



Maltreatment of children with developmental disabilities: An ecological systems analysis

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ABSTRACT

The purpose of this review is to understand the risk factors for maltreatment of children with developmental disabilities. Using the Bronfenbrenner's (1976, 1977) ecological systems framework, the authors examine how socio-demographic characteristics (age, gender, and special education), *micro-* (parent–child relationship and domestic violence), *exo-* (parenting stress, parents' social support, and area of residence), and *macrosystems* level (culturally defined parenting practices) factors influence or inhibit maltreatment of children with disabilities. The authors highlight major implications for practice and policy for maltreated children with disabilities.

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1. Introduction

Maltreatment of children with disabilities has been a major social concern (Hibbard & Desch, 2007). Some researchers concur that children with disabilities are significantly more likely to be at risk of maltreatment than children in the general population (Brown & Schormans, 2003; Crosse, Kaye, & Ratnofsky, 1993; Goldson, 2001; Gore & Janssen, 2007; Mandell, Walrath, Mateuffel, & Pinto-Martin, 2005; Mansell, Sobsey, & Moskal, 1998; Sullivan & Knutson, 1998). Skarbek, Hahn, and Parrish (2009) also posit that children with disabilities are over three times more likely to experience sexual abuse than do children without disabilities. The Children's Bureau of the U.S. Department of Health and Human Services (2008) estimates that 750,000 children were abused or neglected in 2008, of which more than 70% experienced neglect, 16% were physically abused, and 9% were sexually abused. Children with disabilities accounted for 6% of all maltreatment cases.

However, several researchers (Bonner, Crow, & Hensley, 1997; Hibbard & Desch, 2007; Westat, Inc, 1993) have argued that little is known about the prevalence rate of abuse and neglect among children

with disabilities, which is attributed in part to the failure of child welfare workers to recognize and document disabilities status in child abuse cases. Hibbard and Desch (2007) argue that data on the prevalence rate of maltreated children with disabilities are limited which is attributed to 1) variations in the definitions employed by researchers; 2) the lack of a consistent means to classify maltreatment; 3) the failure of child protective workers to document and recognize disabilities; and 4) the lack of social services training to properly assess children (Hibbard & Desch, 2007; p. 1018). Sullivan (2009) concurs that there is a lack of data on the incidences of exposure to violence on children with disabilities due to the various definitions of disabilities. The researcher argues that it is necessary to recognize the fact that 'developmental disability' is not a term that is interchangeable with all types of disabilities. Children can have a disability but not necessarily have a developmental disability (Sullivan, 2009). The legal definition of developmental disability was established with the passage of the Developmental Disabilities Bill of Rights Act (P.L. 91–517) by the Congress in 1970.

Developmental disability is defined by the Federal Developmental Disabilities Assistance and Bill of Rights Act as severe, chronic conditions that 1) are attributable to mental and physical impairments or both; 2) are manifested before age twenty two; 3) are likely to continue indefinitely, 4) results in substantive limitations in three or more major life activity areas, such as self care, receptive and expressive language, learning, mobility, self direction, capacity for independent living, and economic self sufficiency; and 5) require a combination and sequence of special interdisciplinary or generic care treatment or other services that are of extended or lifelong duration

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and are individually planned and coordinated (Public Law 106-402, 2000; pp. 7–8) Under the Act, *severe chronic* conditions include autism, cerebral palsy, epilepsy, Down's Syndrome and intellectual disability, spinal bifida, and fetal alcohol syndrome. Amendments to the Developmental Disabilities Bill of Rights Act of 1970 (P.L. 91-517) and the Developmental Disabilities Act of 1978 (P.L. 95-602) (Dodd, 2007), now referred to as the Developmental Disabilities Assistance and Bill of Rights Act of 2000 (P.L. 106-402), significantly broadened the definition of *severe, chronic* conditions and provisions under the bill. Title II of the Act mandates provisions of family support services for families of children with severe disabilities, which would ensure a variety of devices to assist the child, counseling and training services for parents, and funding to defray any costs related to services for children with developmental disabilities (P.L. 106-402). Moreover, Title II stipulates that services must be culturally relevant and parents must be able to gain access to the needed services (Turnbull et al., 2007).

