CHAPTER 1

Understanding Disability

Chapter 1 defines and describes all types of disabilities, including physical, cognitive, and psychiatric disabilities. These three broad categories of disabilities are based on symptoms, rather than causes. Chronic illnesses are government-recognized disabilities. The six causes for the increase in the number of individuals with disabilities (IWDs) are explained. These six causes are: advances in neonatal medicine; advances in emergency medicine; the longer lifespans for everyone; the longer lifespans of IWDs; more accurate counting; and liberalization and expansion of the definition of disability. Almost one fifth of the American population has a disability, and a congenital disability occurs in one in 16 births.

INTRODUCTION

Two acronyms used throughout this book should be defined. IWD is individual(s) with disabilities and IWOD(s) is individual(s) without disabilities. These acronyms are used for clarity and are very distinct, clear-cut dichotomies, but there are difficulties in using dichotomies to describe any type of identity. Nonetheless, as an introduction to the discussion of disability and the individuals who experience disabilities, the choice of these acronyms favors clarity, while sacrificing some accuracy and precision. Also, IWD and IWOD use "person-first" language, specifically, "an individual with a disability," rather than a "disabled individual."

The purpose of this chapter is to promote a basic understanding of the broad scope of disability. Obviously, the definitions, listing, and categorization of disabilities provided here are only a minimal, broad overview of disabilities. However, before embarking upon the clinical definitions of disability, two important social aspects will be discussed, including:

- The unwarranted fear that IWDs provoke in IWODs
- "People meet my disability before they meet me."

Defining disability is complex and is not limited to the medical and biological aspects of the condition (Barnes, Mercer, & Shakespeare, 1999; Brown, 1991; Hahn, 1993; Smart, 2004, 2005a, 2005b, 2006, 2007; Smart & Smart, 2007, Walkup, 2000; Zola, 1993). Nonetheless, most individuals with little or no experience with disability view disability as only physical disabilities, such as orthopedic impairments, amputations or limb deficiencies, or sensory losses such as blindness, deafness, or deaf/blindness. These misconceptions are often perpetuated and reinforced by the popular media, such as movies, books, and television (Bogdan, 1988; Byrd, 1979; Byrd, Byrd, & Allen, 1977; Byrd & Elliot, 1988; Byrd, Williamson, & Byrd, 1986; Kriegel, 1987; Longmore, 1985; Mirzoeff, 1997; Norden, 1994; Safran, 1998; Zola, 1988, 1992). These media tend to focus on presenting only those real-life IWDs who have accomplished remarkable tasks, such as a blind man, Erik Weihenmayer (2001), climbing Mt. Everest; a deaf/blind woman, Helen Keller, becoming a worldwide celebrity (Herman, 1998); or a movie actor, Christopher Reeve, becoming a self-proclaimed public advocate for those with quadriplegia (Reeve, 1998). Obviously, all of these individuals had severe disabilities; but they also had a great many resources to manage their disability, far more than the majority of IWDs. Furthermore, most of the "disabled heroes" developed their skills or celebrity before they acquired a disability. Weihenmayer climbed mountains as a child and teenager; Christopher Reeve was a famous movie actor; and Helen Keller had the remarkable resource of a full-time companion for 47 years, Annie Sullivan (Brueggemann & Burch, 2007). Thinking only of deaf/blind individuals, it is probably true that most IWODs cannot name another deaf/blind individual, other than Helen Keller.

THE UNWARRANTED FEAR THAT IWDs PROVOKE IN IWODS

- Why do IWODs experience existential angst or fear and anxiety about acquiring a disability?
- Most IWDs consider the reaction of IWODs to be the most difficult aspect of living with a disability.

There are medical and biological realities to all disabilities and all disabilities include functional losses and limitations, all require management and control, and many are expensive. However, most IWDs, and their families, state that their greatest difficulty is responding to the prejudice, discrimination, unnecessary limitations, and lowered expectations of the general society (Davis, 1997, 2010; Scotch, 1984). Thus, the greatest barriers for most IWDs are imposed by society. No one seeks to acquire a disability or have a child with a disability; but, on the other hand, many IWDs state that there are positive aspects to the disability, that they are proud of their mastery of the disability, and that the disability experience is not an unending tragedy. For example, according to a Gallup poll, 42% of Americans polled stated that blindness is "the worst thing that can happen" (The Lighthouse, Research to Prevent Blindness, 1995). Blind Americans would probably disagree with the sighted Americans who responded to the poll (The Lighthouse, 1995).

Dr. Geerat Vermeij, an evolutionary biologist and a professor at the University of California at Davis, has been blind since early childhood. In the following excerpt from his book, *Privileged Hands* (1997), Vermeij explained the way in which uninformed and naïve, but widely held, perceptions of blindness contribute to society's fear of blindness:

Yet opinion polls almost unanimously portray blindness as the most feared of human conditions. Sight is *perceived* as the means by which we gain the bulk of our information about one another and about our surroundings. Accordingly, educators have built curricula almost entirely on a foundation of visual learning. For this reason, blind people are widely regarded as being incapable of learning or interacting fully with others. Skeptics despair that blind people cannot see facial expression, cannot witness a baby's first tentative steps, cannot respond to a smile, cannot see how others behave. Without such quintessentially visual experience, the argument goes, the blind are denied a basic dimension of what it means to be human. Naively, [they] fear or loathe blindness. (p. 16)

Note the way in which Vermeij adds that most sighted people think that blind people are not totally human. How can a person be human if he or she can't see?

Those IWDs who have reached the highest stage of acceptance of disability, called "transcendence" (Vash, 1981), often feel that they are better people because of the disability, wish to assist others with the same type of disability, and feel that they have had opportunities and experiences that would not have been open to them if they did not have the disability.

Perhaps the combination of a lack of knowledge about the disability experience and the uncomfortable feelings that disability arouses in most IWODs result in seeing IWDs as one of two opposites, a hero or a pathetic IWD. Neither stereotype allows the IWD to be seen as an individual and both are extreme roles, prompted by intense discomfort of IWODs (Elliot, Frank, Corcoran, Beardon, & Byrd, 1990).

IWDs often provoke anxiety in IWODs because IWDs remind them of the possibility (and perhaps the probability) of acquiring a disability. Paul Longmore (2003) described this fear: "Disability happens around us more often than we generally recognize or care to notice, and we harbor unspoken anxieties about the possibility of disablement to us, or someone close to us. What we fear, we often stigmatize and shun" (p. 2003). Heinemann and Rawal (2005) stated:

Spinal cord injury resulting in permanent paralysis and loss of sensation would seem to be one of the most devastating experiences imaginable. Emptying one's bladder with a catheter, using a wheelchair, having difficulty entering one's home and public buildings, being unable to participate in enjoyed activities, and disrupted sexual expression may seem to the outsider like a life not worth living... People who sustain SCI (spinal cord injury) do live independent lives and fulfilling lives. (p. 610)

Kleege is a university professor who is blind, worries about "Normals," and feels like "they need a lot of help."

I worried about a lot of them so much, the Normals I know. If some of them never became disabled . . . it will be a bad business. If they could just let go of the fear, I think, I have fear, too. I am afraid of losing my hearing. But I know that if or when it happens, I'll make do somehow. Making do is not such a foreign concept to me. For the Normals, making do is dreadful even to contemplate. What would life be without a leg, without eyesight, without hearing, they worry. Life would be life . . . I say. Flawed and limited in some ways, rich and various in others.

I don't enjoy feeling like we [IWDs] exist to offer illuminating insights to the Normals. But in my more generous moments (few and far between as they are), I feel like it's something worth doing. They [Normals] need a lot of help. (Kleege, 2006, p. 182)

Most IWDs report that the most limiting aspects of the disability have nothing to do with the disability itself; rather, social conditions, such as lack of accommodations and other civil rights, and the inaccurate perceptions of IWODs unnecessarily limit the lives of IWODs (Zola, 1982). Moreover, if "society" has "constructed" these limitations, then it seems logical that society can also "de-construct," or at minimum, greatly reduce these limitations (Higgins, 1992a). Madeline Will (as cited in Weisgerber, 1991), former assistant secretary for education and head of the Office of Special Education and Rehabilitation (OSER), stated:

Most disabled people . . . will tell you that despite what everything thinks, the disability itself is not what makes everything different. What causes the disabilities is the attitudes society has about being disabled, attitudes that make a disabled person embarrassed, insecure, uncomfortable, dependent. Of course, disabled people rarely talk about the quality of life. But it is has precious little to do with deformity and a great deal to do with society's own defects. (p. 6)

"PEOPLE MEET MY DISABILITY BEFORE THEY MEET ME"

IWDs do not define themselves primarily as individuals with disability nor do IWDs view the disability as the most important part of their self-identity. Rather, the disability is an important part of the individual's identity; but, like everyone else, IWDs define themselves by multiple roles and functions (Antonak, 1985; Fine & Asch, 1988a, 1988b, 1988c; Olkin, 1999). IWODs, in contrast, often view an IWD as the disability, as shown by the words they use—a quad, a schizophrenic, "the blind guy," or "the woman in the wheelchair." Nothing else about the IWD is recognized or acknowledged; the disability is the IWD's "master status." Thus, the IWD is always viewed as the "other" or "someone who is not like us." One woman with a disability explained, "People meet the disability before they meet you" (National Public Radio, 1998, "Inventing the Poster Child") and another IWD stated, "You want to be yourself and the world wants you to be the disability" (National Public Radio, 1998, "Inventing the Poster Child"). IWODs often think that every thought and behavior is a direct result of the IWD's disability, thus ascribing much more importance to the disability than do the individuals who have disabilities.

Nor do IWDs view themselves as "heroes" or "pathetic cripples" and they often resent when IWODs describe them in these two ways. Especially insulting to IWDs is the label of "hero," or judgments such as "I don't how you do it" or "I know I couldn't handle your disability." Occasionally, professionals who work with IWDs are told, "God bless you for doing this work." All of these judgments are well-intentioned, but often insulting and demeaning to those to whom these judgments are addressed, IWDs. These types of perceptions do not allow the IWD to be an ordinary person and communicate to the IWD that he or she is viewed only as the disability. These perceptions are not accurate because most IWODs do not understand the disability experience or the demands in responding to the disability. Viewing the IWD as a pathetic crip, someone who is an object of pity, sympathy, and charity, most often is well-intentioned. Nonetheless, the recipient, the IWD, is

not viewed as a contributor. These false perceptions are illustrated in the accounts of many individuals with a visible physical disability who report that when they were shopping at a mall, strangers tried to give them cash.

■ THREE BROAD CATEGORIES OF DISABILITIES

- Categorized according to symptoms, not causes
- Three broad categories:
- Physical
- Intellectual
- Psychiatric

Most IWODs would be surprised to learn that the most common disability in the United States is arthritis. Perhaps because arthritis is a chronic illness, the general public does not realize that arthritis is a disability; but individuals with chronic illnesses comprise a large segment of the disability population. Traumatic injuries often result in disabilities, but not always. Following medical stabilization, some individuals are restored to complete functioning but others survive with a lifelong disability.

