

Impacts of Poverty on Quality of Life in Families of Children With Disabilities

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ABSTRACT: *This review of the literature examines the impact of poverty on the quality of life in families of children with disabilities. Twenty-eight percent of children with disabilities, ages 3 to 21, are living in families whose total income is less than the income threshold set by the U.S. Census Bureau. This review found a variety of impacts of poverty on the five dimensions of family, including health (e.g., hunger, limited health care access); productivity (e.g., delayed cognitive development, limited leisure opportunities); physical environment (e.g., overcrowded and unclean homes, unsafe neighborhoods); emotional well-being (e.g., increased stress, low self-esteem); and family interaction (e.g., inconsistent parenting, marital conflict over money). Implications of the findings for policy, research, and practices are suggested.*

If you have no money, it's very difficult to be together, to do fun things, to be at peace, to come home to a haven.... Because if you have no money, the bills not paid, you not gonna rest when you get home. You might have a good family, you know, a good husband, whatever, whatever. But, you don't have money, all that can go down the drain, so Money provides a way of release. You can go on a vacation, maybe, once a year, whereas if you don't have the money, you won't be able to do that. You can't pay your bills. Whereas if you don't have money, you won't be able to do that. And when you can't do those things, you have this feeling of insecurity which floods over into other problems, emotionally. Anger, bitterness, and then it jumps

off on the other family members and you got chaos. (Beach Center, 1999)

I'm trying to fight so much and do so much to get a house, so they can have their own room, have a larger place to live in, because a lot of apartment we in now, everybody is right on top of one another. And then, I stay upset because they are always fighting, and I know if I get a larger place they won't be doing this. And what I'm afraid of is they gonna constantly do this as they grow older. (Beach Center, 1999)

These quotations from respondents in focus groups of families of children with disabilities reveal some of the life demands associated with poverty and

show how the quality of life of families can be affected because of poverty. They also put a human face on research data. As of 1997, more than a fifth of American children lived in families with cash incomes below the poverty level (Dalaker & Naifeh, 1998). Significantly, recent demographic studies have found a growing relationship between poverty and risk for disability (Fujiura & Yamaki, 2000; Kaye, LaPlante, Carlson, & Wenger, 1996; Seelman & Sweeney, 1995). For example, the longitudinal estimates done by Fujiura and Yamaki (2000) indicated a significant increase in the rate of childhood disability over the past 14 years among constituencies defined by poverty and single-parent headed families. The impact of home and family factors (e.g., income, parent education, language background) were found in 900 school districts in Texas to contribute 49% to student achievement, whereas teacher qualifications contributed 43% and class size 8% (Ferguson, 1991). It is becoming increasingly evident that poverty has a tremendous impact on the educational results of all children, including those with disabilities. Thus, poverty is not a secondary topic in the field of special education services and disability policy anymore. Achieving IDEA'S intended results of independence, productivity, equal opportunity, and inclusion is significantly complicated by complex factors associated with poverty.

WHAT IS POVERTY?

DEFINITION

A family, and every individual in it, is considered poor when the family's total income is less than the income threshold set by the U.S. Census Bureau (Dalaker, 1999). The term income is based on income before taxes and excludes capital gains and noncash benefits such as public housing, Medicaid, and food stamps (average monthly benefits per person from food stamps were \$72.20 in 1999). Table 1 shows the Census Bureau poverty thresholds for 1999, according to family size and composition (U.S. Bureau of the Census, 2000b). Poverty thresholds are based on expenditures judged necessary for minimal acceptable amounts of food, housing, and other essentials (Duncan & Rogers, 1991)

and are updated annually for inflation. Poverty thresholds do not vary geographically. In 1989, the U. S. poverty threshold for families of four was \$12,700; in 1999 it was \$17,184.

PREVALENCE

In 1998, the poverty rate was 12.7%; about 34.5 million Americans lived in poverty and a total of 15.1 % of all American families with children were living in poverty. The poverty rate for children under 18 years old was 18.9% (13.5 million children) in 1998. Although this rate was higher than any other age group, it was significantly down from its recent peak of 22.7% in 1993. Despite the fact that this is the first time that the child poverty rate has been below 20% since 1980, children are still the most vulnerable segment of the population (Fujiura & Yamaki, 2000).

Among children with disabilities aged 3 to 21 in the United States, 28% are living in poor families. By contrast, among the children without disabilities in the same age range, only 16% are living in poverty (Fujiura & Yamaki, 2000).

WHAT IS FAMILY QUALITY OF LIFE?

A strong emphasis on quality of life of individuals with disabilities has been prevalent over the past 2 decades (Hughes & Hwang, 1996; Schalock, 1997, 2000). As Schalock noted:

The quality revolution, with its emphasis on quality products and quality outcomes, was emerging rapidly during the 1980s. One of the main products of this revolution was a "new way of thinking," which was guided largely in the mental retardation field by the concept of quality of life, which became the *unifying theme* around which programmatic changes and "the new way of thinking" were organized. This new way of thinking stressed person-centered planning, the supports model, quality enhancement techniques, and person-referenced quality outcomes. (Schalock, 2000, p. 337).

By extension, the quality of life for families with children with disabilities has emerged as a "useful indicator of outcomes of policy initiatives" (Bailey et

TABLE 1
Poverty Thresholds in 1999

<i>Size of family unit</i>	<i>Related Children Under 18</i>				
	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
1 person					
Under 65 years	8,667				
65 years and over	7,990				
2 persons					
Householder under 65	11,156	11,483			
Householder 65 and over	10,070	11,440			
3 persons	13,032	13,410	13,423		
4 persons	17,184	17,465	16,895	16,954	
5 persons	20,723	21,024	20,380	19,882	19,578

Note: Adapted from Poverty thresholds in 1999 [On-line], by the U.S. Census Bureau, 2000b, Available: www.census.gov.

al., 1998, p. 322). Gardner and associates (The Council, 1995) have developed a quality of life outcome measure for families and young children (ages birth to 5 years). This tool measures family quality of life outcomes as they are influenced by and result from early intervention services.