Disability status is frequently overlooked in the assessment of maltreatment despite the fact that disability status is found to be a contributing factor for maltreatment (Gore & Janssen, 2007; Jonson-Reid, Drake, Kim, Porterfield, & Han, 2004; Kendall-Tackett, Lyon, Taliaferro, & Little, 2005; Mandell et al., 2005; Romney, Litrownik, Newton, & Lau, 2006; Sobsey, 2002; Sullivan, 2009; Westat, Inc, 1993). Recognizing the importance of understanding the risk factors associated with abuse and neglect for children with disabilities (Kapitanoff, Lutzker, & Bigelow, 2001; Sullivan, 2009; Sullivan & Knutson, 1998), a number of empirical studies have emerged in recent years, which found that risk factors for child maltreatment are multifaceted. However, little has been known about the multiple level ecological factors associated with maltreatment for this population. To understand maltreatment of children with disabilities, the authors argue that multiple level factors must be examined within an ecological framework.

The authors begin by identifying socio-demographic characteristics of children with disabilities who are abused by their parents, which is followed by a discussion of the risk factors within the *micro-, exo-, and macrosystem* from which we draw assessment, prevention, and intervention strategies.

2. Selection criteria

Empirical research and literature review studies were selected via electronic bibliographic databases and manual searches. Studies published from 1980 to 2010 were reviewed for this study. Databases utilized for this review include scholar.google, Medline, PsycINFO, and Social Science Abstracts. Manual search included published books, theses and dissertations, and government reports. Keywords for the search included *abuse, neglect, maltreatment, children with disabilities, developmental disabilities, and learning disabilities*. Because 'child abuse' is defined as physical, emotional, and sexual mistreatment of children, according to the Center for Disease Control & Prevention (n.d.), studies that examined these types of abuse were considered in this review. Our search was limited to empirical research that quantitatively or qualitatively assessed the risk and protective factors for maltreatment of children with disabilities, as well as evidenced-based intervention studies that specifically focused on children with disabilities, or included these children in the sample.

3. Ecological systems analysis

An ecological approach can facilitate our understanding of the complexity surrounding child maltreatment in several ways. The ecological theory conceives the environment as an interactive set of systems, which are "nested" within one another (Bronfenbrenner, 1976). The theory also perceives the interdependent interaction of systems as the major dynamic shaping the context in which the

individual directly experiences social reality (Bronfenbrenner, 1976; Garbarino & Bronfenbrenner, 1976). The individual child is an inseparable part of a social network, which is composed of the *micro-, meso-, exo-, and macrosystem*. The theory emphasizes the importance of considering cultural, political, economic, and demographic factors in shaping the family dynamics (Garbarino, 1977).

3.1. Socio-demographic characteristics

3.1.1. Age

Howe (2006) found in his study that children in preschool are at a greater risk for abuse. Sullivan and Knutson (1998) found that while the abuse starts at an early age usually at the hands of a family member, it continues throughout childhood. Jaudes and Mackey-Bilaver (2008) found similar results in their study on maltreated children with behavioral health problems who were abused prior to three years of age. The researchers found that these children were ten times more likely to suffer from repeat episodes of maltreatment. Others (Cicchetti & Toth, 2000; U.S. Department of Health & Human Services, 2006) also identified child age as a risk factor. The U.S. Department of Health and Human Services (2006) reported that in 2004, children under four years of age comprised 80% of maltreatment cases.