Categorization of disabilities is most often based on the symptoms and rarely on the causes (Table 1.1). The etiology is the cause of the disability and for many disabilities, the cause is unknown or there are multiple causes. Thus, there are three general categories of disability: physical disabilities, cognitive disabilities, and psychiatric disabilities. Those with physical disabilities exhibit physical symptoms; those with cognitive disabilities experience cognitive symptoms; and those with psychiatric disabilities experience psychiatric symptoms. Nonetheless, if disabilities were categorized by cause, everyone with a disability would have a physical disability because there are physical causes to all types of disabilities, including psychiatric disabilities. Nor does this categorization system always and completely correlate

	Prevalence of Disability Among Non-Institutionalized People of All Ages in the United States in 2017					
DISABILITY TYPE	%	MOE	NUMBER	MOE	BASE POP.	SAMPLE SIZE
Any disability	12.7	0.05	40,714,800	156,310	321,823,700	3,118,647
Visual	2.3	0.02	7,543,000	71,090	321,823,700	3,118,647
Hearing	3.6	0.03	11,524,400	87,320	321,823,700	3,118,647
Ambulatory	6.9	0.04	20,898,200	115,810	302,104,600	2,955,036
Cognitive	5.1	0.03	15,391,000	100,280	302,104,600	2,955,036
Self-care	2.6	0.02	7,935,500	72,870	302,104,600	2,955,036
Independent living	5.6	0.04	14,592,000	97,770	260,869,300	2,581,685

MOE, margin of error.

Note: Children under the age of 5 were only asked about vision and hearing disabilities. The independent living disability question was only asked of persons aged 16 years old and older.

Source: Erickson, W., Lee, C., & von Schrader, S. (2019). 2017 disability status report: United States. Ithaca, NY: Cornell University Yang-Tan Institute on Employment and Disability (YTI).

with some large diagnostic manuals. For example, the *Diagnostic and Statistical Manual of Mental Disorders*, *Fifth Edition (DSM-5)*, published by the American Psychiatric Association (APA, 2013) includes both psychiatric disabilities and cognitive disabilities. This makes sense because psychologists and psychiatrists serve individuals with these who have cognitive or psychiatric disabilities and the *DSM* is published by a professional group and not a government entity.

Physical Disabilities

- Blindness and vision loss
- Hearing loss and deafness
- Dual sensory loss: Deaf/blindness
- Mobility impairments
- Autoimmune diseases
- Cerebral palsy (CP)
- Spina bifida
- Muscular dystrophies
- Chronic illness and health disorders
- Disfigurements

Physical disabilities include mobility impairments, sensory loss, such as blindness or deafness or deaf/blindness; neurologic impairments, such as CP and seizure disorders; traumatic brain injury (TBI); and musculoskeletal conditions, such as muscular dystrophy and arthritis. The diagnosis of physical disabilities is frequently accomplished with the use of standardized, objective, quantifiable laboratory procedures, such as blood tests, magnetic resonance imaging, and x-rays. For many disabilities, there are standardized levels of severity such as mild hearing loss, moderate hearing loss, and severe hearing loss. Each of these levels of severity is based on a specific number of the loss of decibels of hearing (standardized) and different audiologists would arrive at the same diagnosis (objectivity).

Blindness and Vision Loss

Visual impairments include total blindness from birth; the gradual loss of vision, such as retinitis pigmentosa (RP), muscular disorders, such as strabismus, or "crossed eyes," and loss of acuity across the visual field, such as tunnel vision (Rosenthal & Cole, 2005). People who wear eyeglasses or contacts are not considered to have a visual impairment (nor are they protected under the Americans with Disabilities Act [ADA]) because the provision of widely used and easily obtainable adaptive technology (eyeglasses and contacts) restores the individual to full functioning. Indeed, testing for vision loss takes into account the individual's "best corrected vision."

The age distribution of vision loss is different from other types of disabilities (Table 1.2). Blindness and severe vision loss typically occur at the beginning of life (before age 1) or at the end of life. It is estimated that 60% of all visual impairments occur before the age of 1 year. More than 100,000 Americans have RP, a degenerating disability that destroys the center of the retina and for which there is no cure. Most individuals with RP are blind by the age of 40. Relatively speaking, there are few individuals who become blind in middle age. By the year 2030, an estimated 6.3 million Americans will have some form of macular degeneration, which results

TABLE 1.2	Percentage of Americans With Vision Loss by Age	
AGE (YEARS)	PERCENTAGE OF AMERICANS WITH VISION LOSS (%)	
18–44	7.2 (0.32)	
45–64	13.1 (0.41)	
65–74	13.4 (0.63)	
75 and over	18.9 (0.85)	

Source: National Center for Health Statistics. (2017). Summary health statistics: National Health Interview Survey. Retrieved from https://ftp.cdc.gov/pub/Health_Statistics/NCHS/NHIS/SHS/2017_SHS_Table_A-6.pdf

in blindness or vision loss (Brain Awareness Week, 2019). Macular degeneration is most common among elderly people.

Another interesting aspect of blindness is that it is considered the disability with the least stigma. The general public, mostly IWODs, typically do not blame individuals for their blindness and, mistakenly, IWODs think that they understand blindness. Finally, blindness is a disability for which there are objective and standardized diagnostic procedures that include measuring visual acuity. The best estimate of the number of Americans (of all ages) with visual impairments is 1.5 million, although disability demographers caution that vision impairments are underreported.

A large percentage of visual impairments have no known cause. Degenerative conditions, affecting the retina or optic nerve including RP, retinal detachment, and glaucoma are common causes. Genetic factors cause vision loss, such as malformation of the eye or blindness, and this may be acquired from infections, accidents, or tumors

Presently, there are a larger percentage of individuals with vision impairments than ever before in the United States. However, advances in medicine, especially neonatal medicine, have greatly reduced the number of infants born with blindness. The answer to the puzzle is the larger number of elderly people in the American population and vision loss is quite common among the aging. Vision loss is a secondary condition of diabetes, a condition that affects millions of Americans. Macular degeneration, another common disability among older individuals, causes blindness.

Two factors have been eliminated that, in the past, contributed to the high number of infants who were born blind. These two factors are maternal rubella (a pregnant woman contracting German measles) and excess oxygen administered to premature infants, which resulted in retrolental fibroplasias. There is now a rubella vaccine and incubators developed in the 1960s control the amount of oxygen given to infants. However, there are many adults, born before 1960, who are blind because these medical innovations were not available.

Individuals with severe vision loss cannot learn by observation or demonstration and those with congenital blindness have no memory or visual experiences of such concepts as color, distance, depth, or proportion. Falvo (1991) explained:

[Individuals who have congenital blindness] because of their lack of visual experience in the environment, such as the observation of tasks or behaviors of others... must learn by other means concepts that sighted individuals

often take for grant. This adaptive learning of tasks then becomes a natural part of their developmental process so that the adjustment to visual limitations is incorporated into their self-perception and daily activities as a normal part of growing up. Individuals who lose their vision later in life have the advantage of being able to draw on visual experiences in the environment as a frame of reference for physical concepts, but they may find it more difficult to accept their blindness than those who have never had vision. (p. 255)

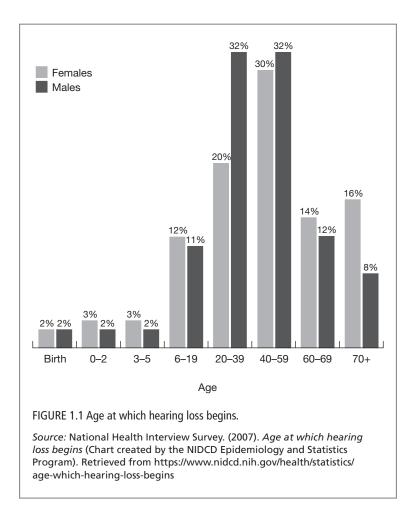
Erik Weihenmayer, a blind man who climbed Mt. Everest, became totally blind as a teenager as a result of a degenerating condition. He was a skilled, experienced climber before he became blind. Also, the course of his blindness, gradual degeneration, allowed him time to adapt and accept his eventual blindness. Interestingly, his blindness proved to be an asset on Everest because he was highly skilled at night climbing (which his sighted companions were not) and his keen sense of touch and hearing alerted him to the presence of crevasses. Weihenmayer could "feel" snow which "sounded" hollow. The one adaptation to his blindness that was not available was his well-developed sense of touch because he had to wear gloves. This description of Weihenmayer's assets and compensations does not mean that it is easier to mountain climb when one is blind. It does say that his team of climbing companions assisted him, especially when vision was required; but Weihenmayer also contributed to the climb, using abilities that his sighted companions did not have. Incidentally, one of the greatest contributions Weihenmayer provided his sighted climbing companions was funding and sponsorship. The National Federation of the Blind and the Glaucoma Society funded many of Weihenmayer's climbing expeditions. In the first few pages of Weihenmayer's book, Touch the Top of the World: A Blind Man's Journey to Climb Farther Than the Eye Can See (2001), he expresses his need to be a fully contributing member of the Mt. Everest team:

I refused to be the weak link of the team. I wanted them to put their lives in my hands, as I would put mine in theirs. I would carry my share. I could contribute as any other team member. I would not be carried up the mountain and spiked like a football. If I were to reach the summit, I would reach it with dignity. (p. 5)

Hearing Loss and Deafness

Hearing loss and deafness can be congenital (present at birth) or acquired at a later time. Most deaf infants are born to hearing parents. Individuals with hearing impairments have achieved some degree of recognition and integration within the broader American culture (Moore, 1987; Smart, 2009b). College students are familiar with sign language interpreters in the classroom; we all are able to watch television with closed captioning, and many of us have a grandparent or great grandparent with some degree of hearing impairment (see Figure 1.1).

However, deafness and hearing impairments differ from other types of disability because they bring additional barriers and unique complications: (a) Speech may be impaired, especially in the case of congenital deafness; (b) many individuals with hearing impairments are isolated and are excluded from employment; (c) parents with deaf children must make important decisions about their children's education very early in the child's life, including whether the child will be educated in a community school or a residential school for the deaf and whether the child will learn American Sign Language (ASL) or try to become a speaking person;



(d) many individuals with severe hearing loss attend residential schools, being required to leave their families and homes at a very young age; and (e) deafness is the only type of disability that is considered, by some, to be a culture with its own language and culture, rather than as a disability, pathology, deviance, or impairment. The Deaf Culture has a long and rich history of providing an environment for deaf people, producing art and literature, and, most especially, advocating for the deaf.

The cause of 25% of all hearing loss is unknown. Hearing loss is measured in decibels and, therefore, the levels of hearing loss are diagnosed using standardized, objective procedures. However, the most important distinction of severe hearing loss/deafness is whether the loss is congenital or acquired later in life. Typically, those with congenital deafness experience great difficulty in learning speech and many never learn speech. Those who experience late-onset deafness cannot hear themselves speak (or anyone else), but they can speak. Congenital hearing loss is often caused by hereditary, genetic factors, such as those that cause otosclerosis and prenatal disease, such as rubella. One expert estimated that 35% to 50% of all cases of congenital deafness are the result of genetic conditions.

Acquired deafness is often caused by postnatal infection, such as scarlet fever, measles, mumps, influenza, typhoid fever, meningitis, or otitis media (ear infections). Helen Keller and her brother had a fever, which was never diagnosed at the

time. It was thought that both children would die; however, Helen's brother died and Helen survived. Helen was both deaf and blind. Obviously, the development of antibiotics has greatly reduced the incidence of deafness from infection. Hearing loss, including deafness, can be caused by environmental factors, such as physical abuse and prolonged exposure to loud noise.

Hearing impairments may become very rare due to a combination of medical and technological advances. Antibiotics cure infections and surgical procedures repair structural anomalies in the ear. Cochlear implants are surgically implanted into the ear (called the cochlea), and provide a small electrical current that stimulates the auditory nerves and provides the sensation of hearing. Other types of technology are available including digital, programmable hearing aids and disposable hearing aids. Hearing aids are programmed to amplify the frequency at which the individual cannot hear. Therefore, hearing aids are custom-designed and programmable.