More recently, Turnbull and her colleagues (Turnbull et al., 2000; Turnbull et al., in press) have developed a conceptual framework of family quality of life based on; (a) data from 34 focus groups of parents of children with and without disabilities, individuals with disabilities, service providers, and administrators (159 respondents), and (b) individual interviews with 20 parents with limited English proficiency. These researchers identified 10 quality of life domains and categorized these domains into those that affect the family as a whole and those that differentially affect only individual members of a family. The validity of this conceptualization of family quality of life is supported by the fact that research teams in Australia (Brown, Davey, Shearer, & Kyrkou, in press), Israel (Neikrug, Judes, Roth, & Krauss, in press), and Canada (Brown, Issacs, McCormick, Baum, & Renwick, in press) have proposed highly similar conceptual frameworks to reflect family quality of life. Internationally within the developmental disabilities field, an emphasis on family quality of life as an outcome of human

services has strong momentum (Brown & Brown, in press).

Family quality of life can best be understood from a basic definition of each of its inherent constructs. Consistent with our earlier work (Turnbull et al., 2000; Turnbull et al., in press), we define *family* as those people who; (a) consider themselves as a family (whether or not they are related by blood or marriage), and (b) support and care for each other on a regular basis. We define *quality of life* experienced at the family level as family members; (a) having their needs met, (b) enjoying their life together as a family, and (c) having opportunities to pursue and achieve goals that are meaningful to them. Consistent with the emerging agreement among research teams internationally, we advance four *core principles* related to family quality of life (Brown & Brown, in press):

- Family quality of life changes as each family and its members experience life.
- Family members influence each other.
- Domains impact each other.
- There is no standard family quality of life-the family decides what "quality" means to them.

IMPACTS OF POVERTY ON FAMILY QUALITY OF LIFE

We applied the family quality of life framework developed by Turnbull and her colleagues (Turnbull

FIGURE 1
Conceptual Framework of Family Quality of Life

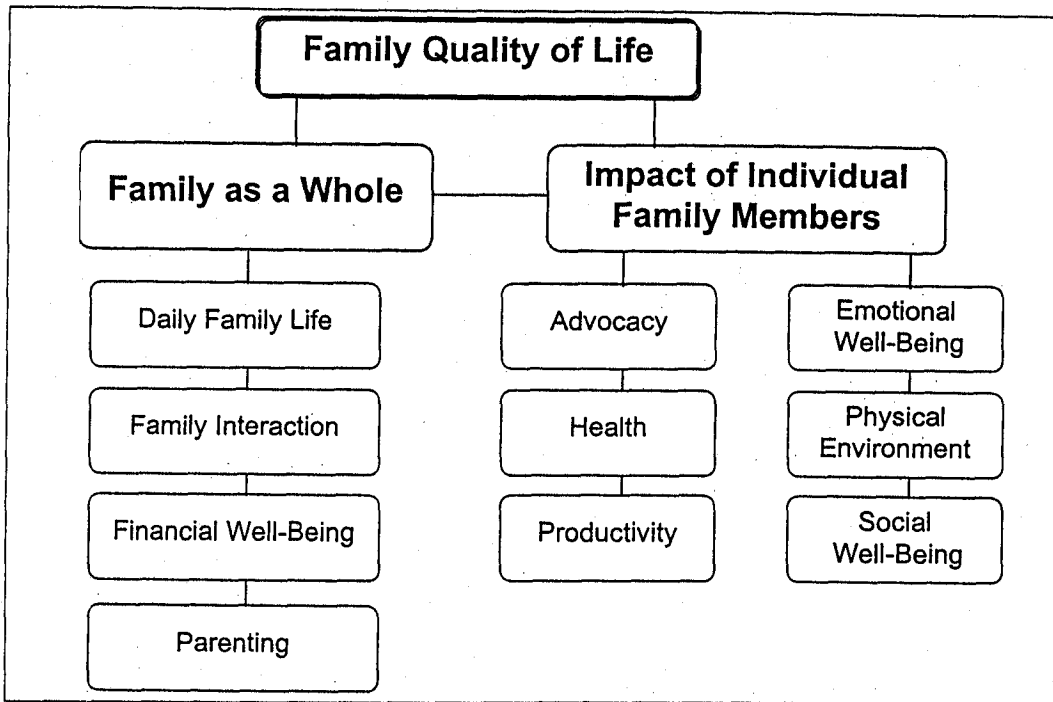
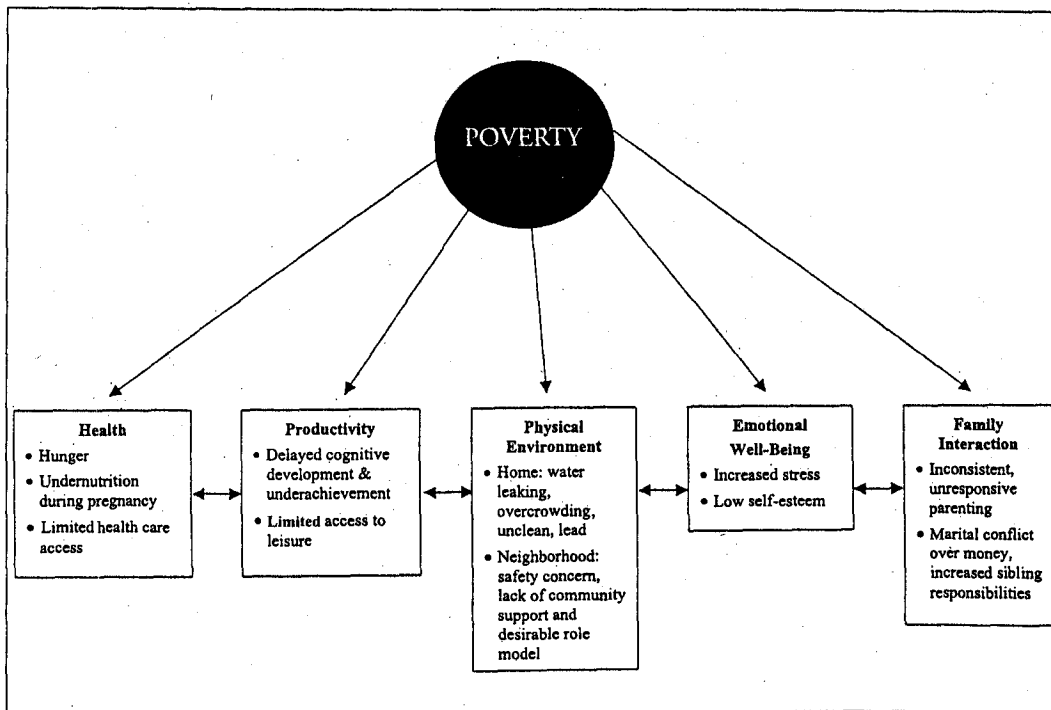