3.1.2. Gender

Among children without disabilities, girls and boys are equally likely to experience child abuse, with girls more frequently the victims of child sexual abuse and boys more frequently the victims of physical abuse. However, these findings are inconsistent when abuse is examined within the context of gender and disability (Hershkowitz, Lamb, & Horowitz, 2007; Sobsey, Randall, & Parrila, 1997). Both Hershkowitz et al. (2007) and Sobsey et al. (1997) found in children with disabilities that boys are more often abused than girls. For sexual abuse, both studies also report that boys were also significantly more likely to be sexually abused than were girls. The overrepresentation of boys reflects the larger proportion of boys with disabilities in the general population (Sobsey et al., 1997). Goldson (1997) hypothesized that parents in the U.S. have the tendency to respond more negatively to their sons with disabilities than to their daughters. The researcher also noted that boys with disabilities, such as learning disabilities and attention deficit disorder and hyperactivity (ADHD) may be difficult to manage as compared to girls with the same problems but without much of the disruptive characteristics of ADHD, making them less prone to abuse. Further research on gender difference in maltreatment among children with disabilities is needed.

3.1.3. Special education

A limited number of studies (e.g., Jonson-Reid et al., 2004) report that children who are enrolled in a special education program in school are likely to be abused or neglected by their parents. A study by Jonson-Reid et al. (2004) examined the association between enrollment in special education program and maltreatment among low-income children. The study included 7940 cases, which consisted of participants between 7.5 years to 16 years of age in St. Louis metropolitan area. Findings from the research indicate a bi-directional relationship between special education and maltreatment. Abused children are more likely to be enrolled in a special education program in school. In terms of the types of abuse, children who were sexually abused had the lowest rates of entry while those who were physically abused had a highest rate of entry into a special education program. The researchers also report that children receiving special education services for learning disabilities, mental retardation, and serious emotional disturbances were most likely to be abused by their parents.

3.2. Microsystem

The microsystem is defined as the relations between the developing person (child) and environment in a direct setting where the person is embedded (e.g., home and school) (Bronfenbrenner, 1977). The microsystem is also conceptualized as the child's interpersonal relationship with others in the direct setting. Microsystem level factors that are relevant to maltreatment of children with disability include parent–child relationships, and domestic violence in the home.

3.2.1. Parent–child relationship

Children with disability require special attention, which can create unique parenting challenges and compromise relationship and attachment between the parent and the child. Research studies consistently suggest that relationship between the parent and the child that is characterized as physically punitive and lacking secure attachment is a salient risk factor for maltreatment (Howe, 2006; Knutson, Johnson, & Sullivan, 2004). In their study assessing disciplinary preference of mothers of deaf children, Knutson et al. (2004) report that mothers of children with hearing impairment were more likely to endorse using physical discipline than mothers of normally hearing children in response to destructive behavior. Findings from the study also suggest that deaf children are at increased risk of severe physical punishment, which can escalate into maltreatment. Gore and Janssen (2007) also contend that parent–child relationships that are characterized as punitive can place a child with developmental disabilities at significant risk of maltreatment. Moreover, an earlier study by Ammerman (1991) reported that children with disabilities require extra care and supervision and are likely to exhibit behavior problems. Their behavior problem can negatively affect their bonding with their parents and increase the likelihood of maltreatment in the home.

3.2.2. Domestic violence

Both domestic violence and maltreatment co-occur in the same family, as a number of studies have consistently found a substantial overlap between domestic violence and child maltreatment (see Sullivan, 2009 for a review; Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008); battered mothers are more likely to employ corporal punishment significantly more frequently when disciplining their children (Hartley, 2002; Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003). Further, it is not uncommon for maltreated children to experience multiple victimization in the home (Messman & Long, 1996). Despite the significant association between domestic violence and maltreatment in the home, there are relatively few empirical studies that specifically examined the association between mothers' experience in domestic violence and maltreatment of children with disabilities. Nevertheless, one study (Sullivan & Knutson, 2000) reported that domestic violence co-occurs with physical abuse among children with disabilities (Sullivan, 2009). Sullivan and Knutson (2000) found from a sample of 4503 abused children that there were records of domestic violence within the families of 17% of children with disabilities and 16% of children without disabilities. Although the study reported no significant differences in the rate of domestic violence between disabled and non-disabled children, the 17% rate is almost three times higher than the base rate of 6% co-occurrence in other community samples (Appel & Holden, 1998; see Sullivan, 2009).