Dual Sensory Loss: Deaf/Blindness

Helen Keller is perhaps the most famous individual who was deaf and blind. The fact that the general public can name only one deaf/blind individual (Helen Keller) illustrates the low incidence of the disability and the severe communication deficits of deaf/blindness. Before Helen Keller, individuals (including children) who were blind and deaf lived with their families, never attended school, and communicated with gestures. Unlike Helen Keller, they did not attend college, and there were no plays or movies created showing their lives. These other deaf and blind individuals lived in obscurity. As with any low-incidence disability, services and education are very difficult to obtain and there are not many professionals trained to work with individuals with low-incidence disabilities. In addition, children with low-incidence disabilities are typically educated in residential schools.

A biographer of Helen Keller explained the disability of D/deaf-blindness:

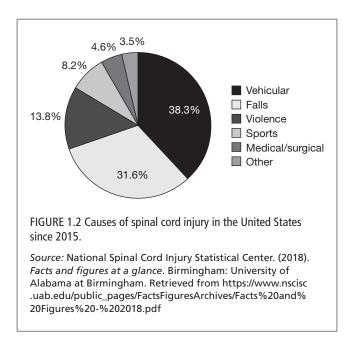
Today, relatively few D/deaf-blind people suffer from Helen Keller's condition—that is, being completely D/deaf and blind from an early age. The life-threatening childhood infections such as meningitis and scarlet fever have been for the most part eradicated, and the simultaneous onset of blindness and D/deafness seldom occurs. (Herman, 1998, p. 340)

Now, almost 50% of all deaf/blind individuals have Usher syndrome, a genetic condition characterized by hearing loss and gradual loss of vision due to a condition called RP, in which the individual begins to experience vision loss in adolescence and gradually loses more and more until middle age, when he or she becomes totally blind.

Mobility Impairments

The category of mobility impairments covers many different types of disabilities, including spina bifida, CP, spinal cord injuries (SCIs), paraplegia; quadriplegia; muscular dystrophy, amputations, including congenital limb deficiencies; and motor neuron diseases, such as Lou Gehrig's disease or muscular dystrophy. Mobility impairments interfere with the individual's movement and coordination and most require some type of assistive technology, such as a cane or a wheelchair.

Most mobility impairments are visible to others and many individuals with mobility impairments experience other disabilities such as hearing loss or an intellectual



disability. Causes include hereditary genetic causes (muscular dystrophy) or lack of oxygen at birth (CP) or abnormal fetal development (congenital limb deficiency). Trauma causes a significant number of orthopedic impairments, such as SCIs (see Figure 1.2). Eighty percent of all individuals with SCIs are men. This is an interesting statistic; however, the fact that most SCIs are in men means that many treatments and services are often not designed with women in mind. How many women wheelchairs athletes are there? In the following excerpt, note that Herr's primary self-identity is a mountain climber, not an IWD or individual with an amputation.

Interestingly, the head of the biomechanics group at the Massachusetts Institute of Technology, Hugh Herr, lost both of his legs at age 17 in a mountain climbing accident. In a book named, *Design Meets Disability* (Pullin, 2009), Herr's disability (or better stated, his assistive technology) is considered to be such an advantage that other climbers want to have him disqualified from competitions:

As he came to terms with his disability, his prostheses became an important part of his self-image. But he still thought of himself as a climber, not an amputee. He fashioned himself climbing prostheses that gave him a foothold where others couldn't even gain a fingerhold, and telescopic legs that could be extended during a climb to any length, shorter or longer than his original legs—even each leg a different length. Then he witnessed the reaction of his fellow climbers turn from pity to calls for him to be disqualified from competitive free-climbing for having an unfair advantage. (p. 33)

Autoimmune Diseases

Autoimmune diseases, such as rheumatoid arthritis, often cause mobility impairments. The immune system attacks the joints and slowly destroys them. Women are almost three times as likely to develop rheumatoid arthritis, with ages 20 to 45 as the peak onset years.

Motor neuron diseases include amyotrophic lateral sclerosis (ALS; commonly known as Lou Gehrig's disease); polio, and muscular dystrophy. ALS is a progressive, terminal disease in which the motor neurons degenerate and are replaced with scar tissue. ALS is more common in men and, while it does not affect cognitive or sensory functioning, it results in muscle weakness, including swallowing, speech, and breathing muscles. Age of onset is typically during middle age; 47 is the average age of onset. Most patients die between 2 and 4 years after the onset of symptoms, but 20% live 5 or more years after onset (Bronfin, 2005; National Disability Policy, 2014)

Mobility Impairments

Like many congenital disabilities, there is a wide range of severity in CP. CP occurs when the brain is injured in the fetal period, during the birth process, or in early childhood. Perhaps the most common cause of CP is lack of oxygen (anoxia) during the birth process. CP is a lifelong disability because the brain injury is permanent. In mild cases, there are symptoms that are not very visible and in severe cases, there are muscle disorders, such as accuracy of muscle movement, and involuntary movement that are visible. Falvo (1999) described these symptoms: "Some individuals with cerebral palsy have ataxia (disorder in the accuracy of muscle movement), which affects their balance and coordination of gait. Still others have dyskinesia, involving unwanted, involuntary movement muscle movements. Specific types of dyskinesia include slow writhing; purposeless movements (choreoathetosis). Some individuals have a combination of spasticity, ataxia, and dyskinesia." If other parts of the brain are injured, additional problems, such as vision and hearing impairments, or seizures, or intellectual disability result. Experts expect an increase of the incidence of CP as the number of extremely low-birth-weight infants survive. This is not to say that all low-birth-weight babies will have CP (or any other disability). Rather, the probability of CP is greatly increased in these infants and physicians provide respiratory support to the infant, immediately following birth. Also, in utero treatment (treatment given to the fetus in the uterus) can be provided. Twins and triplets and other multiple births have an increased probability of CP because infants in multiple births tend to be of low weight.

Spina bifida is a congenital disorder in which the spinal column has spaces in one or more vertebrae, thus the name: "Bifida" means divided and spina bifida is divided spine. In mild cases, there are few, if any symptoms, while in severe cases, muscle paralysis, loss of sensation, and loss of bowel and bladder control are much more likely. In one type of spina bifida, the membrane surrounding the spinal cord pushes out through an opening in the spinal cord and in another type of this disability, both the membranes and the nerves of the spinal cord push out through the opening. Physicians describe the condition as: "extrusion of abnormally formed neural elements" (Gold, 1996, p. 461). Surgery, or multiple surgeries, is required to repair these defects and to prevent further or permanent damage to the spinal cord. Infants born with spina bifida may also have hydrocephalus (fluid on the brain), which can result in intellectual disability if the fluid is not surgically drained and a shunt placed to continuously drain the fluid as it accumulates. Children and adults with spina bifida are susceptible to infections in their spine and, because of this, they typically experience several hospitalizations each year. Spina bifida is a lifelong disability, with severe impairments in many areas of functioning.

In the last decade, there has been a 27% decrease in the number of infants born with spina bifida, which is attributed to the folic acid supplements added to grain

products, such as cereal. It is important that pregnant women take folic acid because folic acid aids in neural tube development. However, Gold (1996) explained that there are many causes of spina bifida: "Although folic acid supplementation plays a role in prevention, the etiology for neural tube defects is likely multifactorial and has a genetic basis." (p. 463)

Muscular dystrophies (there are several types) are hereditary conditions that are characterized by progressive muscle degeneration. Congenital muscle dystrophy is apparent at birth and, in severe cases, obstetricians and pediatricians must guard against respiratory failure in the newborn. The infant shows weakness and restriction of joint movement (Bronfin, 2005).

There is a large number of causes of mobility impairments, including birth trauma, later-in-life injuries, and degenerating conditions. John Hockenberry, a reporter for National Public Radio and Middle East correspondent, describes the variability in paraplegia and quadriplegia:

"Paralyzed from the waist down" describes so little of the experiences of a spinal cord injury that most crips use it as kind of shorthand joke. In my case, I am paralyzed from the nipples down. When people learn this they are shocked to realize that there is no international checkpoint at the waist. It is an arbitrary demarcation. In actual fact, relatively few people are paralyzed from the waist down. Everyone has their particular separating sensation from numbness. Each line of separation is invisible to the eye. In some people the aspects of temperature and pressure and muscle control are separate. Some spinal cord injured people can feel pressure but not temperature in some parts of their body and vice versa. There are people with almost total sensation but with no motor control ... a partially damaged fiber-optic cable ... picture, but no sound ... bad reception. All these metaphors aid understanding, but none is precise. The trace of each paraplegic and quadriplegic's sensory border zone is unique as a fingerprint. Each person has a different answer to the question: What does paralysis feel like? (Hockenberry, 1995, p. 97)

Chronic Illness and Health Disorders

We have discussed some chronic illnesses in the section on Mobility Impairments and Autoimmune Diseases. In addition, diabetes, cardiovascular disease, brittle bone disease (osteogenesis imperfecta), rheumatoid arthritis, Parkinson's disease, ankylosing spondylitis, and Huntington's chorea are recognized to be disabilities. All of these conditions limit functioning and are chronic, lifelong conditions and are therefore recognized as disabilities.

- Diabetes is a condition of carbohydrate metabolism that results in an imbalance of the availability of the hormone insulin. Diabetes must be managed on a daily basis and is almost a "gateway" disability because its complications lead to limb amputations, blindness, and other disabilities.
- Cardiovascular disease, because of its limiting, chronic nature and the need for treatment and management, is a disability. The arteries that supply the heart are the most important blood vessels in the body.
- Huntington's chorea (or disease) is a slow, progressive, hereditary disease of the central nervous, which typically is diagnosed in young adulthood. Individuals with Huntington's have jerky, involuntary movements and intellectual

- deterioration. Death occurs approximately 15 years after the first onset of symptoms.
- Rheumatoid arthritis is a chronic, progressive systemic disorder in which the joints become inflamed and swell. It is thought to be an autoimmune disease. Autoimmune diseases occur when the body's immune system attacks itself, leading to inflammation and cell death.
- Parkinson's disease is also a slowly progressive disorder of the central nervous system. Characteristics of Parkinson's include involuntary tremors, extreme slowness of movement, and lack of spontaneous movement. The actor Michael J. Fox has Parkinson's and has become an advocate for research and greater awareness of this disease.
- Ankylosing spondylitis is a type of rheumatic disorder which occurs mainly in young men, affecting the joints and ligaments of the spine. It can also affect the hips, ankles, or elbows. Kyphosis (hump back) may result. As with other rheumatic disorders, the joints become inflamed; this causes pain, which often results in fusion of the joints, thus restricting motion.

Disfigurements

Due to advances in surgical techniques, individuals with disfigurements have more options to reduce or remove the disfigurements. Interestingly, disfigurements typically do not include functional limitations, but they are still legally considered to be a disability (Love, Bryne, Roberts, Browne, & Brown, 1987; Macgregor, 1951; Macgregor, Abel, Bryt, Laver, & Weissmann, 1953; Patterson et al., 1993). It is the stigma and other negative responses of society that limit individuals with disfigurements. For example, lower limb amputation (one or both of the legs) is considered to be more functionally impairing while upper limb amputation (one or both of the arms) results in fewer functional limitations. However, upper limb amputation is thought to be a greater disability because of the disfiguring aspects of lacking one or both arms. The majority of disfiguring disabilities have an acute onset, many of them traumatic. For example, individuals who experience severe burns, after medical stabilization, often have lifelong facial disfigurements, although there are no functional limitations.