FIGURE 2
Impacts of Poverty on Five Family Life Domains



et al., 2000; Turnbull et al.), in press, to analyze the impacts of poverty (Figure 1). We examine the impact of poverty on 5 of the 10 family quality of life domains: (a) health, (b) productivity, (c) physical environment, (d) emotional wellbeing, and (e) family interaction. We selected these 5 domains because families in our focus groups emphasized these domains in discussing the impact of poverty on them (Turnbull et al., 2000; Turnbull et al., in press). Although there are impacts of poverty in all 10 domains, we limited the number of domains to 5 in order to highlight our major points (see Figure 2).

IMPACTS ON HEALTH

The family quality of life domain of health includes a family's health status, health care, and health impact. The impacts of poverty on health relate to (a) hunger, (b) undernutrition during pregnancy, and (c) limited access to health care.

Hunger. Poverty puts enormous restraints on the ability to afford a nutritionally adequate diet. An insufficient diet in turn impacts family members' health. The Food Research and Action Center (2000), a leading national organization working to improve public policies to eradicate hunger and undernutrition in the United States (website: www.frac.org), reported after its survey of families living below 185% of poverty guidelines that hungry children suffer two to four times more often than well-fed children from such health problems as unwanted weight loss, fatigue, headaches, irritability, inability to concentrate, and frequent colds.

Undernutrition During Pregnancy. Low birth weight (less than 1,250 grams) and related birth defects are associated with undernutrition during pregnancy (McLoyd, 1998). Poor infants are overrepresented in premature samples because of inadequate nutrition and lack of prenatal care (Crooks, 1995). The risk for respiratory, neurological, and cognitive problems (e.g., birth asphyxia, cerebral palsy, seizure disorder, visual and motor coordination problems, mental retardation, and learning disability) increases in premature infants, especially those with low birth weight (McLoyd, 1998).

Limited Access to Health Care. Poverty affects all family members' health because of the family's inability to afford; (a) health services from doctors, dentists, or psychologists, or (b) health supplies, such

as prescription drugs or first aid materials. Although recent expansions in Medicaid coverage have relieved many poor families from the burden of health insurance for their children, one in four poor children (25.2%) still had no health insurance at all during 1998 (U.S. Bureau of the Census, 1999). Even with Medicaid, many doctors refuse Medicaid patients because of low reimbursement rates from the government; and many poor families have difficulty paying small fees for covered services, especially when the fees add up because of multiple follow-up visits or several prescriptions (Sherman, 1994; U. S. Congress, 1993).

IMPACTS ON PRODUCTIVITY

The area of family quality of life associated with participating in and contributing to useful and enjoyable daily activity is referred to as productivity. Productivity is characterized by such indicators as skills, competence, success, opportunity, participation, and vision in the areas of school, work life, leisure, personal development, and accomplishments: Poverty affects productivity in terms of; (a) children's cognitive development and schooling, and (b) family leisure and recreation.

Children's Cognitive Development and Schooling. Poverty undoubtedly can limit children's learning (Jarvelin, Laara, Rantakallio, Moilanen, & Isohanni, 1994; McLoyd, 1998; Sonnander & Claesson, 1999). Poor families cannot pay for quality child care or stimulating toys and books during children's early childhood; furthermore, they cannot afford school supplies, stimulating extracurricular activities such as scouts or camp, or private music lessons (Posner & Vandell, 1999; Sherman, 1994). Early cognitive development and young children's IQs are associated with the family's ability to provide intellectually stimulating experiences (Bradley, Whiteside, Mundfrom, Casey, Kelleher, & Pope, 1994). When the family's priority is survival, less cognitive stimulation, both academic and language, is provided to the children in the family (Smith, Brooks-Gunn, & Klebanov, 1997). Because children from financially advantaged homes arrive at 1st grade with their verbal and math skills at a higher level than do children from financially disadvantaged homes, the strong relationship between family economic back-

ground and children's school outcomes begins early (Huston, 1994).

Disadvantages from early years set in motion a pattern of underachievement and lead to undesirable outcomes in the children's schooling (McLoyd, 1998). Those who live in low-income households have an average of 2.1 fewer years of school than those who live in affluent households at the same age by the time children are 24 years old (Mayer, 1997). Also, 34.1% of children from poor families dropped out from high school, but the national average dropout rate was only 17.3% (Mayer, 1997) .

When the children have a disability and also live in poverty, the impact of poverty may be more significant. For example, Schonaut and Satz (1983) found, from their investigation of the relationship between learning disabilities and poverty, that socioeconomic status is a powerful variable in early learning disabilities and in children's learning outcomes. They reported that the prognosis for children in poor families was worse than for children from middle-class families.