3.3. Exosystem

The exosystem consists of interactions between two or more settings, of which one is the immediate setting (Bronfenbrenner, 1976, 1977). Bronfenbrenner asserts that exosystems are both formal and informal, such as parents' employment, social network, neighborhood characteristics, relations between school and com-

munity. Relevant exosystem level factors are parenting stress, parents' social network, and area of residence.

3.3.1. Parenting stress

Situational factors, such as high level of parenting-related stress may increase the likelihood of maltreatment (Crouch & Behl, 2001). Milner (1993, 2000) theorized that parents under conditions of high stress may be more likely to engage in rapid, automatic information processing, which may increase the influence of basic belief structures on parenting behavior (e.g., physical abuse). Several researchers (Gore & Janssen, 2007; Rodriguez & Murphy, 1997; Sobsey, 2002) report that abuse and neglect increase when parents experience high levels of stress. Parents of children with disabilities are especially vulnerable to emotional, physical and economic stress. Rodriguez and Murphy (1997) examined the relations among parenting stress, abuse potential and children's intellectual and adaptive functioning from a sample of 33 low-income African American mothers of children with developmental delays. Results from the study indicate that mothers who experience parenting-related stress were significantly likely to engage in physically abusive parenting practices.

3.3.2. Parents' social support

Studies have found that the quality of parents' social support network can influence the quality of parent–child relationship. Because social support has been identified as a protective factor for stressful events (Green & Rodgers, 2001), researchers have asserted that understanding how parents develop, perceive, maintain, and engage in social support is crucial (Curtona & Russell, 1990). Despite the critical need for social network, low-income parents have fewer social contacts and are less likely to receive social support, which can help mitigate stress (Eamon, 2001). Parents with limited social support may be at high risk of abusing children with disabilities, because they may feel overwhelmed and unable to cope with the required supervision responsibilities (Hibbard & Desch, 2007; Socolar, Winsor, Hunter, Catellier, & Kotch, 1999). Brown and Schormans (2003) study, which examined the frequency of maltreatment of children with developmental delay, found that these children were raised by low-income single mothers who reported experiencing parenting-related stress due to low socio-economic status, employment-related hardships, and inadequate social support. Findings from this study suggest that poverty can increase parenting distress due to limited access to social support (Eamon, 2001).

3.3.3. Area of residence

Parenting stress and lack of social support are attributed to residency in neighborhood and communities that are characterized as having limited resources or social networks, which can mitigate stressors and enhance parenting practices. Many abused children reside in impoverished areas where they are prone to conditions associated with disability, such as low birth weight, lead exposure, and chronic illness (Fujira & Yamaki, 2000). An epidemiological study conducted by Sullivan and Knutson (2000) assessed the prevalence of abuse and neglect among a population of children with a disability. The researchers found a significant difference with respect to the socioeconomic status of the neighborhoods where maltreated children resided, in comparison to the median income value based on U.S. Census Tract data, which indicates an association between economic stress and multiple forms of abuse. The link between economic disadvantage in the area of residence and maltreatment is apparent for children with disabilities.

3.4. Macrosystem

Bronfenbrenner (1977) defines the macrosystem as consisting of the micro-, meso-, and exosystems that exist, or may exist at the level

of the subculture or the culture as a whole, in conjunction with any belief system or ideology. He highlights the importance of identifying more specific social and psychological features of culture, which can influence particular conditions and processes at the microsystem level. Ogbu (1981) further argued that culturally and socially defined role expectations can influence parenting processes and developmental outcomes. It is critical to examine roles and expectations of parents and children, cultural value that influence parental perceptions of the meaning and cause of a disabilities, and societal responses to persons with disabilities (Kapitanoff et al., 2000). Parents of all racial and ethnic groups employ childrearing practices to encourage the development of appropriate competencies during adulthood (Ogbu, 1981). However, understanding the culturally defined parenting practices as well as beliefs concerning physical abuse and disabilities of diverse families can shed light in our understanding of the risk and protective factors for abuse and neglect that are relevant to racial and ethnic minority children with disabilities and their families. Further research is needed on maltreatment of racial and ethnic minority children with disabilities.