Cognitive Disabilities

- Intellectual disabilities (IDs; formerly termed "mental retardation")
- Learning disabilities (LDs)
- Developmental disorders—such as autism spectrum disorder (ASD)

Cognitive disabilities include intellectual disability, Down syndrome, LDs, and developmental disorders, such as ASDs. Often traumatic brain injuries are grouped in the broad cognitive category. Cognitive symptoms are impairments in learning, perception, memory, and information processing. These disabilities are grouped together because of their similar symptoms; yet, the range of these symptoms is broad. One aspect of cognitive disabilities that is different from physical disabilities concerns the education and services provided to people with intellectual disabilities. Public, government-funded special education provided in community schools began in the 1960s and employment opportunities before this

time were limited to sheltered workshops. Before the 1960s, most adults with IDs were housed in institutions or simply stayed at home (and many stay home today). Parents who had infants with these types of disabilities were advised by doctors to put their babies into institutions. Many older individuals with IDs were born before the 1960s and have lived their entire lives in institutions. Adult services (the state-federal Vocational Rehabilitation [VR] system) for these individuals were not provided until 1943 in contrast to individual with physical disabilities who received VR services in 1920. In the United States, free, public special education was not available until the 1960s. Some parents of children with IDs organized and provided some education in church or synagogue basements. Often, these parents would hold bake sales or car washes in order to raise funds to buy school supplies.

Therefore, these limitations of individuals with IDs experienced difficulties were not a part of the disability; society created these limitations. It can be said that American society, including government entities, further disabled these individuals by segregating them from society and not educating them (according to their potential). Society made ID smore limiting than necessary.

Intellectual Disabilities

The preferred term is "intellectual disabilities," instead of the stigmatizing label of mental retardation. However, many diagnostic manuals use the diagnosis of mental retardation in very precise, standardized ways, and, therefore, the term "mental retardation" will be used, but only when necessary. An estimated 3% of the American population has an ID, 90% of whom have mild ID (Joseph P. Kennedy, Jr. Foundation, 1991). Severe ID, therefore, is relatively rare. IDs are more than 7 times as prevalent as blindness or deafness and 10 times more prevalent than physical disabilities. While there are standardized and quantifiable levels of severity (mild, moderate, and severe), the diagnostic procedures include paperand-pencil standardized intelligence testing and clinical impressions. As expected, it is more difficult to diagnose a mild ID than it is to diagnose severe or profound IDs. Frequently, lack of educational and cultural opportunities or lack of English-language skills is difficult to distinguish from a mild ID. Moderate IDs are typically discovered when children enter school and severe and profound IDs are apparent at birth because there are often other disabilities present, such as sensory loss, mobility impairments, seizure disorders or a combination of these disabilities.

ID is defined by the American Association on Intellectual and Development Disabilities (AAIDD; formerly known as the American Association on Intellectual Disability, or AAMR). The AAIDD define ID as "significantly subaverage general intellectual functioning resulting in or associated with concurrent impairments in adaptive behavior, and manifesting during the development period" (Grossman, 1983, p. 1). Social functioning is included in the definition of adaptive functioning (AAIDD, 1992).

In order to distinguish intellectual disability from cognitive disabilities that occur later in life (e.g., senile dementia), this diagnosis is determined in the individual's developmental period, which is birth to 22 years (Drew, Logan, & Hardman, 1992). Individuals with IQs in the range of 55 to 70 would be considered to have mild ID; individuals with IQs in the range of 40 to 54 are considered to have

moderate ID, and individuals with I.Q.s below 40 are considered to have severe ID. The level of adaptive functioning, or better stated, the level of needed support is also taken into consideration.

Most ID is associated with neurological damage. Damage to the central nervous system, typically occurring at birth due to lack of oxygen, abnormal fetal position, or infections often result in IDs. However, some cases of IDs are caused by known organic causes. These include maternal infections, maternal use of alcohol, or incompatible blood types between the mother and the fetus. Changes in metabolic functioning, especially fragile X syndrome, result from genetic-chromosomal factors and often leads to an ID. Down syndrome is caused by a chromosomal defect in the developing fetus. (Dr. Landon Down was the physician who first described Down syndrome.) Many conditions are named for the individual who first described them, such as Alzheimer's, Turner's syndrome, Asperger's syndrome, or Tourette's.

A pediatrician (Batshaw, 2001) made clear distinctions between the terms developmental delay, developmental disability, and mental retardation:

Physicians used the term *developmental delay* to describe a young child who is slow in developing but has the potential to catch up. This contrasts with the term *mental retardation*, which implies a permanent and significant slowness in development. The term *developmental delay* is often used in describing a premature infant; it is rarely appropriate to be used for a child older than 2-3 years of age. Unfortunately, professionals often use the term *developmental delay* long after it has become clear that the child has mental retardation. It then becomes a way of avoiding the reality that may be painful to the parent and to the professional. (p. 54)

Learning Disabilities

LDs are becoming one of the most often diagnosed disabilities, meaning that the actual rate of LDs may not be increasing as much as it appears, but simply that more and more individuals are being screened and, therefore, there are more frequent diagnoses. Once considered a disability that the individual "outgrew," it is now known to be a lifelong disability.

Diagnosis of an LD first begins by eliminating other possible causes, such as a sensory loss or an intellectual disability (National Disability Policy, 2014). Children with suspected LDs are initially identified because of a discrepancy between their measured academic potential (IQ) and their actual academic performance. The causes of LDs can only be speculated, although functional magnetic resonance imaging has shown that children with LDs have reduced physiological functioning in the cerebellum. Other suspected causes include lack of communication between the hemispheres of the brain or that one hemisphere is larger than the other (termed "asymmetrical development").

Autism Spectrum Disorder

In 1943, Leo Kanner described a group of 11 children who displayed a similar pattern of symptoms that were very different from those of other childhood behavior disorders. Kanner used the term "early infantile autism" to describe the disorder

(Morris, Morris, & White, 2005). "Autism spectrum disorder" is a term created by the APA and is used to describe a pattern of neurologically based impairments in social interactions and communications

According to Morrison (2014),

Autism spectrum disorder (ASD) is a heterogeneous neurodevelopmental disorder with widely varying degrees and manifestations that has both genetic and environmental causes. Usually recognized in early childhood, it continues through to adult life, though the form may be greatly modified by experience and education. (p. 26)

Deficits in social interaction may be noticed as early as 6 months when parents notice their infant is not making eye contact, is not smiling reciprocally or wanting snuggling, and is displaying no desire for physical closeness. Motor milestones are typically on time for infants with ASD, but it is the type of motor activity that is unusual. Many of these behaviors are termed "stereotyped" or "ritualized" or "inflexible," meaning that there is no observed purpose to these behaviors, other than to reduce stress. Repetitive twirling, twisting, rocking, flapping of the hands, and head banging are example of stereotyped behaviors.

Deficits in communication include total failure to react to others, engaging in repetitive monologues, and lack of body language. Those with ASD often fail to understand abstract meaning, jokes, or sarcasm. Often they ask the same questions to the same people over and over.

Sensory sensitivity often occurs, including avoidance of bright light, loud noises, and rough textured fabrics. While many with ASD experience an intellectual disability, a few individuals have enhanced cognitive skills in a narrow area, such as music, math, and rote memorization; however, these individuals are unable to function independently. Due to all these deficits, ASD is considered a severe disability that greatly affects family life.

The diagnostic criteria of ASD in the *DSM-5* differ from the same diagnosis in the *DSM-IV-TR*. The criteria did not change, only the name of the diagnosis and its categorization. When disabilities are measured on a continuum (or spectrum or dimension), one end of the continuum is low functioning (extreme and severe) and the other end is high functioning. In the case of ASD, Asperger's was the diagnostic label given to individuals with the manifestations of autism, but who function at higher levels and have no language deficits. Typically, those formerly diagnosed as having Asperger's were probably viewed by others as odd, especially in social situations, but they often had remarkable skills and abilities that often led to productive careers. The old joke is that Silicon Valley is full of people with Asperger's. Perhaps due to the Internet, those with Asperger's have a collective positive identity, calling themselves "Aspies," and referring to IWODs in somewhat belittling terms, "neurotypicals." This can be considered a type of "pride" movement.

In contrast to diagnoses based on a continuum, there are diagnoses based on categories. In categorical measurement, diagnoses are considered *qualitatively* different and in diagnoses measured on a continuum, diagnoses are considered *quantitatively* different. Blindness and deafness would be categorical measurement while ASD is measured on a continuum, with diagnoses based on differing levels of severity. Continuum diagnoses are often difficult to make because some type of cut-off point must be determined—what separates medium-functioning ASD from

high-functioning ASD? Where do you draw the line? Also, if service provision is tied to a diagnosis, clinicians may be tempted to "fudge" and render a diagnosis of ASD when the individual did not meet all the criteria.

Another problem with disabilities and diagnoses based on a continuum is that, to the public, individuals with high functioning diagnoses represent the entire continuum. Ask someone to name a person with Asperger's or high functioning ASD and he or she will state Dr. Temple Grandin, but will probably be unable to name anyone else. Nonetheless, there are many individuals with low functioning autism who are unable to communicate, have severe intellectual disabilities and are incontinent and, therefore, are very quantitatively different from Dr. Grandin. One mother of a child with low-functioning ASD expressed this concept:

Please don't write about them (high-functioning Asperger's) They're a handful of noisy people who get a lot of media attention. They're trivializing what autism really is. It's like stealing money from the tin cup of a blind man when you say that it's not an illness; you are getting the people who should be making political and social change to think that it's not a problem. (Solomon, 2012, p. 280)

This mother realized that whatever group represents the entire continuum (which is not possible) is the group who receives funding, access, and social acceptance.

In the following chapters, we discuss the meaning of diagnoses for the individual and his or her self-identity. In the popular magazine *The Atlantic*, an article about the removal of the diagnosis of Asperger's from the *DSM-5* included an excerpt of someone who felt that his self-identity had been changed without his permission. For John Elder Robison, the revision is an abrupt and unwelcome assault in an all-important identity.

"Just like that, Asperger's was gone," he wrote in an essay on the *New York Magazine's* website. "You can do things like that when you publish the rules. Like corrupt referees at a rigged college football team, the APA removed Asperger's from the field of play and banished the term to the locker room of psychiatric oblivion." Robison, who grew up feeling under siege in a deeply dysfunctional family in the 1960s, champions the label and tribal protection it offers in a "neurotypical" world that he is sure will always stigmatize and misunderstand people like him—and his son. (Rosin, 2014, para. 1)

Psychiatric Disabilities

- Mental illness
- Mood disorders

Psychiatric disabilities include mental illness, including depression; alcoholism; and chemical and substance abuse. Both the diagnostic criteria and the diagnostic process are based on clinical judgment and the use of paper-and-pencil tests, such as the Minnesota Multiphasic Personality Inventory (MMPI). Of the three disability groups, psychiatric disabilities are most often thought of as to self-inflicted or, at best, disabilities that could have been avoided if the individual simply "tried harder." Psychiatric disabilities are also the disability toward which there is the greatest degree of societal prejudice and discrimination. This prejudice and discrimination is experienced in daily life in social interactions; however, prejudice

and discrimination are also seen in reduced funding for services, unequal insurance coverage, and a very short history of government funding (Mannion, 1996; Marsh, 1992). After all, legislators are subjected to the same societal misperceptions as everyone else. Recent federal legislation is mandating insurance coverage for those with psychiatric disabilities. Also, while the treatment of individuals with any type of disability has been of low quality or nonexistent, the treatment and rehabilitation of individuals with psychiatric disabilities has lagged behind (Orrin, 1997).

