paying for basic necessities, and high stress. During the most critical years for forming healthy attachment with a caregiver, between birth and age 3, children were more likely to experience caregiver instability when multiple aforementioned risk factors were present (Casanueva et al., 2008). The multitude of risk factors experienced coupled with a lack of caregiver stability can affect the quality and quantity of EI services for families (Dicker & Gordon, 2006; Hebbeler et al., 2007; Moxley et al., 2012).

In summary, the extant literature suggests several microsystem factors affect young children with disabilities who have experienced abuse and their families. Of particular importance are parent-child relationships, the presence of domestic violence, and home conditions that often contribute to the maltreatment of young children with disabilities.

Conclusion

We examined research studies that have investigated key macro-, exo-, meso-, and microsystem factors related to providing CW and EI services to young children with disabilities who have experienced abuse. There are four gaps and limitations in the research.

Many of the included studies focused on identifying the prevalence of abuse and neglect among children with disabilities. Nine of the 23 included studies focused primarily on prevalence through the use of large existing state-level administrative data sets. These studies, while useful in understanding the occurrence of abuse in the lives of young children with disabilities, do not necessarily account for the impact of relevant contextual factors, attitudes, behaviors, and motivations that affect identification, referral, and service provision for these children. Furthermore, now that the prevalence rates of young children with disabilities who have experienced abuse have been established, further research is needed to understand how these children can or do benefit from EI and CW services, both independently and collectively.

The reciprocal relationship between child abuse and disability along with the prevalence of young children with disabilities experiencing abuse is well documented (Hill et al., 2011; Johnson-Reid et al., 2009; Putnam-Hornstein & Needell, 2011; Sullivan & Knutson, 2000; Westat, 1993). However, limited research exists about the diverse and complex experiences these children have within EI and CW systems, as well as the families and service providers.

Although a plethora of conceptual policy and practice articles encourage cross-system collaborations between EI and CW systems (Adams & Tapia, 2013; Azzi-Lessing, 2010; Corr & Danner, 2014; Dicker & Gordon, 2006; Litzelfelner & Petr, 1997), little empirical research exists on how and under what conditions cross-system collaborations work.

Finally, although several of the studies contribute to multiple levels of knowledge regarding the provision of services for young children with disabilities, none of the aforementioned studies were designed to simultaneously explore this topic from macro-, exo-, meso- and microsystem levels, resulting in a partial and often fragmented understanding of this phenomenon.

Future Research

The findings from this literature review suggest that when supporting young children with disabilities who have experienced abuse, successes and barriers exist across both systems. Both the EI and CW systems would benefit from research that examines shared priorities, meaningful partnerships, clarified roles, and recommendations for designating resources related to young children with disabilities who have experienced abuse. Research, policy, and funding efforts focused on these matters (i.e., priorities, partnerships, roles, resources) in isolation may not be as beneficial. In sum, we make four primary recommendations for the prioritization of future comprehensive research and policy efforts: (a) Young children with disabilities who have experienced abuse should be acknowledged and identified by EI and CW systems as a research priority; (b) the needs of professionals in both EI and CW who work with young children with disabilities who have experienced abuse should be explored extensively; (c) the depth and breadth of the experiences of families, both biological and foster, of young children with disabilities who have experienced abuse should be examined; and (d) existing policy, within and across multiple systems, should be examined to further understand how it helps or hinders EI and CW cross-system collaborations in relation to young children with disabilities who have experienced abuse.

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