4. Practice and policy implications

As this review indicates, an ecological review of studies on the maltreatment of children with developmental disabilities has major practice and policy implications for children with intellectual and/or developmental disabilities and their parents.

4.1. Microsystem

It is imperative that practitioners assess the relationship and attachment between the parent and the child. Because chronic nature of the mental health and behavior diagnosis places the child at a heightened level of risk for abuse and neglect (Jaudes & Mackey-Bilaver, 2008), practitioners need to thoroughly assess family history of violence, such as child maltreatment and domestic violence. Child protective services need to train child welfare workers to effectively identify conditions that lead to family disruptions and violence, and must systematically keep records of abuse. As Romney et al., (2006) found relatively few states have accurate data or records on maltreatment of children with disabilities due to the fact that data collection has been inconsistent (Sullivan, 2009) and relatively few states have identified children with developmental disabilities as a part of their statistical reporting on children who are abused or neglected (Shannon & Agorastou, 2006).

Further, a limited number of child protective services and social services agencies provide training for caseworkers to effectively assess maltreatment due to a major lack of understanding of the risk factors for abuse and neglect that are relevant to children with disabilities. The authors advocate for improving procedures that would identify children with disabilities, improve skills to assess non verbal clients or to use alternative communication device and systems to interview, be knowledgeable about available resources for parents and children. Thus, it is also important for practitioners and child welfare professionals to understand developmental disabilities and its effect on parent–child relationships and family dynamics.

4.2. Exosystem

At the exosystem level, there is a need for practitioners to address the issue of stress experienced by parents, their lack of social support and the impact of the area of residence on children and family. The important role of parents in the life of children with disability is a major consideration. As studies have shown, with added financial, physical and emotional demands, parents raising a child with a disability experience increased levels of stress (Heward, 2006). Interventions need to address the interaction between the child and

the parent to ascertain the risk factors, which exacerbate parenting stress (DiLauro, 2004), such as the Positive Parenting Program, a community-based program, which specifically targets risk factors such as parenting stress, social support and parent–child relationships (Turner & Sanders, 2006). Several intervention programs that are designed to reduce parenting stress and enhance social support are reviewed.

Aniol, Mullins, Page, Boyd, and Chaney (2004) study, for example, found an association between the potential for child abuse, stress of parents, and relationships in the family. In order to mitigate parents' stress associated with childcare for children with a disability, parents' stress must also be considered in assessment and intervention strategies (Aniol et al., 2004; Hibbard & Desch, 2007; Rothman, 2003). Heward (2006) also suggests respite care for parents, which can reduce physical and mental stress associated with parenting.

Child welfare professionals and social services workers might also consider community-based intervention programs. Fantuzzo, Stevenson, Abdul Kabir, and Perry (2007) conducted a study to test the effectiveness of a community-based intervention called Community Outreach through Parent Empowerment (COPE), which is designed to reduce parenting stress and to link isolated parents with other parents. The participants consisted of 146 parents identified as “socially isolated,” of which 40 had a history of child abuse. Both abusive and non-abusive parents were assigned randomly to intervention and control groups, respectively. The intervention includes ten group training sessions, which consist of group discussions on issues such as family relations, friendships, poverty, social isolation, stress, physical health, and emotional well-being. The training session also included ways to enhance friendships and social connections and to mitigate parenting stress. Participants in the intervention group reported lower levels of stress and high levels of social activity. Asawa, Hansen, and Flood (2008) also researched the effectiveness of early childhood intervention programs that are implemented to target and prevent cases of child maltreatment focusing on children under five-years-old. The researchers contend that these programs facilitate healthy child development and prevent negative outcomes associated with at-risk children. The authors suggest that specialized care for children with a disability must be inclusive in these programs.