Leisure and Recreation. Poverty restricts opportunities for family members to play, exercise, and socialize in sound recreational activities (Sherman, 1994). The cost of sports equipment, fees, and uniforms for learning leisure activities, and finding enough time to participate in recreational activities as a family unit are all beyond poor families' affordability. Even free facilities such as parks are used less by low-income families. Scott and Munson (1994) investigated people's use of public parks in Greater Cleveland and found that income was the single best predictor of perceived constraints to park visitation among the various population characteristics. When poverty limits families' choices for recreation and leisure, high-risk and unhealthy habits such as smoking and heavy drinking may take their place in the surplus of unstructured time (Sherman, 1994). In regard to poor families with a member with a disability, Crawford (1989) pointed out that even recreation programs that are provided free of charge for individuals with a disability are biased in that the programs focus on skills development and remediation rather than making the time enjoyable and relaxing for individuals with disabilities and their families.

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IMPACTS ON PHYSICAL ENVIRONMENT

The physical surroundings of a family home is the physical environment. This domain encompasses the human factors related to family life (e.g., neighbors, community culture) as well as the physical factors. The indicators of this domain include space, safety, and order of home, work, school, and community environment. The impacts on physical environment relate to two important aspects of family life: (a) home environment, and (b) neighborhood environment.

Home Environment. A safe and comfortable house is a basic condition for any family life (McLoyd & Wilson, 1991). Poor families, however, were 2.5 times more likely than nonpoor families to experience a nonworking water heater, toilet, or other plumbing system in their houses the previous winter, three times more likely to have exposed wiring, more than three times more likely to live in homes with rats, mice, or roaches, and more than three times more likely to live in crowded homes (more than one person per room; U.S. Bureau of the Census, 2000a). Sherman (1994) pointed out that overcrowding, utility shut-offs, inadequate heating, and other housing quality problems may disrupt children's ability to rest or do homework and may also contribute to stress and depression in adults. Higher rates of poor families living in older housing that contains lead paint and lead-soldered pipes also result in higher levels of lead in family members' blood than in nonpoor families (Crooks, 1995). In short, poverty impacts the home environment, and in turn, the home environment impacts the productivity, emotional well-being, and health of all family members.

Neighborhood Environment. The fact that poor families often cannot afford a decent house implies that these families have little choice about whether they are able to live in decent neighborhoods. Compared to children of nonpoor families, children of poor families are more often excluded from high-quality childcare environments, better schools, safer play areas, and positive adult role models. Likewise, poor families are more concerned than nonpoor families about crime, violence, and drugs, and are more irritated by noises and odors (Sherman, 1994).

Duncan, Brookes-Gunn, and Klebanov (1994) investigated how neighborhood conditions affect the behaviors of a group of parents and their 5-year-old children. They found that living in low-income neighborhoods had a significant correlation with higher levels of externalizing problem behaviors in young children, such as temper tantrums or destruction of objects. The authors hypothesized that poor parents are less inclined to reduce aggression and acting out in their children because of a greater need for their children to defend themselves through such behaviors in poorer neighborhoods. In another study, Duncan (1994) found that adolescents who grew up in poor neighborhoods completed less years of school and had higher school dropout rates than those who grew up in affluent neighborhoods. With regard to disability and neighborhoods, living in a supportive community is associated with better coping capability of the family (Yau & LiTsang, 1999). Clearly, neighborhood quality of life is closely connected to family quality of life.

IMPACTS ON EMOTIONAL WELL-BEING

Emotional well-being embraces the emotional aspects of family quality of life, such as adaptability, positive thinking, identity, happiness, and stress/exhaustion. Stress, adaptability, and self-esteem are the main themes in the literature regarding the impact of poverty on families' emotional well being.

Stress and Adaptability. Earlier in this article, we reported the findings about stress caused by limited access to recreation or unpleasant physical environments. Financial instability itself also is a direct source of stress both in adults and children.

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McLeod and Shanahan (1993) examined the relationships between length of time spent in poverty and children's mental health based on the data from the 1986 Children of the National Longitudinal Survey of Youth (NLSY) (Center for Human Resource Research, 1988). They found that, as the length of time spent in poverty increases, so too do children's levels of stress and feelings of unhappiness, anxiety, and dependence. In addition, low-income adults are more likely to suffer from stress and mental health problems due to difficult life events such as not being able to pay their bills, being evicted, losing their jobs, moving frequently, and worrying about money (McLoyd, 1990).

When the family has a child with disabilities, more stress is added to the strain already caused by poverty and more coping strategies will be needed by the families. Scorgie, Wilgosh, and McDonald (1998) examined 25 recent studies of stress and coping in families of children with disabilities to find out how stress and adaptability in families of children with disabilities are different according to many family variables. They found that families with higher incomes have more choices available to help them cope and also demonstrated higher paternal and maternal satisfaction. Yau and Li-Tsang (1999) conducted a similar review of the literature of the last 20 years to examine the factors that enhance the adaptation of parents of children with a disability. They found that a financial situation that helps to cope with extra health and daily living demands of a child with a disability also contributes to parental adaptability.

Self-Esteem. Self-esteem is the central evaluative component of the self and reflects the degree of an individual's belief about his or her own worth (Rosenberg, 1989). Brody and Flor (1997), in their test of a family-process model, found that adequate family financial resources are linked with higher self-esteem in mothers. In the investigation of the relationship

between economic hardship and adolescent self-esteem in a sample of 387 Midwestern families, Ho, Lempers, and Clark-Lempers (1995) found that economic hardship had an adverse effect on adolescent self-esteem. They speculated that this result was obtained because the adolescents' parents, exhausted from economic hardship, may convey negative appraisal of their children. Regarding children's self-esteem, on the other hand, many other authors assert that poverty has only weak direct effects on children's self-esteem (Demo, Small, & Savin-Williams, 1987; Whitbeck, Simons, Conger, Lorenz, Huck, & Elder, Jr., 1991). Likewise, Axinn, Duncan, and Thornton (1997) found in their longitudinal study of mothers and their children that family income was a significant predictor of the children's self-esteem, but not after other aspects of the family, such as the father's schooling, were controlled.