Mental Illness

Psychiatric disabilities are diagnosed using the *DSM-5* (APA, 2013). This manual provides information such as diagnostic criteria (those symptoms necessary for the diagnosis to be made), prevalence rates, course of the disorder, and gender features; but the *DSM* does not give treatment plans. The diagnostic criteria are clearly described and, because of this, there is a consistency in diagnosis among various practitioners. The *DSM* is a serial endeavor, meaning that since 1952, there have been many editions (Smart & Smart, 1997). The use of the manual requires specialized training and is typically used by psychiatrists, psychologists, and social workers. While most disorders listed in the *DSM* are defined as disabilities, several disorders such as kleptomania, pyromania, or sexual addiction and other behavioral addictions are not considered to be disabilities and, therefore, individuals with these disorders would not be protected under the Americans with Disabilities Act (ADA) nor would they be eligible for government-funded disability programs, such as VR.

According to the APA (2013), mental illness includes schizophrenia, delusional disorders, bipolar affective disorders, major depression, and anxiety/panic disorders. Many psychiatric disabilities have courses that are episodic, or relapsing, in which symptoms may disappear for a time and then reappear. Relapses or onset of symptoms is called the "active phase" and the disappearance of symptoms is termed "remission."

There is a wide range of subtypes of schizophrenia; however, all of these include distortion of reality and disturbances of thought, speech, and behavior. Schizophrenia affects many areas of functioning and is a lifelong disability. Most cases of schizophrenia begin in late adolescence and early adulthood; although there are a few cases of onset in middle age. Men tend to have experienced an earlier onset (ages 20–24) than women, but women tend to have a more severe form of schizophrenia than men. Schizophrenia is also more prevalent in men, with a ratio of three men with schizophrenia to every two women who develop this disability.

The characteristic symptoms of schizophrenia are delusions, hallucinations, disorganized speech, and bizarre behavior. Hallucinations are sensory experiences that seem real to the individual, but for which there is no external stimulus. "Hearing voices" is an auditory hallucination. Delusions are erroneous beliefs that are firmly held despite clear evidence to the contrary.

Mood disorders, or affective disorders, occur at least 15 to 20 times more frequently than schizophrenia (Butcher, Mineka, & Hooley, 2010). Mood disorders are divided into two broad categories—depressive disorders and bipolar disorders. Affective disorders are not always considered to be disabilities; some government agencies recognize the various types of depression (including bipolar depression) as disabilities and others do not. Those agencies that acknowledge depression to be a psychiatric disability do so because of the pervasive impairment depression causes

in all areas of the individual's life. Falvo (1999) described severe depression as "incapacitation . . . so great that individuals are unable to attend to their own daily needs, such as basic hygiene and nutritional needs" (p. 133). Depression can be fatal since about 10% of those with depression successfully complete suicide. Not all depression is considered to be pathological; for example, grief following the death of a loved one is not considered to be a disorder/disability unless it is unresolved after a lengthy period of time. This is an illustration of the adage, "unpleasant does not mean pathology." In other words, everyone has "down" or "blue" days and, if this were the only manifestation, the individual would not receive a diagnosis of depression. The depressive symptoms must be long term, typically unremitting, and impair the individual's functioning.

The depressive disorders are characterized by some combination of these symptoms, feelings of sadness, hopelessness, decreased energy, feelings of worthlessness and guilt, disturbances in sleep, eating, and activity level, and inability to concentrate. There is considerable overlap in the symptoms of depression and bipolar disorder; however, individuals with bipolar disorder also experience manic episodes in which they have an inflated self-esteem, decreased need for sleep, and become excessively involved in activities, either work or pleasure. It is estimated that between 10% and 50% of individuals with depression will, at some point, have at least one manic episode. Manic episodes tend to begin suddenly. Strictly speaking, depression without manic episodes is termed "unipolar depression" and "correct differentiation" between unipolar and bipolar depression is important (but often difficult) because different treatments are used.

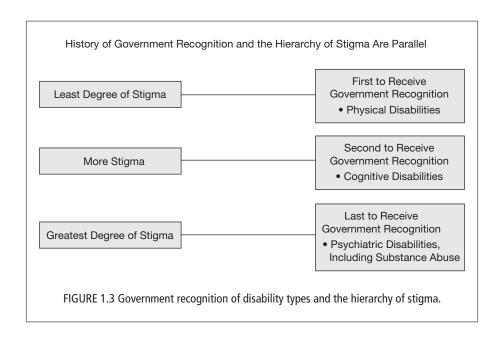
The most frequent age of onset for depression is the early 20s, but depression can be diagnosed in infants, children, and adolescents. Often, individuals are hospitalized in order to stabilize the symptoms. Typically, the more severe depressions have an acute onset (sudden) while the less severe depressions have a gradual (insidious) onset.

Psychiatric disabilities, including mental illness and affective disorders, require lifelong management and there are few total cures. Thus, we can see that psychiatric disabilities parallel physical and cognitive disabilities in that they are chronic, not curable, and require a lifetime of careful management and monitoring. The one difference between psychiatric disabilities and other types of disabilities may be the frequency and intensity of relapses.

UNIQUE DEMANDS OF PSYCHIATRIC DISABILITIES

- Last disability category to be funded, could be the first to be de-funded
- Can build upon the successes of the cross-disability rights movement

Government recognition of disabilities began with physical disabilities, followed by cognitive disabilities, and individuals with psychiatric disabilities were the last category to be considered as eligible to receive resources and services. The history of government recognition of the three broad types of disability parallels the hierarchy of stigma, with the disability group with the least degree of stigma receiving services first, followed by the disability group with more stigma, and finally, the disability group with the greatest degree of stigma receiving government recognition last (Figure 1.3). Those with psychiatric disabilities, and their families,



worry that in times of economic downturn and a simple re-definition of disability, psychiatric disabilities will no longer be legally recognized as a disability.

Mental illnesses, such as depression and schizophrenia, and chemical and substance abuse are defined as disabilities due to the following factors: They are chronic and lifelong conditions which can be treated and managed, but most are never cured; individuals with psychiatric disabilities are subjected to prejudice and discrimination; and these types of disabilities impair the individual's functioning.

The ADA of 1990 and the Amendments of 2008 have accorded civil rights to a large group of Americans, and many IWDs consider the passage of the ADA to have changed their lives. Some disability scholars believe the greatest achievement of the ADA is the development of a group identity or pride movement that crosses all diagnostic lines. Rather than "the blind" competing with "the mentally ill" for legal protection and resource allocation, a cross-disability focus eliminates this factionalism and advocates for individuals with all types of disabilities. A success for blind individuals is a success for individuals with psychiatric disabilities. As the last recognized disability group, those with psychiatric disabilities can build on the strengths, methods, and achievements of other disability groups.

VIEWING MENTAL ILLNESS AS DISABILITIES

Advantages of viewing psychiatric disabilities as disabilities

- Reduces prejudice and discrimination
- Can be viewed as paralleling other invisible episodic disabilities
- Accommodations, as mandated by the ADA, can be provided, although these accommodations are often not easily understood by others
- Questions of disclosure are difficult because there is a great deal of stigma toward psychiatric disabilities and the invisibility of these disabilities makes nondisclosure possible

Individuals with psychiatric disabilities are subjected to more prejudice and discrimination than individuals with other types of disabilities and part of this stigma is the result of (mistakenly) blaming the individual for the psychiatric disability. While blind people are not blamed for their blindness, psychiatric disabilities are often viewed as moral or character failings. (Blind people are subjected to other kinds of prejudice discrimination, such as lowered expectations and reduced range of choices.) Individuals with psychiatric disabilities are rarely viewed as the moral and legal equivalent of IWODs or of IWDs with physical or cognitive disabilities.

There are many physical disabilities that are invisible and episodic, including various chronic illnesses and the resulting ambiguity often results in increased prejudice and discrimination. For psychiatric disabilities, most of which are invisible and episodic, there is increased stigma due to the invisibility and episodic nature. Ambiguity often makes others fearful, uncomfortable, and stressed, wanting to distance themselves from the source of ambiguity.

Adding to these difficulties, accommodations for individuals with psychiatric disabilities are not as understandable to IWODs as accommodations for IWDs with physical disabilities. Curb cuts, ramps, elevators, and braille signage are easily understood by everyone; however, many accommodations for psychiatric disabilities involve stress reducers such as private offices, flexible work hours, medication breaks, and time off to attend support groups. These often appear to be outrageous demands, rather than as mandated civil rights as Americans under the ADA. One woman with a psychiatric disability reflected on her unnecessary hospitalizations, simply because her requests for medication checks by caregivers were refused. She remarked that no one would withhold a wheelchair for someone with a physical disability, but a daily telephone call to remind her to take her medication was considered to be an inappropriate request.

When I think about what I had to go through to get those medication reminders, it just infuriates me. I'm a pretty assertive person and in fact, I was on the CMH [Community Mental Health] Board at the time. Yet they said I was trying to be taken care of. That's like saying somebody with a physical disability is asking to be taken care if she needs a wheelchair. No, a wheelchair is a tool or instrument that enables her to have an independent life. My medication calls were my tool and were extremely cost-effective: two one-minute phone calls a day compared to two months of hospitalization. (Mackelprang & Salsgiver, 1999, p. 316)

Individuals with all types of visible disabilities are not faced with the choice to disclose the disability to others because everyone sees the disability or the assistive technology. Those with invisible disabilities have the choice to disclose, including to whom, the timing, and the amount of disclosure. Failing to disclose any type of invisible disability is often termed "passing." When anyone, for any reason, feels compelled to hide an important part of his or her self-identity, cognitive dissonance results and they pay an emotional price. Also, they often become anxious, afraid that their disability will be disclosed or that others will "assume the worse."

Individuals with psychiatric disabilities experience more prejudice and discrimination than those with other types of disabilities and therefore, disclosure often is very emotionally and financially costly. For example, diabetes is an invisible physical disability and, therefore, the individual has the choice to disclose or not to disclose. However, there is little societal stigma toward individuals with diabetes in

contrast to the greater stigma directed toward psychiatric disabilities. Most individuals with psychiatric disabilities struggle with the decision to disclose or whether to "pass" as not having a disability. Disclosure for those with diabetes does not have as many consequences.

Often, IWDs simply want to avoid the "disabled role" of inferiority and deviance. Avoiding the societal-imposed disability role is regarded as an advantage for nondisclosure. Nonetheless, many IWDs with invisible disabilities state that disclosure has many benefits and certainly outweigh the costs. Costs of nondisclosure include the cognitive dissonance and discomfort of pretending to be nondisabled, constant fear of being discovered, and without disclosure, there are no accommodations provided.

INDIVIDUALS WITH PSYCHIATRIC DISABILITIES EXPERIENCE PREJUDICE AND DISCRIMINATION

A constellation of factors lead to more prejudice and discrimination than experienced by other disability groups

- Ambiguity, even among professional caregivers
- Individuals with psychiatric disabilities are often thought to have caused their disability
- Individuals with psychiatric disabilities are often held responsible for their "cure"
- Accommodations are difficult to understand

A psychiatrist/researcher/author, Joel Paris (2015) described situations in which professionals have held individuals with psychiatric disabilities responsible for their own problems, which often resulted in lack of medical care.

I have heard them [emergency department doctors] say, "I am already busy with so many people who are sick for no fault of their own, so why should I have to spend time treating patients whose illness is self-inflicted?" What these professionals are missing is that these patients experience intense suffering, which they express through impulsive actions. (p. 14)

Blaming IWDs for their disability is often a type of subconscious defense mechanism to avoid existential angst. Their reasoning (or feeling) goes something like this, "Well, I will never allow stress to overwhelm me," or "Well, I'll never attempt suicide," or "I'll never drive drunk."