Some researchers have also examined the relationship between area of residence and the maltreatment of children with disabilities. Researchers found that residency in an unsafe neighborhood can undermine the parent–child relationship, which can increase the likelihood of maltreatment (Park, Turnbull, & Turnbull, 2002) due to lack resources such as recreational and childcare services for children (Swanson Ernst, 2000). A study by Chipungu, Crewe, Gourdine, and Smith (2005) found that families with the greatest need were living in areas where services were not located, and services were located in areas that necessitated transportation and other barriers. Child welfare professionals need to assist low-income families of children with disabilities residing in low-quality neighborhoods in gaining access to needed resources and subsidies through state and federal income transfer programs (e.g., Temporary Assistance to Needy Families, Supplemental Security Income, State Children's Health Insurance Program, Medicaid, and Medicaid's Early and Periodic Screening, Diagnosis and Treatment) (Parish & Cloud, 2006).

4.3. Macrosystem

At the macrosystem level there is a need for policy-makers to consider culture both as a potential risk or protective factor for potential abuse of children with disabilities. Kapitanoff et al. (2000) contend that before policies, programs and intervention are implemented, researchers and policy makers must have a sense of how parents raise and discipline their children, their thoughts on the etiology of illnesses and disabilities, their view on the meaning of disability from a cultural perspective and the different treatment

modalities based on culture. For example, the researchers pointed out that policy-makers should recognize the importance that diverse families place on their extended family and other supports to assist in relieving stress and in abuse prevention. The researchers also included several models for intervention for maltreated children with disabilities. One intervention is the Project Ecosystem (Lutzker & Campbell, 1994), a culturally sensitive program that teaches parents to effectively reduce stress. Other components of the program include pediatric training, training in basic parenting skills, and problem solving techniques.

Trachtenberg, Batshaw, and Batshaw (2007) also proposed a model of culturally focused family-centered care as an intervention modality for professionals working with families who have a child with a disability. Major features of this model include a) respecting each child and his or her family, b) respecting racial, ethnic, cultural, and socioeconomic diversity and recognizing family's perceptions of care, c) ensuring flexibility in organizational policies and procedures, d) providing services that can be tailored to the needs and cultural values of the child and family, and e) recognizing and building on strengths of each child and family (Trachtenberg et al., 2007).

5. Limitations

We must also note one major limitation to this review. We were unable to include any empirical studies that examined factors in the mesosystem level, which is defined as interrelationships between two or more microsystems (e.g., home and school) in which the individual is situated (e.g. the relationship between home and school) (Bronfenbrenner, 1976, 1977).

6. Conclusion

This article has examined the parameters that affect abuse and neglect among children with disabilities using Bronfenbrenner's ecological model. Specifically, the authors examined how the ecosystem at the different levels may impact the life of children born with developmental disabilities. This model allows the authors to identify potential practice issues in working with families who have children with disabilities. Among those practice issues are the lack of focus on documenting the number and types of children with disabilities who come into child welfare system because of abuse and neglect. Among the skills needed for social workers and child welfare professionals are assessment skills across the life span. What should they look for in their assessment process? If we consider preventive care – what kind of community based education programs should be implemented and what is the targeted audience for this prevention? Intervention services should consider a number of factors such as acceptance of child's disability, assistance in caring for the child, and making sure services are available and assessable to family members. Typically services are difficult to obtain for most families to secure even for families with financial resources. Advocacy for these services are warranted.

There are implications for policies for children with developmental disabilities. If the greatest risk for abuse is for children under four-years-old what are the outreach programs available to families at risk? Many families face these obstacles with little or no assistance. Hospital programs, clinics, public/private social programs, and early childhood education must be available, viable, and visible to the community at large. Access to Medicaid waiver programs is one such program that can provide assistance to families needing the support for their child with disabilities. However means tested programs for those families who are ineligible may leave them with no other options for assistance especially for those who are working poor and low-income families). Difficulty in accessing programs creates additional stresses for families. Those children having difficult conditions such as seriously emotional disturbance create more

stressful circumstances for their families especially those without training or support to care for a child with this type of disability. Services for support and coping are essential for these families so families can employ techniques to assist them in successfully coping and rearing of their child.

