Benefits of the Americans With Disabilities Act of 1990 for Children and Adolescents With Disabilities

Jean A. Kalscheur

Key Words: environment • models, occupational therapy

The Americans With Disabilities Act of 1990 (ADA) (Public Law 101–336) is a civil rights law intended to bring men, women, and children with disabilities into the mainstream of American life. This paper discusses the relation of the law to pediatric occupational therapy practice. The spirit of the ADA is highly compatible with occupational therapy's philosophical perspective. Occupational therapy personnel value functional independence, which requires an interactive relation between the environment and the child. Current pediatric practice models focus on deficit reduction and give limited attention to the environment, even though physical, social, and temporal environments contribute to disability, as do performance component deficits. An environment-centered model is suggested as a pediatric service provision approach compatible with the philosophical background of the ADA. This model emphasizes education and consultation to businesses and individuals for the purpose of altering environments to be accessible and accommodating to children and adolescents with disabilities. Three examples of environment-centered services are presented: (a) an evaluation of environments and reasonable accommodation recommendations for a teenager with a physical disability, (b) the mother of a child with cerebral palsy, and (c) the parents and program director of a community recreation program.

Philosophical Framework

Philosophically, we as occupational therapy practitioners value people doing for themselves and taking responsibility for their own health and wellness (Yerxa, 1983). We...
also value the right of each person, regardless of disability, to live, learn, and act (Bing, 1986) and to have meaning and purpose in his or her life. Clients, in collaboration with occupational therapy personnel, work toward functional independence as an outcome of the occupational therapy process. Functional independence demands an interactive relationship between the person and the environment. The individual brings competence and autonomy, and the environment provides physical, social, and temporal supports that encourage independent behaviors (Rogers, 1982). Competence requires the person to have the performance components and skills necessary to perform tasks of daily life. Autonomy means that a person is self-governing, functioning independently without control by others (Merriam-Webster, 1988) and implies that a person makes choices, separate from the environment, which fulfill personal needs and desires.

Competence and autonomy, through the process of development, are learned as children interact within their natural environments. Children develop skills in sensorimotor, cognitive, psychological, and psychosocial performance components in order to achieve competence in task behaviors. They come to know themselves, their abilities, their limitations, and their desires in order to achieve autonomy and to see themselves as having roles, such as sibling, player, daughter or son, and student. Environments in which children interact have to require, encourage, and support the acquisition of competence and autonomy. Autonomy, competence, and environmental support create functional independence in children and adolescents with disabilities.

A model of pediatric occupational therapy practice should focus on the integration of competence, autonomy, and environmental accessibility with an expected outcome of functional independence. Environments, both physical and social, can be as disabling as any developmental or performance component deficit (Jongbloed & Crichton, 1990). Barriers in the environment "limit opportunities, promote discrimination, prevent integration, restrict choice and frustrate self-help" (Dejong & Lifchez, 1983). The ADA provides a legal mechanism guaranteeing the right to barrier-free environments for children and adolescents with disabilities. The law does not mandate participation by occupational therapy personnel in creating barrier-free environments; it offers the opportunity for creative partnerships. Participation in the implementation of the ADA may expand the method of service provision from direct service to include education and consultation with children, adolescents, parents, city planners, architects, program designers, and employers. Implementation of the spirit of the ADA alters the model of practice from reducing children's deficits to altering physical and social environments that impede or restrict competence and autonomy, thereby limiting the participation of children and adolescents with disabilities and their families in life's activities.

The Relationship of the ADA to Pediatric Practice

Title I

Title I of the ADA addresses employment discrimination and reasonable accommodations within the work setting for persons with disabilities. Employers cannot discriminate against qualified persons with disabilities. Physical environments and tasks must be made accessible for these persons (ADA, 1990). Employment is not an issue for children in our society, but it does become an important developmental issue for teenagers. According to the Bureau of Labor Statistics (U.S. Department of Labor, 1991), 45% of teenagers between 16 and 19 years of age are employed in the labor force. Preteens will explore work through responsibilities at home or in their neighborhood. An adolescent will generally seek employment outside the home at 16 years of age (Mosey, 1986, p. 120). The motivation may be to earn money, but many other tasks are learned. A working teenager learns about job interests, relationships with co-workers and persons in supervisory roles, and personal capabilities and skills. Evaluating future career choices and making plans toward those goals begin in adolescence. Teenagers with disabilities need to see themselves as potential workers if they are to achieve the goal of being workers as adults. The opportunities need to be there for all teenagers, regardless of the handicapping condition.