IMPACTS ON FAMILY INTERACTION

Family interaction is characterized by the emotional, relational, and "invisible" component of family life. The indicators include family routines, relationships among family members, roles, emotional climate, communication, and behavior/discipline. In this section, we describe the impacts of poverty on family interaction according to: (a) the parent-child interaction, and (b) other family interaction.

Parent-Child Interaction. Warm, responsive interactions between parent and child provide children with a sense of security and trust. Poverty limits parents' capacity for positive interaction. Studies found that negative emotional conditions in poor parents are highly predictive of parental inconsistency and unresponsiveness to children's dependency needs and that the parents exhibit less positive behavior such as hugs, praise, or supportive statements toward their children (Lempers, Clark-Lempers, & Simons, 1989; McLeod & Shanahan, 1993). Also, the parents showed less sensitivity and satisfaction with parenting and more frequent use of aversive, coercive discipline methods (Elder, Nguyen, & Caspi, 1985). Literature indicates, however, that parents should not be blamed for these factors because parents and their children especially are victims of economic and social inequality (McLoyd & Wilson, 1991).

Other Family Interaction. Economic stress can add to family conflicts and irritability over many topics, including money. Conger, Ge, Elder, and Lorenz (1994) interviewed 378 7th-grade students and their parents every year until the students finished 9th grade. Their data supported the theoretical model that economic pressure would increase marital conflict as well as conflicts between parents and children over money. Especially when a family member has a disability, marital satisfaction becomes more critical in increasing parent participation in child care and enhancing family adaptability to their member with a disability. Research on the relationship between marital satisfaction and child care in 48 married couples of children with developmental disabilities revealed that higher family income is related to higher marital satisfaction for fathers and that marital satisfaction is positively associated with the fathers' participation in child care for their children with disabilities (Willoughby & Glidden, 1995).

Other studies have found that brothers and sisters of lower socioeconomic status families were more likely to be involved in the care of their sibling with a disability; and if that responsibility is too heavy, it can be detrimental to the nondisabled siblings (Grossman, 1972; Wilson, Blacher, & Baker, 1989). Stoneman, Brody, Davis, and Crapps (1988) found that siblings of children with a disability in higher-income families participated in more activities outside the home than they did in lower-income families. It is evident that poverty and disability conditions have an impact on the interaction between siblings.

There is no literature describing the difference between poor and nonpoor families in their relationships with extended families (e.g., grandparents). The few existing studies focus on the ways in which grandparents in poor families contribute to the quality of life rather than comparing or contrasting them with affluent families. For example, Chase-Lansdale, Brooks-Gunn, and Zamsky (1994) conducted home-observation of 99 African-American families of 3-year-old children living in poverty and found that the quality of parenting was increased when young mothers lived with the grandmothers of the children (the mothers of the young mothers). Baydar and Brooks-Gunn (1991) also found that, when mothers were

TABLE 2
Policies That Can Benefit Families Affected by Disability and Poverty

<i>Family Quality of Life Domains</i>	<i>Suggestions for Policy Reform</i>
Health	Increasing access under Women, Infants, and Children, Food Stamps, Free/Reduced School Meals. Decreasing the disincentive of health care providers to serve Medicaid-qualifying patients (Reichard, Turnbull, & Turnbull, in press).
Productivity	Increasing the "poverty factor" that Congress incorporated into the 1997 IDEA amendments (federal funds distributed to take into account poverty).
Physical Environment	Increasing access to housing (i.e., enforcing Fair Housing Act) and affordability of housing stock that is accessible to disability-affected families. Increasing law enforcement and crime prevention activities in order to increase the safety of the places where people live and where violence contributes to disability.
Emotional Well-Being	Increasing the funding and effectiveness of community-based mental health services and reviewing the sliding scale fees set by local providers.
Family Interaction	Increasing adoption subsidies to benefit children with disabilities. Increasing efforts to prevent and intervene noncriminally earlier in cases of child maltreatment. Allowing Home-and-Community-Based (Medicaid) waiver funds to be used to pay families to support their members who have disabilities.

employed, grandmothers were the most beneficial child care providers who also contributed the most to the cognitive development of children raised in poverty.

DISCUSSION

In spite of the long period of economic growth of the United States in the 1990s, many poor families struggle against multiple challenges caused by poverty. In particular, the fact that households with a family member with developmental disabilities have significantly lower income and greater dependence on means-tested income support indicates that poor families of children with a disability will be affected by poverty more severely than either poor families of nondisabled children or affluent families of children with a disability (Fujiura, & Yamaki, 1997). Because poverty permeates several domains of family quality of life and because the impact on multiple domains is often detrimental to all family members, a single action or step cannot solve pervasive problems.

There is a need for comprehensive and systematic family support to meet these multiple needs. Accordingly, the implications from this literature review should be contemplated at various dimensions of supports: policy, research, and practices.

IMPLICATIONS FOR POLICY

The term *new morbidity* (Baumeister, Kupstas, & Klindworth, 1990; Baumeister, Kupstas, & Woodley-Zanthos, 1993; 1996) accurately describes the co-prevalence of childhood disability with family structure (basically, single-parent families); poverty; and ethnic, linguistic, and cultural status (Fujiura & Yamaki, 1997; 2000). The term also suggests a multipronged approach to addressing the challenges of family quality of life that are related to poverty.

It is clear that policies targeted at raising family incomes also contribute to increasing children's cognitive development and academic accomplishments (McLoyd, 1998). Illustrations of

Poor families of children with a disability will be affected by poverty more severely than either poor families of nondisabled children or affluent families of children with a disability.

those policies, as connected to the family quality of life domains that we discussed here, include those set out in Table 2. Note that in Table 2 we suggest incremental reforms of these policies to benefit families affected by both disability and poverty. Our recommendations pre-date the initiatives of the administration of President George W Bush.