Additionally, when IWODs, consciously or unconsciously, believe that the IWD caused the psychiatric disability, either by doing something or failing to do something, there is an increased tendency for IWODs to engage in the "Try Harder" syndrome. Due to the fact that those with psychiatric disabilities are often thought to have caused their disabilities or that their disabilities are simply moral and character failings, they are often told to "try harder" or given advice on how to "get better," or "just make up your mind to be happy."

Edwina, a young girl in the United Kingdom with degenerating vision, was told by her mother, "You see only what you want to see." Although Edwina had a physical disability, she was chastised for lacking the motivation to see. Even as a young child, Edwina knew that her mother was wrong. Trying harder is not possible when the individual does have the capability.

In the following excerpt, it is easy to see how mental illness may be viewed as laziness or lack of will. Patricia Deegan described her overwhelming reaction to her psychiatric disability and to many it may appear an easy task to get up off the couch. In this excerpt, she speaks of another resident and herself.

We both gave up. Giving up was the solution for us. It numbed the pain of our despair because we stopped asking "Why?" and "How will I go on?"... Giving up meant that for 14 years he sat in the day rooms of the institutions gazing at soap operas, watching others live their lives. For months, I sat in a chair in my family's living room, smoking cigarettes and waiting until it was 8:00 p.m. so that I could go back to bed. At this time, even the simplest of tasks were overwhelming. I remember being asked to come in to the kitchen to help knead some bread dough. I got up, went in to the kitchen and looked at the dough for what seemed to be an eternity. Then I walked back to my chair and wept. The task seemed too overwhelming to me. (1991, p. 49)

Dr. Paris (2015) summarized what he considered the "main cause of stigma associated with mental disorders."

... the fear of losing control of one's mind is the main cause for the stigma of associated with mental disorders.... When disorders are exaggerations of normal traits, we recognize ourselves, albeit in a distorting mirror. (pp.

In the following chapters, the fear and anxiety of the possibility of acquiring a disability felt by many IWODs has been termed "existential angst." In the case of psychiatric disabilities, IWODs may feel greater fear and anxiety because they perceive the losses of psychiatric disabilities to be much greater than the losses of physical disabilities or cognitive disabilities.

WHY CATEGORIZE DISABILITIES?

Categorization of disabilities in some circumstances often is totally irrelevant in many others. Government agencies are required to develop some system of counting and data collection about disability in order to ensure government services and funding. Advocacy groups need information on disabilities in order to pursue their legislative and public interests. For example, the Muscular Dystrophy Association, a nonprofit organization, probably does not have funds to collect national data on the incidence of muscular dystrophy. Therefore, in order to provide funding and services, it is both ethical and logical to categorize disabilities. When accessing various large-scale systems, such as the U.S. Census, it is important to first understand the way in which disability is being defined before looking at the numbers. For example, some systems include only "activity limitations" or "work limitations," and other systems have a much broader definition and, therefore, the number of IWDs will be higher.

Categorization of disabilities often is not relevant and may even be harmful. Here is a list of the ways in which categorization is not useful:

■ Many individuals have more than one disability, such as a physical disability and a psychiatric disability. One category, then, would not describe their experience.

- Categorization of disability exerts a powerful influence on the degree of stigma directed toward IWDs. Broadly speaking, there is a great deal more prejudice and discrimination toward psychiatric disabilities than there is toward physical disabilities.
- Any categorization system lumps a great diversity of individuals, experiences, and needs in a single group which can erroneously lead to stereotypes, such as "all individuals who have an amputation also have a cognitive disability."
- Disability rights advocates support the "cross-disability" perspective. Rather than having organizations for different disabilities competing with each other for resources and civil rights, it makes more sense to include individuals with all types of disability, or to utilize the "cross-disability" perspective (Fleischer & Zames, 2001). IWDs are developing a "collective identity." In fact, if IWDs can be considered a "minority group," they would outnumber any of the racial/ethnic minority groups.

There are biological and physical components of all disabilities and it is important to understand the number of individuals affected by each type of disability. Therefore, in this book, we occasionally use this categorization of physical, cognitive, and psychiatric disabilities. However, the majority of this book views the disability experience and IWDs as including all types of disabilities.

■ THE INCREASING RATES OF DISABILITY

There are more IWDs than ever before in history. Indeed, the U.S. Census found that 18% of the American population has a disability of some sort. Furthermore, this percentage is probably an underestimation. It is safe to state that everyone will either have a disability, marry someone with a disability, attend school with friends with disabilities, have a baby with a congenital disability, or work with colleagues who have disabilities. The combination of the civil rights bill for IWDs, the ADA, and the increasing rates of disabilities ensure that IWDs will no longer be hidden and segregated from the broader society (Rehabilitation Act, 1973). Moreover, the integration of IWDs into society will enrich and broaden American life.

- Advances in neonatal medicine
- Advances in emergency medicine
- The aging population
- IWDs are living longer
- The liberalization and expansion of the definition of disability
- Greater accuracy in counting

A review of the causes of these increased rates of disability reveals that a higher standard of living results in more disabilities. Included in the higher standard of living are better nutrition, more insurance coverage, greater workplace safety, public sanitation, and wider access to medical care (Smart, 2009a, 2009b, 2009c, 2009d, 2009e). This may appear to be incongruous at first. There are six reasons why there are more disabilities; four are due to medicine and scientific advances and two are termed "statistical" causes, meaning that refined diagnostic techniques and more accurate counting methods have simply found more IWDs.

In many ways, the increasing numbers of IWDs parallel the increasing numbers of elderly people. Such parallels include some of the causes, such as scientific and medical advances and the higher standard of living. The lack of societal opportunity structures available to these greater numbers of IWDs also mirrors the experience

of the elderly. This is termed a "structural lag" (Freund, Nikitin, & Ritter, 2009), meaning that governments and societies often do not keep up with demographic changes. However, the "general public" is more aware of the increasing number of elderly people than they are of the increasing number of IWDs. One indication of this greater awareness is the well-known phrase, "the graying of the population."

Advances in Neonatal Medicine

There are more congenital disabilities (disabilities present at birth) than ever before because of scientific advances in neonatal medicine. Indeed, neonatal medicine is a relatively new specialty of medicine. Neonatal medicine concerns itself with the treatment of newborn (neonates), including fetuses before birth. More infants survive and the infant mortality (death) rate has decreased markedly; but many of these infants survive with a disability. This relationship may be stated in this way: Infant mortality rates are inversely correlated with the rate of congenital disabilities.

Presently, it is commonplace for infants as small as 1.5 lb to survive, and premature and other low-birth-weight newborns have a much higher risk of congenital disabilities. Most premature infants develop well, without complications or disabilities. However, premature babies have a much high probability of developing cognitive, physical, and behavioral disabilities. A premature birth is any birth that occurs before the 37th week of pregnancy (Glass, 2001). These "kilogram babies" often have problems related to their undeveloped organs. Premature infants are susceptible to brain hemorrhage. Societal conditions contribute to low-birth-weight newborns, including births to teenage mothers; worldwide, 1 in 10 babies are born premature (Neergaard, 2009). Neergaard reported that the two areas with the highest percentages of premature births are Africa and North America. She explained that more than 13 million babies are born prematurely each year, and that there are many factors that contribute to prematurity in both wealthy and poor nations. However, only wealthy nations have the high-tech NICUs to care for babies born extremely prematurely. Success stories from these nations create "headlines about miracle babies and . . . a false sense that modern medicine conquers prematurity without acknowledging lifelong problems including cerebral palsy, blindness, and learning disabilities that often plague survivors" (Neergaard, 2009).

Teenage mothers have higher rates of babies who are premature or low-birth-weight (Himmelstein, Woolhandler, & Wolfe, 1992). Fertility treatments are becoming more common and these treatments have a higher rate of multiple births. There is a much higher rate of congenital disability in multiple births, such as twins or triplets. For example, there is a fourfold increase in the probability of a newborn having CP if the infant is part of a multiple birth. Before 1957, there were no surviving children with spina bifida, although there were infants *born* with this condition. However, all spina bifida babies died a few days after their birth. In 1957, a shunt was developed which drained fluid from the brain of infants with spina bifida, helping babies with severe cases of spina bifida survive (Stefan, 2001). Today, there are relatively high rates of survival of babies with congenital disabilities of CP, Down syndrome, intellectual disability, and spina bifida.

A cause of congenital disabilities that is completely avoidable and therefore would not be considered progress is lack of insurance coverage. When a nation experiences an economic depression or recession, insurance coverage decreases, mostly as a result of job loss and the loss of employer-based insurance (Abelson, 2010).

Lack of insurance is associated with greater numbers of congenital disabilities and more late-onset disabilities. When pregnant women cannot afford prenatal care, there are more congenital disabilities. Also, when middle-aged people cannot afford routine, preventive checkups, diabetes and other asymptomatic disabilities develop.

Advances in Emergency Medicine

The death rate from accidents and other types of trauma has been greatly reduced due to the development of emergency medicine and trauma care. The Vietnam War was the impetus that spurred the advances in emergency care at the scene of the trauma. It is interesting to note that many medical advances were a direct result of military innovations in time of war. The American military in Vietnam used helicopters to transport injured soldiers, evacuating them quickly, treating and stabilizing them while being transported to the hospital. These methods were quickly adopted in the civilian population. Before the Vietnam War, most ambulances carried no medical equipment and only provided transportation. Now fewer individuals die before they reach the hospital, not only in combat, but in civilian life as well. Presently, the death rate from accidents has declined dramatically while the disability rate as a result of injuries, accidents, and trauma has increased. For example, "in 1980, less than 10% of individuals with trauma brain injury (TBI) or spinal cord injuries (SCI) survived; today the survival rate for these individuals with these disabilities is higher than 90%" (Smart, 2009d, p. 39).

Therefore, there are many individuals with SCI, including quadriplegia (paralysis of all four limbs). However, individuals with any kind of paralysis experience many secondary health conditions, such as decubitus ulcers or pressure sores, and respiratory and bladder infections. The use of antibiotics has allowed those with paralysis to live a much longer lifespan (Crewe, 1993). After World War I, there were only 400 American men with battle injuries that paralyzed them from the waist down. Ninety percent of the men with these injuries died before reaching home as a consequence of secondary infections, such as pneumonia. After World War II, and the discovery of antibiotics, there were 2,000 veterans with paraplegia (paralysis of the legs) and 85% were alive 20 years later (Shapiro, 1993). Most individuals with paralysis consider themselves to be healthy, controlling their secondary conditions with antibiotics. Of course, individuals with paraplegia or quadriplegia do not live as long as those without disabilities. Therefore, if young when injured, these individuals can plan for education, employment, and family life. Wheelchair sports illustrate the good health of many of those with orthopedic impairments.

TBI is an acquired damage to the brain, which alters functional capacities such as motor control, sensation, perception, cognition, memory, personality, and emotion. TBI is a lifelong disability with pervasive limitations of motor abilities, cognitive abilities, and changes in personality. There are levels of severity, including mild, moderate, and severe. Due to the fact that mild TBIs frequently do not result in impairments, it is thought that the incidence of TBI is underreported. The Centers for Disease Control and Prevention (CDC) estimates that approximately 1.5 million people acquire a TBI. Dixon, Layton, and Shaw (2005) explained the relationship between medical advances and the increase in TBIs:

The rate of survival from TBI has increased over the last 20 years due to advances in emergency medicine, neurosurgery, and intensive care. As a result, the cumulative number of people with TBI is increasing. Many people who

formerly would have died as a result of accidents or assaults now are saved in the acute period following injury. (p. 120)

Typically, individuals (mostly males) who are between the ages of 15 and 24 have the highest rates of TBI; after age 24, the risk of sustaining a TBI decreases dramatically and after the age of 75, the risk again increases because elderly people tend to fall. Alcohol is frequently associated with accidents that result in TBI. Corrigan (1995) found a 36% to 51% occurrence of intoxication at the time of injury.