Organizations that employ persons with disabilities often work with local employment agencies or high schools (Geber, 1990). Occupational therapy personnel can consult with transition and employment preparation programs in schools and communities. Expertise in task analysis and identification of physical, social, and temporal accommodations are contributions that occupational therapy personnel can make to persons with disabilities participating in these programs. Occupational therapy personnel can also provide on-the-job assistance to the co-workers of adolescents with disabilities. Attitudes and stereotypes may need to be dispelled, for example, co-workers not feeling comfortable with a person with disabilities, prejudging the person's abilities, or coddling and overprotecting the person.

Persons associated with children and adolescents with disabilities are also protected from discrimination under the ADA, including parents and siblings. Parents of children with disabilities, for example, may need more flexibility in a work schedule to accommodate physician's or therapy appointments, compared with employees not associated with a person with disabilities. Siblings should not be required by a school principal to transport a sister or brother with disabilities to and from school if the district lacks a bus with a wheelchair lift. Occupational therapy personnel can be involved in programs that educate siblings and parents about their rights as well as in programs for employers, co-workers, and school per-
sonnel concerning attitudes, expectations, and reasonable accommodations.

**Title II**

Title II of the ADA addresses access to public services, programs, and facilities under the administration of state and local governments, whether they receive federal funds or not. Public transportation agencies are also addressed in Title II. Different or separate services provided to children and adolescents with disabilities would be prohibited under the ADA (National Mental Health Association, 1990). This is an extension of Section 504 of the Rehabilitation Act of 1973 (Public Law 93–112). For example, segregated educational programs, recreation programs, and playgrounds administered through state and local governments for children and adolescents with disabilities are prohibited.

Public ground transportation, including bus and intracity rail facilities, are to be made accessible under Title II. Paratransit systems are mandatory for persons unable to use public transportation systems. All new buses are to be wheelchair accessible. At least one accessible car is to be part of every train. In addition, bus and rail stations are to be made accessible (ADA, 1990). We are a highly mobile society, and full participation in society is dependent on functional mobility. Children and adolescents with disabilities are no exception. They too use public transportation. Some are transported on buses or rail systems to and from day-care settings, schools, stores, recreation and entertainment events, and vacation destinations.

Children learn independence as they travel through their neighborhoods. Functional independence in mobility allows children and adolescents access to their peers and to the environments in which their age group gathers, where children learn, play, work, and interact.

**Title III**

Title III of the ADA requires all public accommodations and services operated by private entities to be accessible to persons with disabilities (ADA, 1990). Private accommodations and churches, however, are exempt from the law. Environmental supports of all kinds are necessary to the development of children and adolescents with disabilities. Imagine the possibilities for developmental experiences when children, regardless of disability, have opportunities to access their environment.

A partial list of public accommodations and services directly related to the interests of children is given below. Some facilities and services could be administered by either state or local governments or by private entities. Depending on the specific circumstances, those administered by state or local governments would be regulated under Title II; those operated by private entities would come under regulatory guidelines established in Title III.

Regardless, children and adolescents with disabilities cannot be prevented access to the following:

- Play environments: Day-care centers, playgrounds, amusement parks
- Sport environments: Baseball, football, soccer, and hockey fields; basketball and tennis courts; weight-lifting rooms; gymnasiums; swimming pools; stadiums
- Entertainment environments: Theaters, zoological parks, cinemas, video arcades
- Shopping environments: Malls; clothing, sporting goods, shoe, music, toy, and video stores
- Gathering environments: Fast food restaurants, community centers
- Learning environments: Nursery schools, grade schools, high schools, colleges, museums, libraries
- Personal services: Physicians’ and dentists’ offices, hair salons and barber shops, counseling offices
- Personal care environments: Locker rooms, fitting rooms, public bathrooms

The Accessibility Guidelines for Buildings and Facilities (Architectural and Transportation Barriers Compliance Board, 1991), written in response to the ADA, does not specifically address the areas of children’s environments and recreational facilities. The Board has undertaken several projects prior to writing specific child-related guidelines. One is a research project titled, “Accessibility Standards for Children’s Environments”; another project is to work with the U.S. Forest Service and the National Park Service to develop accessibility guidelines for outdoor recreational facilities (Architectural and Transportation Barriers Compliance Board, 1991). Rule making specific to children’s environments and recreational facilities was expected to begin in late 1991.