As powerful as these policies have been, and can be, in enabling families to satisfy their basic needs, there is some evidence that income-transfers (payments of cash or vouchers to eligible families) alone traditionally have not produced dramatic improvements in family well-being (Duncan & Brooks-Gunn, 1997; Duncan & Rogers, 1991). More recent evidence, however, indicates that the 1996 federal welfare reform law (Personal Responsibility and Work Opportunity Reconciliation Act, 1996) seems to have had positive effects on families and on their well-being:

- The number of welfare recipients has declined.
- The family earnings of former participants has increased and their degrees of poverty have been eliminated (except among the poorest women).
- The number of female-headed families has declined.
- The number of marriages among former welfare recipients has increased (Schoeni & Blank, 2000).

It is not clear whether the gradual move out of poverty is attributable directly to the new welfare policy or to factors related to the rise in earnings of other family members and to the reestablishment of two-parent families (Schoeni & Blank, 2000). Nor does there appear to be solid evidence concerning the effects of welfare law reform on families whose children have disabilities or are headed by people with disabilities. Indeed, the evidence still is that participation in the workforce by individuals with disabilities is low relative to the capabilities of those with disabilities (Blanck, 1998).

There also is evidence that income inequality among children comes primarily from the differences in the income-producing ability of the adults with whom they live, though the structure of their family (i.e., one- or two-parent families) and the geographical location in which they live remain highly relevant to childhood poverty (Acs & Gallagher, 2000). Policies, such as the earned income tax credit, that (a) promote two-parent families, (b) increase the benefits payable to single-parent families, or (c) raise the earning capacities of low-income families seem desirable (Acs & Gallagher).

Also desirable are policies that assist the newly described "fragile family"-the one that consists of poor children born outside of marriage whose two natural parents are working together to raise them either by living together or by shared visitation (Sorensen, Mincy, & Halpern, 2000). Those policies might consist of repealing or scaling back of noncash antipoverty programs, such as food stamps and Medicaid. Noncash antipoverty programs allegedly offer incentives to single-parent families that are unavailable to two parent families. Another policy option is to relax the national child support enforcement system (Title IV D, Social Security Act, 1975) and replace it with employment-related training and opportunities for poor nonresident fathers (who are, themselves, struggling to stay afloat economically, much less meet the demands of child support; Sorensen et al., 2000).

Policies such as these, however, are highly debatable, and compelling arguments exist for following a more traditional approach, such as that advanced by the Children's Defense Fund (1999): (a) exemptions from welfare-aid cutoffs should be allowed from time limits for more than 20 percent of families if they meet hardship definitions established by states, (b) states should use their own funds to provide aid to poor families (e.g., California) until the federal law is changed to allow states to continue providing the benefits after the time limit, and (c) aggressive outreach efforts should be made to ensure food stamps and Medicaid reach eligible poor families.

FIGURE 3
Suggetions For Disability Policy Reform

- Suggestions for Disability Policy
- Increasing the Earned Income Tax Credit allowance for disability-affected families will provide them with more expendable income.
 - Increasing the incentives for Individual Retirement Accounts/401(k) contributions for families whose children have disabilities may lead to family financial stability for those families who work but may be among the “working poor” or for those who even have escaped that category.
 - Eliminating the marriage penalty to respond positively to the “fragile family” plight.
 - Preserving mortgage-payment deductibility seems assured (given that is it “middle-class welfare” policy), but increasing the deductibility of costs associated with keeping children with disabilities in a family would be helpful (e.g., changing the medical-cost deductibility, giving a tax credit to families at a certain level of poverty for medical and rehabilitatiave/habilitative costs associated with their children, redefining “child” to be any person of any age who receives more than 25% of their support from their family; cf. the law now limite the support to 50%).
 - Increasing the subsidy for adopting children with disabilities.
 - Increasing the minimum wage and the ability of parents and children with disabilities to earn but not be disqualified from receiving SSI or SSID and attendant Medicaid and Medicare benefits.
 - Extending the Family Medical Leave Act to families who work less than full-time.
 - Providing the job training, with associated child care, to parents.
 - Providing tax benefits for private employers who hire disability-affected families on “flex-time” bases.
 - Increasing the value and duration of cash or voucher programs at the federal and state levels.

Alternatives exist and may be considered if the 107th Congress takes up the issue of "tax reform" during its first session (2001-2002). Figure 3 sets out policies that are generally consistent with the "new" (post-Personal Responsibility and Work Opportunity Reconciliation Act) and "traditional" approaches that have disability-specific foci.

The mantra of the "old liberals" (Kennedy-Johnson types) and "neo-conservatives" ("progressive Republicans") seems to have been the same: Good national economic policy is good family policy. By the same token, good family policy seems to be good disability policy. The debates have been around means, not around fundamental principles of economics; and around "dependency vs. independence" as a consequence of family and disability policy. During the past 4 to 6

years (1994-2000), pre-Bush presidency, the leadership of both parties and of both "wings" of both parties seem to have come to the center—at least so far as being more pragmatic and less ideological about how to approach families, poverty, and disability. Whether that centrist magnet will be obtained during the next several years remains unclear. Once again, it is a matter of will, not knowledge, that may restrain the progress made to date in establishing quality of life for families affected by disability.

IMPLICATIONS FOR THE RESEARCH

First, many studies found a significant association among poverty (income), disability, and race (culturally diverse groups), but more studies should be

conducted to find out the degree of association or the causal relationships. Depending on findings about association or causal relationships, implications for policy and practices would be different. For example, if there is a high representation of disabilities in poor families (i.e., if poverty caused disability), primary prevention (reducing possible risk factors in advance) and secondary prevention (minimizing the effects of risk factors while also addressing academic achievement) seem warranted. Although some educators may believe that addressing the problems of poverty is beyond their role and that educators should only concentrate on education, it may be that poverty factors must be addressed before other educational goals can be accomplished. For example, trying to address problem behavior at school (e.g., sleeping through class) may be futile without addressing the multiple poverty factors in family environments (e.g., no bed) that are contributing to and maintaining the problem behavior.