Therefore, the combination of (a) the growing survival rates of individuals with TBI; (b) that fact that TBI is a severe disability which limits many areas of functioning; and (c) that it is a disability which typically occurs in the late adolescent years and the early 20s, results in a fairly large group of individuals with TBIs who will progress through most of the lifespan developmental stages.

Aging of the Population

Rate of disability is positively correlated with age. As individuals age, they experience a greater probability of acquiring a disability. Old age and disability are highly correlated. This correlation holds true on an individual basis and for large groups of people. Therefore, nations that have "graying" populations will have higher rates of disabilities and those nations with young populations will have lower rates. Medicine and medical technology have lengthened the lifespan. Arthritis, diabetes, mobility impairments, and sensory impairments (vision and hearing) are disabilities often associated with the elderly. The following are some examples of the way in which the longevity revolution has increased the rate of disability.

- Of all the therapeutic amputations performed in the United States today, 75% are performed on people older than the age of 65, mostly as a secondary condition of diabetes.
- Since the 1970s, stroke mortality rates have decreased, but the incidence of stroke has not decreased. This means that more individuals are surviving strokes, many with disabilities, and most of those who experience strokes are elderly (although younger people can have strokes).
- The prevalence of vision impairments is increasing dramatically due to the aging population. For example, 17% of Americans in the age group 65 to 74 years have a vision impairment and 26% of Americans who are 75 or older have a vision impairment. Vision impairment is diagnosed when the best vision, with eyeglasses or contacts, falls below a certain threshold (The Lighthouse, National Survey on Vision Loss, 1995).
- Individuals with diabetes have a 25 times greater risk for blindness than the general population (Rosenthal & Cole, 2005).

People With Disabilities Are Living Longer

The longevity revolution has allowed IWDs to live longer, although not as long as those who do not have disabilities. So, as the rates of congenital and acquired disabilities continue to rise, the lifespans of these individuals are lengthened. Nearly 90% of children with disabilities survive into adulthood (Jones, Stanford, & Bell, 1997; Lublin & Larsen, 1998, 2006; White & Lublin, 1998). In the past, parents of children with congenital disabilities, such as CP, Down syndrome, or intellectual

disability, were told "take your baby home and enjoy him or her. You won't have this baby for long."

Children with Down syndrome (a genetic condition that causes intellectual disability) are living twice as long today as they did 20 years earlier. In 1983, the average lifespan of an individual with Down syndrome was 25 years and in 2007, the lifespan was 56 years; moreover, the lifespan for these individuals is expected to increase further. This increase is due to advances in surgery and the use of antibiotics (Smart, 2001, 2009d).

These increased lifespans will create the need for more and varied programs for IWDs, especially gerontological programs, and will require medical practitioners to enlarge their scope of practice to include skills in treating various types of disabilities in individuals with a wide range of developmental stages. In the example of Down syndrome, sex and marriage education will become important services to provide to individuals with this syndrome. More importantly, the experience of disability will be different for the individual and his or her family (Sutkin, 1984). Harriet McBryde Johnson (2003, 2005) was a disability rights lawyer who died in 2009 at age 51. She was born with a degenerative muscle disease and her parents were told that she would die in early childhood. In an article entitled "Too Late to Die Young," she explained her response to living past the time that doctors predicted that she would die.

The death sentence hangs over my childhood like a cloud.... As my body continues to deteriorate, my life looks more and more like normal. At 25 I leave the cozy comfort of home to go to law school. I figure I'll be 27 when I finish; if I go now I can probably practice law for a couple of years. By this time, the thought is almost subconscious: when I die I might as well die a lawyer. (p. 44)

Johnson (2005) concluded: "My plan to die young hasn't worked out.... It's too late to die young" (p. 46).

The next two causes of increasing rates of disability are termed "statistical causes," meaning that the actual number of IWDs did not increase; rather the way in which disability is defined and counted has changed.

Liberalization and Expansion of the Definition of Disability

Not very long ago, all disabilities were physical disabilities. Disabilities such as LDs, mental illness, and alcoholism were not thought to be disabilities and the individuals who experienced these services were not eligible for government services or funding. After 1990, and the passage of the ADA, individuals who do not have a documented disability as defined by the ADA would not be protected under the ADA. The old adage is, "If you don't have a label, you don't get services" is true. More recently defined as disabilities are AIDS, post-polio syndrome, and chronic fatigue syndrome.

LDs provide an illustration of the liberalization of the definition of disability and the ways in which such liberalization results in decreased stigma from the general public and allows for accommodations and services (Cruickshank, 1990). Children, usually boys, with LDs were thought to be stupid, lazy, and oppositional. Often, their family experienced stigma because schoolteachers felt that the family did not value education. Instead, these children had central nervous system

impairments, which are now beginning to be seen in magnetic resonance imaging. Butcher et al. (2010) explained:

It is unfortunately the case that LD, despite its having been recognized as a distinct and rather common type of disorder for more than 40 years, and despite its having generated a voluminous research literature, still fails to be accorded the status it deserves in many school jurisdictions. Instead, many classroom teachers and school administrators resort to blaming the victims and attributing the affected child's to various character deficiencies ... a youngster who learns academic skills slowly or in a different way is treated as a troublemaker.... Thus even when LD difficulties are no longer a significant impediment, an individual may bear, into maturity and beyond, the scars of many painful school-related episodes of failure. (p. 551)

These painful episodes result in poor self-concepts. If powerful and authoritative individuals, such as teachers, tell a child something, the child often believes it. John R. Horner described his self-image:

Back in the days when I was growing up, nobody knew what dyslexia (a type of LD) was.... So everybody thought you were lazy or stupid or both. And I didn't think I was, but I wasn't sure. (West, 1994, p. 344)

Horner flunked out of the University of Montana six times, but later "his brilliant synthesis of evidence . . . forced paleontologists to revise their ideas about dinosaur behavior, physiology, and evolution" (West, 1994, p. 334).

When large-scale screenings are used, more disabilities are discovered. For example, in elementary schools, there are screening tests for both hearing and vision. In many hospitals, simple hearing tests are given to all newborn babies. Frequently, there are announcements for screening for depression at universities. Screening tests discover individuals who might (or might not) have the particular disability and send these individuals for further diagnostic testing by highly skilled professionals.

Different government agencies define disability differently (LaPlante, 1991, 1993, 1996, 1997). For example, some agencies include affective disorders, such as depression, in their definition of mental illness and other agencies do not consider affective disorders to be a mental disorder. Those agencies that define mental illness more broadly will report higher rates of the disability of mental illness. Some government agencies only include "work limitations," thus eliminating children and elderly IWDs.

Overdiagnosis, however, is a negative aspect to broadening the definition of disability. For example, there is some disagreement over the incidence of autism, the fastest growing disability in the United States. Indeed, some have termed the large number of newly diagnosed autism cases to be an "epidemic." Autism is a child-hood developmental disorder that involves a wide range (or "spectrum") of deficits, such as language, motor, and social skills. Some experts assert that autism is overdiagnosed due to the fact that a child must have a diagnosis (or a "documented disability") in order to be eligible for services and accommodations. Therefore, children with fairly mild impairments may be diagnosed as autistic, because physicians and psychologists understand that the child must have a disability and autism seems to "fit" the child's problems best.

More Accurate Counting

There is a difference between the number of disabilities and the number of *reported* disabilities. Smart (2016) explained:

As both the general public and government policymakers become clearer on the definitions of disability, the numbers of all individuals *reported* to have disabilities continues to climb. Essentially, more accurate counting is another "statistical" cause for the higher disability rates, because the number of IWDs did not increase, only the number of people who are counted or reported to as having a disability. Furthermore, disability and health demographers consider the reported number of disabilities to be an underestimation, simply because there are many individuals who do not wish to identify themselves as having a disability. (p. 41)

In the same way that the profession and academic discipline of gerontology was a result of the growing number of elderly people, perhaps a new profession and academic discipline will emerge as a result of the growing number of IWDs.

The combination of longer lifespans in IWDs and the liberalization of the definition of disability will serve as an impetus for developmental psychologists to consider the developmental stages and transitions of IWDs. For example, the first generation of adults who were formally diagnosed with LDs as children and (hopefully) received services and accommodations can reflect on their experiences and, in so doing, help parents, teachers, and other professionals to provide sensitive, supportive, and effective services (McNulty, 2003).

With these increasing numbers of IWDs, societal perceptions of disability will change (Linton, 1998). For example, in the future, the use of hearing aids will not be viewed any differently than the use of eyeglasses. There is little, if any, stigma in wearing eyeglasses; however, those who need hearing aids often refuse to use them because they know that this type of sensory adaptive technology can be stigmatizing.

The DSM-5

Large medical and psychiatric diagnostic manuals continue to expand with more and more disorders. It should be noted that not all of these disorders are considered to be disabilities. The fourth edition of the *Diagnostic and Statistical Manual (DSM-IV)* (2000) listed 120 more diagnoses than did the third edition of the *DSM*. For example, LDs were lumped under a single category of "dyslexia." In the *DSM-IV-TR*, LDs are divided into three categories, dyslexia (impairment in reading), dyscalculia (impairment in math), and dysgraphia (impairment in writing.) Asperger's syndrome was not added to the *DSM-IV* until 1994 (APA, 1994). In the *DSM-5*, published in 2013, the definition of learning disorders has been expanded to include specific learning disorders. By expanding the number of diagnostic codes for a broad group of disorders, greater diagnostic precision is possible; however, such expansions have resulted in an ever-increasing number of diagnoses.

While every edition of the *DSM* is a revision, all of the previous revisions have been small, what the *DSM* terms "incremental changes." In contrast, the *DSM-5*, according to the APA, is the most radical revision to date (large changes), taking 14 years to compile. No diagnostic manual is completely free of error nor is every

diagnostic manual totally inclusive, meaning that there may be a few diagnoses that are not found in the *DSM*. The fifth edition is considered to be atheoretical, meaning that possible causes of these disorders are not considered. The first edition (1952) was not atheoretical, but was based on Freud's theory.

The DSM-5 (APA, 2013) uses a new organization, reflecting its stated change of a focus to a developmental perspective. Chapters are now arranged from disorders diagnosed at birth to diagnoses diagnosed in old age, reflecting the developmental lifespan. Therefore, the first chapter covers Neurodevelopmental Disorders, because these disorders are typically diagnosed in the developmental stages, and the final chapter is entitled Neurocognitive Disorders, because these are usually diagnosed in older people. The five axes system has been eliminated. According to Dailey, Gill, Karl, and Minton (2014), "One of the most far reaching structural modifications of the DSM-5 is the removal of the multiaxial system" (p. 12). (Axis I was Clinical Disorders; Axis II included Personality Disorders and Intellectual Disability; Axis III includes General Medical Conditions; Axis IV was Psychosocial and Environmental Stressors; and Axis V was The GAF.)

The GAF or the assessment of the individual's Global Assessment of Functioning, has been deleted perhaps due to the great subjectivity in judging overall functioning. Terminology used for some disorders has changed; for example, intellectual disability has replaced mental retardation; illness anxiety disorder has replaced hypochondriasis; and childhood-onset fluency disorder has replaced the term "stuttering."

Perhaps the greatest change in the *DSM-5* is the lowering of diagnostic thresholds, thus increasing the number of individuals diagnosed with psychiatric and cognitive disorders. Examples of lowering diagnostic thresholds are reducing the number of diagnostic criteria in order to make a diagnosis, decreasing the time duration for these symptoms to be present, and in one specific diagnosis, posttraumatic stress disorder (PTSD), diagnoses may be given to individuals who did not experience the trauma, but are family members of someone who did observe or experience trauma out of the normal range of human experience.