Title III also addresses the equal treatment of persons with disabilities when taking part in routine events of life. Following are some examples related to children and adolescents:

- Participation on sport teams
- Memberships in clubs, organizations, and scouting
- Inclusion in extracurricular school events
- Involvement in the arts
- Not being isolated in corners of restaurants
- Attending movies without restrictions on time or day

Occupational therapy personnel can participate in creating accessible physical or social environments. An activity such as eating in restaurants is typical for many families. Families of children with disabilities may find this routine task extremely difficult for several reasons. Family restaurants may not be physically accessible, having booths or modular units that do not accommodate
wheelchairs. Restaurant personnel may find it uncomfortable to watch a child with disabilities eat and may ask the family to leave or not seat them, citing the discomfort this causes other patrons. Discrimination against persons with disabilities and their families because of inaccessible physical or social environments is prohibited by the ADA. In this example, an occupational therapist’s role may be as a consultant to the restaurant manager about creating accessible space. Working with employees may also be a service offered. This may include designing programs to increase employee comfort when serving children with disabilities and their families or it may be to recognize and address discriminatory beliefs about persons with disabilities.

**Title IV**

Title IV of the ADA addresses telecommunications relay services and devices for persons with speech or hearing impairments, enabling them to communicate in a manner similar to persons without impairments (ADA, 1990). Use of the telephone begins in the middle school years and peaks in adolescence. Telephone communication connects children and adolescents with disabilities to their peers. Use of the telephone enhances social development and a sense of belonging. Children with speech or hearing impairments who must rely on others when telecommunications relay services are not readily available may lose functional independence and a sense of privacy when unable to communicate their needs directly. Occupational therapists should be concerned about the functional communication skills of children and adolescents with disabilities and advocate the installation of telecommunication devices in public facilities.

**Environment-Centered Model**

The ADA guarantees civil rights for persons with disabilities through its mandates for accessible and accommodating physical and social environments. The law assigns the responsibility for implementation to society and, specifically, to public and private services and facilities and transportation and telecommunication agencies. No professional group is named as a required participant. The philosophical and knowledge base of occupational therapy practitioners make them invaluable partners to those groups in need of altering their physical or social environments to accommodate persons with disabilities. Occupational therapy’s values are congruent with the spirit of the law. Occupational therapy personnel can educate, consult, and make recommendations to children, adolescents, parents, organizations, businesses, and government agencies about reasonable environmental modifications necessary to comply with the law. Service provision of this kind may be new to some pediatric occupational therapists, and current pediatric practice models are not adequate when the environment, not the child or adolescent, presents the deficits requiring change.

An environment-centered model requires pediatric personnel to enlarge their perspective of a child’s needs. We need to view children and adolescents with disabilities as persons striving to achieve desired roles and capable of fulfilling responsibilities and expectations of their environment. The environment has to be viewed as an integral contributor to developmental success, and children and adolescents must be seen beyond the performance component deficits created by their condition. Traditional pediatric practice settings can hinder an occupational therapist from taking a holistic view of a child or adolescent. In an educational setting, the focus is on educational relevance. In a hospital or rehabilitation setting, the focus is on sensory and motor deficit reduction. In a prevocational program, the focus is on work skill development. In an environment-centered model, the focus shifts from the child and his or her deficits to the child and his or her desires and abilities in the context of his or her environment. Several assumptions underlie an environment-centered model:

- Children and adolescents have a right to participate in society.
- Knowledge of child and adolescent development is a critical foundation for any model serving this age group.
- Psychological and social development are as important to functional independence as sensorimotor and cognitive development.
- Many performance component and task deficits resulting from a long-standing developmental disability will remain deficits to varying degrees throughout the life span.
- There is little practical significance in trying to alter some performance component deficits.
- Alteration of the physical, social, and temporal environment can make the deficit a characteristic, not a disability.
- Functional independence, not performance component skills, is the expected outcome of service provision.
- Learning and taking personal responsibility is a lifelong challenge that begins in childhood.