Second, though many suggestions for policies and practices have been made so far, there have not been enough studies of cost-benefit or effectiveness of the existent policies and practices. There is a need for collecting information about the impact of welfare (e.g., Social Security Income) and human services (e.g., full-service school, wraparound services) implementation on children and families, and for tracking earnings, employment, food stamps and Medicaid receipts, and other indices over time to determine whether or how much they improve family quality of life (Children's Defense Fund, 1999).

IMPLICATIONS FOR PRACTICE

Practice implications can be divided into those that are systemic and those that incorporate actions that can be taken by individual practitioners when systemic solutions are not available.

Systems Level. On a systems level, there is an increased recognition that no single professional or agency can meet the multifaceted needs of poor children and their families; therefore, stakeholders create school-family-community partnership to envision, create, and implement comprehensive, services either at school sites or within close neighborhood proximity. Many terms are used to refer to this arrangement including full-service schools, community-linked services, community schools, school-linked

services, interprofessional collaboration, and others (Adelman & Taylor, 1997; Amato, 1996; Briar-Lawson, Lawson, Collier, & Joseph, 1997; Calfee, Wittwer, & Meredith, 1998; Coltoff, 1998; Comer, Haynes, Joyner, & Ben-Avie, 1996; Doktor & Poertner, 1996; Dryfoos, 1996a, 1996b, 1998; Dupper & Poertner, 1997; Lawson & Briar-Lawson, 1997; Melaville, 1998; Sailor, in press; Skrtic & Sailor, 1996; United States General Accounting Office, 2000). Regardless of the particular name, these approaches have in common:

- A single point of entry into the service system.
- Coordinated delivery of services.
- Recognition of the holistic needs of students and families (especially ones who experience poverty).
- Innovative and nontraditional approaches to improve academic outcomes including extended school day programs.
- Links to future job opportunities.

A recent U. S. General Accounting Office (2000) evaluation indicated that full-service approaches have not been evaluated rigorously in terms of academic outcomes, but they have reported improvement in attendance and graduation rates. One approach, the career academy, has conducted a 10-year evaluation and documented that students had improved school attendance, credits toward graduation, and preparation for postsecondary education.

Table 3 is a service matrix implemented in four school sites, located in one Florida community, ranging from pre-kindergarten through grade 12; it illustrates the broad range of supports and services available to students and families (Calfee et al., 1998). Although the majority of these services is located on one of the four school campuses, some of the services are offered at a community center, a student's home, a child-care center, or a family service center. Such a broad array of services likely would make a significant and sustainable difference in the quality of life outcomes for children and families who experience poverty.

Most of the writing on full-service approaches has not been in the special education literature. The exception is the work of Sailor and his colleagues (Sailor, Gee, & Karasoff, 2000; Sailor, in press; Skrtic & Sailor, 1996). Equally noteworthy is that the

Table 3
Service Matrix for a Real Full-Service School

<i>Service</i>	<i>Description/Clientele</i>	<i>Location/Hours</i>	<i>Funding Sources</i>
Adult Education	Basic education and remediation for adults 16+ Undergraduate and graduate coursework	Middle School, 5-8 p.m., Mon. & Thurs. College and enrichment classes by semester	<ul style="list-style-type: none"> • Adult Learning Center • Community schools • Community college • State university
Casework	Protective services, Project Vision Referrals for delinquency, foster care, developmental and economic services, alcohol/drug abuse, mental health, counseling, home visits	Middle School, weekdays	<ul style="list-style-type: none"> • State Dept. of Children and Families (DCF)
Child Care	Free or reduced, subsidized child care for children 3 months to 12 years Some restrictions apply	Appointments taken for location convenient to parent	<ul style="list-style-type: none"> • Children's Services
Community Use of School Facilities	Civic and parent groups apply for permission Available to all, free	Primary, Intermediate, and Middle Schools	<ul style="list-style-type: none"> • County School Board
Economic Services	AFDC, Medicaid, food stamps: intake, screening, application, review Referrals to other community resources	Middle School, M-F, 8 a.m.-5 p.m. Appointments preferred; walk-ins accepted	<ul style="list-style-type: none"> • DCF
Educational Opportunity Center	Career options counseling and financial aid for students 19+	Community Center, Tuesdays, 1-4 p.m.	<ul style="list-style-type: none"> • Community college
First Call for Help	Toll-free community resource information hotline	Available district-wide	<ul style="list-style-type: none"> • Center for Community Mental Health • United Way • Retired senior volunteers • County School Board
Graduation Enhancement Program	Technology -based early intervention to promote student learning	Intermediate and Middle Schools	<ul style="list-style-type: none"> • Supplemental School Health Grant: DCF and State Dept. of Education
Health Services	RN and psychologist: prevention, early detection, early intervention, and community referrals Mobile health unit Emergency food and clothing Affordable health insurance for school-age children	Intermediate and Middle Schools, M-F, schools hours	<ul style="list-style-type: none"> • Sacred Heart Hospital • Community resources • Healthy Kids Corp.