The U.S. has a number of policies related to families, children, education and child care. The federal government provides this array of services to families typically through state programs that are enacted to secure federal funds. States must develop or revise their policies to meet family needs (Child Welfare Information Gateway, 2009). Starting in 1974 with the passage of the Child Abuse Prevention and Treatment Act (CAPTA), efforts were made to protect children who may experience abuse in their own families. This legislation remains current by reauthorization. A major requirement of this legislation is the coordination between child protective, public health, mental health and developmental disabilities programs (Child Welfare Information Gateway, 2009). However successful coordination is not an activity that is easily achieved and states have difficulty knowing how one program works with another successfully (Mezey, Neas, & Irish, 2003). Some of the difficulty is the policy intention and the street level understanding of the policy (Turnbull et al., 2007). This disconnect on the macro level is problematic for families already experiencing stress due to their rearing a child with a disability. Some cities or local agencies that support families and children are private and cater to those who can afford their services or they fund raise to cover the cost of services. The perception of most families is that there are far too few service choices for them as they as they raise children with disabilities because there is no single family policy in the field of developmental disabilities (Turnbull et al., 2007).

Having a child with a disability is stressful for many parents; however, society places a stigma on families who suffer this fate making it difficult for some families to seek support within the community. This holds particularly true for families on the low extremes of the socio-economic spectrum. In response to the needs of families, the federal Developmental Disabilities Act created State Councils, protection and advocacy systems, and university centers in every state and U.S. territories (Vanderbilt Kennedy Center, n.d.). Examples of these centers are University Centers for Excellence in Developmental Disabilities; Developmental Research Centers; Leadership Education in Neurodevelopmental and Related Disabilities; State Developmental Disabilities Councils, State Protection and Advocacy; and National disability advocacy organizations.

The Individuals with Disabilities Education Improvement Act of 2004 was originally passed by the Congress as PL 94-142 in 1975, which mandated free educational and rehabilitative services for school-age children. Part C of the Act requires an Individual Family Services Plan (IFSP) that is designed to foster child development by recognizing and supporting the family, their needs, concerns, and priorities (Head & Abbeduto, 2007). The *Americans with Disability Act, 1990* has focused on the establishment of rights regarding access to employment, transportation, telecommunications and public accommodations. The provisions of this law are similar to 504 of the Rehabilitation Act of 1973 and the Civil Rights Act of 1964 (which prohibited discrimination based on race, ethnicity, color, creed, or national origin). The law has also expanded opportunities to children and adults with disabilities in education, employment, and various other settings (Heward, 2006).

In addition to the abovementioned federal programs, there are programs administered at the state and local levels that are beneficial to low-income children with disabilities (Parish, Rose, Grinatein-Weiss, Richman, & Andrews, 2008). Such programs include income transfer programs (e.g., Temporary Aid to Needy Families [TANF], Supplemental Security Income [SSI], and Disability Insurance) and health insurance services programs (e.g., State Children's Health Insurance Program, Medicaid, and Early and Periodic Screening, Diagnosis and Treatment). States are also mandated to provide these

services to children with developmental disabilities or developmental delays as well as childcare support for their families (Parish & Cloud, 2006).

Many of these programs such as SSI, medical assistance and food stamps, however fall short in meeting the needs of families (Trachtenberg et al., 2007). For example, managed care plans may not cover all long-term medical and rehabilitative services that are presently funded by mandated programs (Trachtenberg et al., 2007). Moreover, children with disabilities and their families have also experienced a significant reduction in benefits since the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996. According to Parish and Cloud (2006), SSI eligibility was no longer determined by individual functional assessment but was determined based on medically determinable physical or mental impairments. The authors also found that prior to 'welfare reform,' parents of children with disabilities were exempted from work requirements under Aid to Families with Dependent Children (AFDC). With the passage of TANF, these families were no longer exempted from the work requirement. However, the good news is that in some states, some families are exempted from work requirement if the recipient is caring for a household member with a disability and childcare is unavailable (Parish & Cloud, 2006).

In summary, this article has reviewed existing research studies that have examined the risk factors for maltreatment of children with developmental disabilities. It is important to take the ecological systems theory seriously to assist children with developmental disabilities and their families and to bring about systemic change. The first step is to examine how the existing policies can impact parenting practices, attitudes, abilities, and values.

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