In an environment-centered model, the primary assessment strategies are environmental analysis through developmental knowledge, analysis of activities in the context of the natural environment, and evaluation of the desires and abilities of the child or adolescent. Intervention includes negotiation, creativity, problem solving, and a healthy understanding of reasonable accommodation. The expected outcome of services is meaningful involvement of children and adolescents with disabilities in desired life activities. Several examples of occupational
Services to the Child

In an environment-centered approach, service outcomes are directly related to the functional needs of the child while interacting in the real world. The child's functional needs may relate to either competence or autonomy. These take time to develop under the best circumstances. Those skills that can be changed should be carefully selected, not simply because they are deficits, but because they are essential to the fulfillment of a desired role. Any component skill taught a child should explicitly incorporate environmental requirements and relate to meaningful roles.

A sense of autonomy is established in the preschool years, develops in the elementary school years, and is redefined throughout adolescence (Mosey, 1986). Children and adolescents with disabilities need to learn about themselves, their rights, and their responsibilities. They need to see themselves in the context of the larger environment— as persons with desires, potential, and contributions to make. Too many children with disabilities have limited personal visions and tend not to speak for themselves (relative to age expectations). Programs designed by occupational therapists can assist children in learning about themselves, their opportunities, their rights and responsibilities, and advocacy. Strategies may include activities that challenge their strengths, role playing, and interaction with successful role models. Children and adolescents with disabilities can learn to identify their personal needs and what that means in terms of accommodations and accessibility. They can find their own voice and make it heard.

An example of children finding their own voice was reported in a newspaper story about the Music and Art Center for the Handicapped (Bridgeport, Connecticut). Young adolescent girls who were blind were about to debut in a ballet performance. When asked why they wanted to learn ballet, one girl said, "[I]t makes me feel proud of myself, that I could be just like anybody else" (Saft, 1990, p. 1). The pride and sense of accomplishment could be heard in the stories of those children. They found their voice, asked to participate in a meaningful activity, and found an environment that offered them reasonable accommodation and role models, yet expected hard work and practice regardless of the disability.

Services where children and adolescents learn competence and autonomy may begin in typical one-on-one therapy or educational sessions, but should not be limited to them. Practice of these behaviors has to occur outside protected, planned environments; these behaviors have to be generalized to those environments in which the child or adolescent must function. The following example of an adolescent with a disability seeking specific assistance for a functional outcome demonstrates a service provision option for an occupational therapy practitioner with knowledge of the ADA.

This 15-year-old boy with spina bifida is an average high school student who excels in computer science and whose extracurricular interests are music and car mechanics. He is functionally mobile in a wheelchair. The boy's parents offer him the same relationship and opportunities offered his two older brothers. A typical teenager, he is trying out more responsibilities and risks on his own. Occupational therapy has been received off and on over the years. He and his parents contract occupational therapy services from a private practitioner as the need arises. The family and therapist work as a creative team.

Earning money is important, and finding an after-school job has been his primary goal the past few months. An after-school program helped prepare him for the job search and interview, but he is concerned about conveying his accommodation needs to a prospective employer. He wants to speak for himself and not ask his parents to come with him. He and his parents decide to contact the occupational therapist's services to help him figure out his reasonable accommodation needs prior to his job interviews.

The teenager and the occupational therapist visit a few prospective job sites. The therapist uses task analysis as they survey the work sites for building accessibility, product accessibility, typical employee tasks, customer-employee interaction needs, and bathroom accessibility. After several site visits, they are able to identify the essential accommodation needs. They then discuss reasonable accommodations.

With this information, the teenager goes on job interviews confident that he can convince the employer that he can meet the requirements of the after-school job. The collaboration with the occupational therapist serves his need to be more independent, as one might expect of someone his age.