Table 3
(Continued)

<i>Service</i>	<i>Description/Clientele</i>	<i>Location/Hours</i>	<i>Funding Sources</i>
Healthy Kids	Affordable health insurance for children ages 3-19	Available district-wide Enrollment by toll-free number	<ul style="list-style-type: none"> • State legislature • Healthy Kids Corp. • County School Board • County commissioners • Blue Cross/Blue Shield Health Options
Home Visitor High-Risk Infant Program	Home visits by social worker for at-risk infants Training in parenting skills, immunizations, etc.	South end of county	<ul style="list-style-type: none"> • (DCF)
Job Services	Employment services for job training and placement with computer access to regional job listings	Middle School, M-F, 8 a.m. - 5 p.m.	<ul style="list-style-type: none"> • DCF • Private Industry Council (PIC) • Job Training Partnership Act • DCF
Juvenile Alternative Services Program (JASP)	Meaningful sanctions and services for certain juvenile offenders and their families, designed to divert from judicial processing and to reduce incidence of law violations	Intermediate and Middle Schools	<ul style="list-style-type: none"> • DCF
Latchkey	State-licensed after-school programs until 6 p.m. school days and some holidays Summer camp program, 7:30 a.m. - 6:30 p.m.	Primary, Intermediate, and Middle Schools, Campers picked up and returned to Intermediate School	<ul style="list-style-type: none"> • Community schools • Parent tuition • Title XX funding for qualified families
Mental Health Counseling	Counseling for students and families Exceptional student education specialist Full-time therapist for emotionally or severely emotionally disables	Primary, Intermediate, and Middle Schools	<ul style="list-style-type: none"> • Center for Community Mental Health • Medicaid • Private insurance
Parent Involvement Center	Educational and counseling materials available for check-out by parents for use with students at home	Primary, Intermediate, and Middle Schools	<ul style="list-style-type: none"> • Project Vision • National Foundation for the Improvement of Education (NFIE) • Junior League • Community resources • Parent-teacher association (PTA) • Parent advisory boards

Table 3
(Continued)

<i>Service</i>	<i>Description/Clientele</i>	<i>Location/Hours</i>	<i>Funding Sources</i>
Parent Workshops	Hosted periodically during the school year for all interested persons	Primary, Intermediate, and Middle Schools	<ul style="list-style-type: none"> ● Project Vision ● Community resources ● PTA
Prekindergarten	Head Start or early intervention programs for 4-year-olds Placement on space-available basis Some restrictions	Intermediate school	<ul style="list-style-type: none"> ● Parent advisory boards ● Federal and state funding in collaboration with County School Board
Private Industry Council (PIC)	Employability skills for middle school, 16+ students, and adults	Middle School	<ul style="list-style-type: none"> ● PIC
Protective Services	On-site investigator for abuse or neglect complaints through State Protective Services System's Abuse Registry	Middle School	<ul style="list-style-type: none"> ● DCF
Research	Ongoing research activity supervised by state university	Primary, Intermediate, and Middle Schools	<ul style="list-style-type: none"> ● Full-service schools ● State university
Sheriff's Department	On-site duty available for assistance with law enforcement issues, education, and prevention activities	Primary, Intermediate, and Middle Schools	<ul style="list-style-type: none"> ● County Sheriff's Department ● Full-service schools
Volunteers	Volunteers act as tutors, teacher helpers, mentors, etc.	Primary, Intermediate, and Middle Schools	<ul style="list-style-type: none"> ● Retired senior volunteers ● County School Board
Women, Infants, and Children Program	Offers nutrition counseling and supplemental food for prenatal and postnatal care and for children from birth to 5 years	Community Center, first Wednesday and second Friday each month, 9 a.m.-3 p.m.	<ul style="list-style-type: none"> ● Community Organizations ● PIC ● Federal funding through County Public Health Unit

Note: From *Building a Full-Service School* (pp. 18-20), by C. Calfee, F. Wittwer, and M. Meredith, 1998, San Francisco, CA: Jossey-Bass Publishers.

literature on full-service approaches rarely provides examples related to students with disabilities or any linkage to the processes prescribed by the Individuals with Disabilities Education Act (1997) for identifying, evaluating, and serving students with disabilities. Clearly, good practice includes expanding full-service models to ensure that special education and related services are imbedded in full service models with particular attention to the needs of students with disabilities who experience the multiple challenges of poverty.

Individual Practitioner Level. Working at an individual practitioner level, educators can be advocates in school districts to learn more about state-of-the-art full-service models and to consider the development of those models in their local areas. In addition, they can take such action as:

- Learning more about how poverty factors impact students' and families' functioning as the basis for identifying effective instructional practices.
- Using school resources creatively to meet priority needs.
- Partnering with related service providers, within school and community networks, in meeting individual needs.

Teachers who have an opportunity to learn more about a student's home life often identify information that is highly useful for instruction (Edmonson, 2000). For example, recently, we were partnering with a teacher who was distressed that a student in her class was sleeping through a significant portion of each class period. After trying several discipline techniques with very limited success, the teacher resorted to suspending the student: for sleeping. After working with the school's positive behavioral support team, the teacher learned that the student does not have a bed. Upon learning about the student's home life, the teacher became far more empathetic and partnered with the school's positive behavioral support team to locate a person who had an extra bed in storage who was happy to give the bed to the student and his family. Supporting the student to have adequate resources for rest was a far more effective instructional technique than punishing the student for sleeping or rewarding him for staying awake.

Practitioners also can creatively use school resources. Consider, for example, a student whose family home lacks running water; he was not able to have adequate hygiene or to take care of the escalating acne that caused him tremendous embarrassment. The school district's associate superintendent made arrangements for the student to use the showers in this school's gymnasium on a daily basis for his hygiene. The teacher and student worked, out a plan for this to be done on a discreet basis so that the student would not be singled out by classmates for not having adequate hygiene resources in his home. The associate superintendent also recommended that the school district use school buses between their pickup of children in the morning and their delivery of children in the afternoon to enable parents and other family members who do not have transportation to gain access to needed human services in the community through school-supported transportation.

Finally, educators can network with school social workers, other related service providers, and professionals who work for community agencies that have an explicit mandate to address issues associated with poverty. Many states have Community Development Corporations (website: www.ncced.org) that have the explicit mandate of addressing critical needs associated with poverty such as housing, employment, safe neighborhoods, and transportation. Educators can become knowledgeable about school and community resources and reach out to these resources to enable students and families to have broader services and supports when full-service schools are not available.

Educators can be advocates in school districts to learn more about state-of-the-art full-service models and to, consider the development of those models in their local areas.

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Manuscript received June 2000; manuscript approved May 2001.

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This research was supported by a grant from the National Institute on Disability and Rehabilitation Research to the Beach Center on Disability, Grant #H133B980050.