Consultation Within the Social Environment: Families

The interpretation of the Education of the Handicapped Act Amendments of 1986 (Public Law 99-457) endorses a family-centered model. This model assumes that the interrelationships among children, their families, and their environments affect development. Assessment in a family-centered model includes family needs, such as housing and transportation, in addition to the developmental needs of the child. An interdisciplinary team works for change by addressing the child's and the family's issues.

An environment-centered model offers a different level of services to families of children and adolescents with disabilities. First, the breadth of the ADA is broader than education-related legislation and is inclusive of accommodation to most public and private services and facilities. Other pediatric-related legislation does not address reasonable environmental accommodation. Second, age is not a limiting factor; the ADA is inclusive of persons with disabilities of all ages. Third, occupational therapy's contribution is not limited to the child's developmental process and educational relevance. Fourth, the ADA prevents discrimination against persons who associate with children and adolescents with disabilities, such as their parents and siblings.

A family may find itself in need of occupational therapy consultation for environmental accommodations. An
example of this family-occupational therapist relationship follows.

A single mother with two children works full time as a registered nurse. Her daughter is 12 years old and in the seventh grade. Her son is 10 years old and attends an elementary school—he has cerebral palsy, which severely limits his physical capabilities and moderately affects his cognitive abilities.

An occupational therapist in private practice consults with families and provides several programs to local parent support groups that the mother regularly attends. Several years ago, when her son received his electric wheelchair, the mother contracted the occupational therapist to help her make some decisions about remodeling the home environment.

Recently, the mother has become concerned about her son’s lack of involvement in any activity except for scheduled classes at school and watching television at home. The mother believes that her son is missing some social and psychological opportunities and that this will greatly affect him as he matures. The mother contracts the occupational therapist to work with the family in assessing extracurricular and community options. The occupational therapist’s role includes assessing interests; assessing the options available and their physical and social environments; analyzing options to accommodate the son’s physical limitations; assessing social support and transportation needs; and assisting the mother in communicating those needs to prospective groups.

When the mother and son identify an extracurricular option, the occupational therapist involves the family and the activity leader in planning a short program to introduce the boy to the other participants. Accommodations are discussed, and stereotypes are dispelled through proactive planning.

Consultation Within the Physical Environment

A large portion of a child’s time is spent in play. Play environments offer natural learning opportunities. Children, through play, learn about objects and people, explore their capabilities, recognize the consequences of their actions, practice social roles, and learn to respond to environmental demands. Children with physical disabilities may encounter secondary social, emotional, and psychological disabilities if play is not available to them (Brown & Gordon, 1987; Missiuna & Pollock, 1991). Children also spend a lot of time in formal learning environments such as schools, day-care centers, libraries, and museums. Whether in play or in school, learning occurs when the child or adolescent with disabilities can access and participate in his or her environment.

Analysis and modification of physical environments is one strength of occupational therapy personnel. Play environments such as parks, playgrounds, recreation areas, and camps can be made accessible through consultation with occupational therapists (Roley, 1991; Stout, 1988). Examples of modifications to play environments are (a) plastic playground equipment rather than metal, because metal can burn sensitive skin; (b) basketball courts with hoops that can be raised and lowered in height; (c) ramps into the shallow end of swimming pools; (d) raised sandboxes; (e) swings with net seats; (f) slides built into existing hills; (g) and spring-based playground equipment for proprioceptive input.

Children and adolescents with disabilities have been educated in public school systems for many years, yet the physical environments of many school buildings hinder complete participation by these persons in the full spectrum of academic and extracurricular activities. Inclusion programs demand accessibility throughout school facilities and activities. Occupational therapy personnel can consult with school districts to bring their physical environments into compliance with the ADA. Examples of modifications to educational environments are (a) quiet space in classrooms; (b) study carrels to block out extraneous stimulation; (c) motion sensor doors; (d) telephones that can be reached from a wheelchair; (e) telephones with telecommunication devices; (f) accessible bathrooms, water fountains, and locker rooms; (g) food in cafeteria lines within the reach of all students; (h) auditoriums and stages accessible to all participants; and (i) library stacks that accommodate the width of a wheelchair.

Consultation Within the Temporal Environment

The temporal environment refers to the timing and pacing requirements of activities. The inability to meet temporal requirements hinders participation by many children and adolescents with disabilities. The underlying dysfunction results from a number of performance component deficits. Some examples of children not able to meet the demands of the temporal environment are a child who is unable to run fast enough to get to the bases in baseball, a child who constantly moves and has to be involved in the action, and a child with poorly timed eye-hand coordination. In an environment-centered model the performance handicap is not the focus. The restructuring of tasks and problem solving for reasonable accommodations to meet the requirements of the temporal environment are not always as evident as modification of the physical environment. Occupational therapy personnel can contribute by analyzing and altering the steps or the requirements of the activity and using the child’s capabilities in activity selection.

An example of an occupational therapist consulting to a community’s summer recreation program follows. It emphasizes the making of reasonable accommodations around the temporal requirements, thus enabling children with disabilities to participate in activities.

An occupational therapist contracts with the city’s summer recreation director as a program consultant to design accessible playgrounds and plan summer activity programs for children with physical disabilities. This summer, there are several parents requesting program access for their children with attention deficit disorders. The parents want an inclusion program that is fun for their children and that engages them with other children. The children with disabilities and their parents are interviewed by the occupational therapist. The families’ perspective, interests, and abilities are discussed. The therapist decides she needs individual information about the children before making programs. The recommendations. The scope and cost of the assessments are negotiated among all parties.

One child is tactically defensive, becoming anxious and impulsive in crowded situations, thus preventing him from successfully...
engaging in an activity. He enjoys basketball and plays one-on-one in the family's driveway with a younger brother. He has never been successful playing on a team because he would get caught under the basket by the other players. Even though he was a good, accurate shooter, he could not participate. The occupational therapist recommended the coach designate this child as an outside shooter and not use him to travel with the ball. The coach agreed, and the essence of basketball as a team sport was maintained. The child was able to pursue a meaningful activity and become a valuable member of the team.

Another child could not stand still and needed to be actively moving. When restricted, he became impulsive and distracting to others. He had never developed any particular interests, but could catch and throw a ball with accuracy. Baseball was found to accommodate his needs as long as he was put in the catcher's position, which required him to be actively involved in the game at all times. Action was not so fast that he became overly stimulated and impulsive.

Conclusion

Current models of practice based on deficit reduction will not be successful when occupational therapy practice interfaces with the ADA. The ADA provides the philosophic background and the practical guidelines with which pediatric occupational therapy personnel can develop an environment-centered model for service provision. Consultation and education to business personnel, parents, children, and adolescents is a new practice arena for pediatric occupational therapists, requiring a change in the way we perceive disability and our role in creating alternatives. Methods of service provision, strategies for change, and therapist-client relationships are altered. When a child or parent is the recipient of services, it will be because they contract services, thereby changing the relationship between the occupational therapist and the client. Outcomes will directly relate to recognizable function and participation in client-determined occupations. When the service recipient is a business, analysis of physical and social environments will direct assessment and intervention. Services will be time limited, as determined by the service recipient. Implementation of the ADA creates new partnerships and practice arenas for pediatric occupational therapy personnel.

Summary

The ADA guarantees civil rights to children and adolescents with disabilities and their families. The ADA requires that standards be established to eliminate discrimination of persons with disabilities in employment, public services, public accommodations and services operated by private entities, and telecommunication services. Changes mandated by the ADA occur within physical and social environments that restrict or prevent persons with disabilities from participating in life's activities.

Children learn competence and autonomy through interactions with natural environments. For children with disabilities, the environment may need to be modified to encourage and support learning. Without accessibility to the environment, functional independence for children and adolescents with disabilities cannot occur. Making environments accessible requires pediatric occupational therapy personnel to think about problem definition and resolution using environment-centered models rather than deficit-reduction models. The role of occupational therapy personnel becomes one of consultation and education for the purpose of altering physical, social, and temporal environments so children and adolescents with disabilities can be accommodated.

The spirit of the ADA mandates the inclusion of women, men, and children with disabilities in all aspects of American life. The law offers many potential benefits to children and adolescents. Changing attitudes and making reasonable accommodations for youth will, in the long run, positively affect all society. Pediatric occupational therapy personnel can use the ADA mandate to develop educational and consultation programs for public and private facilities serving children and adolescents with disabilities and their families.

References