DO WE WANT MORE IWDs?

Do we want to have more IWDs? The answer is "yes," and "no." Yes, we want more IWDs when the alternative would be death or lack of services. No, we do not want more IWDs when these disabilities are a result of or are related to societal conditions (such as lack of prenatal care or lack of workplace safety standards). Also, society does want more disabilities if the disabilities could be avoided.

Let us turn to the "no" part of the answer. There are many widely disseminated disability prevention and reduction programs, including the use of seat belts, helmets, and other recreational and workplace safety equipment (Nagi, 1991). These programs are geared at avoiding a disability altogether. However, accidents and injuries do occur and, in these cases, disability is preferable to death. Other disability prevention programs include government-funded access to prenatal care for pregnant women and free or low cost screening programs to "catch" the early onset of diabetes, high blood pressure, and other "silent" (asymptomatic or subclinical) conditions that can lead to further disability. Programs for the prevention of disability or reduction in the severity of disabilities and early diagnosis save money—for

insurance companies, for the government, and for the individual. More important are the unquantifiable emotional costs for the IWD and his or her family.

However, if the disability cannot be or was not preventable, the survival of the individual, with a disability, is considered to be a positive for both the individual and the society. Cook (as cited in Stalcup, 1997, p. 175) stated, "We want more disabled people, not fewer." With the increases in medicine, science, and technology, it seems reasonable to expect greater numbers of IWDs. Further, it seems reasonable to expect that more disabilities will be detected with government-sponsored health plans.

Another way to understand the way in which society and government have the capability to reduce the number of disabilities is to look at the higher disability rates for racial/ethnic minority groups in the United States (Taylor, 2018; U.S. Department of Health & Human Services [DHHS], 2000; Vernellia, 1994). African Americans, Native Americans, and Hispanics have higher rates of disability than do Pacific Islanders, Asians, or White, non-Hispanic Americans (Smart & Smart, 1992). Disability demographers hypothesize that lack of insurance coverage, lower educational levels, employment in physically dangerous and demanding jobs, and high levels of poverty are related to these higher rates of disability. Better education typically leads to safer jobs and more insurance coverage. More insurance coverage means more prenatal care, more routine physical examinations, and more gerontological care, all which result in fewer disabilities. Smart (2016) concluded, "If these societal conditions could be changed, reduced, or improved, it stands to reason that the higher rate of disabilities for minorities could be reduced" (p. 73).

There is one other point to be considered in this discussion. Science and medicine have increased the number of IWDs; however, science and medicine also have the capability to decrease the number of IWDs, through abortion or assisted suicide. This is a question that will be considered later. However, it is important to remember that the use of either of these two methods requires reflection and resolution of the definitions of humanity, normalcy, and quality of life (Douard, 1995). These three concepts have confounded humankind for millennia.

DISABILITY IS BOTH COMMON AND NATURAL

It is true that one important source of an individual's identity is his or her body; however, is it true that normalcy (or the lack of a disability) is a criterion of humanity? When stated in this way, it seems silly to think that an IWD is not a human. Nonetheless, there may be deep-seated, almost subconscious feelings that an individual with severe and multiple disabilities is "not quite human," while those with less severe (or invisible) disabilities are thought to be "more human." The increasing numbers of IWDs and their longer lifespans add more meaning to the question: "What is humanity?" (Douard, 1995). In Western cultures, the value of each individual contributing to the larger society is deeply ingrained. Of course, neither children nor elderly people contribute, but children have the potential to contribute and most elderly people have devoted a lifetime to working and contributing. If humanity is defined in terms of the capability to provide for oneself and others, then many individuals with severe and multiple disabilities would not meet this standard. Also, it must also be remembered that many, if not the majority of IWDs, are not allowed to contribute because of societal barriers (Gill, 2001).

According to the U.S. Census, disability is a very *common* experience and, moreover, the potential to acquire a disability is *universal*. Clay Haughton, director of the Civilian Equal Opportunity for the Department of Defense, explained:

No one is immune to developing a disability, and almost no one, regardless of race, gender, religion, or economic status, will go through life without suffering from some form of physical impairment. It's truly the equal opportunity situation, and those of us who are disabled are a constant visual reminder of the frailty of each member of the human. And so, accepting this possibility and adjusting to disability, those are matters that concern us all. (Fleischer & Zames, 2001, p. 109)

Often we confuse normalcy (or the lack of a disability) to be the ideal, a standard against which everything is measured. This misperception, when carried to the extreme, equates normalcy with perfection. These false assumptions can, and have, remained strongly maintained throughout centuries. These false assumptions have also been projected into the future. In all of the futuristic books of the 1950s that envisioned great scientific and technological advances of the 21st century, not one mentioned IWDs. In the past, IWDs have been absent, or at least marginal, but this is changing in a society which provides a social identity to IWDs. Most people probably do not consider the possibility that they could acquire disability before old age. Their rationalizations include, "Disability is something that happens to other people, not to me." However, Smart (2016) summarized: "So rather than thinking of disability as something abnormal, exotic, or marginal to our interests, we see that disability concerns all of us."

OTHER FACTORS IN THE DISABILITY

- Type of onset
- Time of onset
- Type of course
 - Stable course
 - Degenerating course
 - Episodic stable course
 - Episodic degenerating course
- Degree of visibility
- Prevalence of the disability—low incidence or high incidence
- Degree of prejudice and stigma

Both the type and severity of the disability exert powerful influences on the individual's development. There are other factors that also influence the individual's development, such as type of onset, course of the disability, and the degree of stigma directed toward the disability.

Type of Onset

Type of onset includes *time* of onset. Broadly speaking, there are two times of onset: congenital or acquired. Congenital disabilities are present at birth or shortly thereafter. "Congenital disability" is the preferred term, rather than "birth defect." Acquired

disabilities are those disabilities with an onset that occurs any time after the first year of life. Typically, the earlier the age of onset, the better the individuals respond and adjust (Alfano, Nielsen, & Fink, 1993; Krause, 1992, 1997, 1988a, 1998b; Krause & Crewe, 1991). This may be due to several factors: Children have cognitive and affective resiliency; children with congenital disabilities do not have a premorbid (predisability) identity; children have not internalized society's prejudices and discriminations about disability; and children have not fully developed their body image. For example, children with a congenital limb deficiency adjust better than children or adults who undergo therapeutic amputations (such as for cancer or diabetes). Certainly congenital blindness is a different experience than blindness acquired in old age.

With both types of onset, differentiating time of onset from time of diagnosis is important. In most disabilities, diagnosis and onset occur at the same time. For example, before the widespread use of neonatal (newborn) hearing tests immediately following birth, the average age of diagnosis for congenital deafness was 15 months. During these first 15 months of life, the parents and other caretakers were aware that something was "not quite right," but there was no definitive diagnosis. Therefore, the infant lost 15 months when he or she could have been learning to communicate through the use of sign language. For adults, it is typical with many types of disabilities, such as autoimmune diseases, to experience months and years before the diagnosis is made. In these cases, the time of onset is never known.

Acquired disabilities require a change of identity. Some acquired disabilities are the result of traumatic injuries, which are unpredictable and occur without warning. Therefore, there is no time for emotional preparation for this major life transition. Robert Perkins, in his book *Talking to Angels: A Life Spent in High Latitudes* (1996), described the shock of the diagnosis/onset of his mental illness:

In the spring of 1968, I was nineteen and a freshman at Harvard College. I was soon to leave school, without even passing "GO" or finishing the year, to start a journey. A journey I have yet to complete.... To have the wind knocked out of you, hard, at nineteen. To give you the feeling of it, I'd hit you on the side of the head, when you were not expecting it, with a flat board or a piece of rubber tubing. The shock of the thing! (pp. 5, 15)

A young man named Roy went on a trip to the American West with friends to celebrate their college graduation. The driver fell asleep at the wheel and rolled the van. Roy was the only one seriously hurt. Roy expresses in a single sentence the sudden, unexpected onset of his disability: "I was 22, a recent college graduate, and all of a sudden, I'm a T8 bilateral paraplegic, whatever the hell that is!" (Crewe, 1997, p. 32).

Richard Cohen, the husband of television personality Miera Vera, wrote a book about his diagnosis of multiple sclerosis. Describing his reaction to the diagnosis, he described the diagnostic process as "a journey into a strange land. That place would be exotic and rude" (2004, p. 17). Cohen related that he had no experience or expectation of a disability; nothing in his earlier life had prepared him for a disability. He felt that the label "winner" had been replaced with the label "damaged goods" (p. 27).

Both Perkins and Cohen compare the onset of their disability and the subsequent adaptation and acceptance to be a journey. The concept of a journey may be a way in which to describe two aspects: the ongoing process of adaptation and the necessity of leaving one's home to start the journey, or the need to change one's identity. Older individuals have stronger, more developed self-identities and they may have

earned prestige and status in the community. Also, middle-aged individuals tend to have more responsibilities for spouses, children, and elderly parents. Therefore, the onset of a disability in middle age requires a great deal of adjustment.

Type of Course

The course of a disability refers to the time after medical stabilization, especially the day-to-day experience of living with a lifelong disability. Basically, there are three types of courses: (a) stable course; (b) episodic course (sometimes referred to as recurring or relapsing); and (c) degenerating.

Stable course disabilities are those in which symptoms do not vary after medical stabilization. Examples of stable course disabilities are intellectual disabilities, deafness, and SCIs. The stability of the course is based on good management and treatment so that the individual does not acquire secondary disabilities. A plateau of functioning has been attained and the individual (presumably) knows what he or she is dealing with. Life has changed for these individuals but stable course disabilities tend to present fewer adjustment demands for both the individual and the family.

Examples of episodic disabilities are several types of mental illness, asthma, and seizure disorder. (Note: "seizure disorder" is the preferred term, rather than "epilepsy.") Disabilities with episodic courses are the most difficult to adjust to. In episodic disabilities, symptoms become worse at times and then these symptoms disappear or become much reduced. Typically, the course of episodic disabilities is very unpredictable and, therefore, the individual is subjected to ambiguity and lack of control (Falvo, 1999). Episodic disabilities are also ambiguous to the family, work colleagues, and society in general. Indeed, when considering only the three types of courses, there is more prejudice and discrimination against those with an episodic course disability. After all, at times, the individual "seems herself or himself" and at other times, the individual is severely limited in functioning. At times, this unpredictability is confusing to the individual with the disability. When symptoms remit, he or she may overexert or may discontinue medication and treatment. Ambiguous situations are stressful and, in general, we tend to ascribe negative and hostile characteristics and motives to people and situations that appear ill-defined. Ambiguity creates discomfort, tension, and stress in others and those with episodic course disabilities appear ambiguous. Mostly everyone tries to avoid ambiguity. Stefan (2001) explained:

Society is most comfortable with disabilities that are permanent and chronic; either one is disabled or not. Even with people who sometimes have to use a wheelchair find themselves regarded with skepticism and suspicion bordering on hostility. (p. 10)

Stefan asserted that the prejudice and discrimination against those with episodic disabilities (especially mental illness) are part of the larger legal and economic structure of the United States.

The economic, mental health, and legal structures, however, cannot accommodate the central truth of alternating or concurrent crisis and functioning at all. The U.S., legal system, mental health system, and labor market are marked by a static and dichotomous vision: One is either disabled or not, and once identified as disabled, residence in the category is presumed

permanent. There is no place for the complexities and contradictions of people's real lives.... Defeats ... are also not seen as temporary, but as permanent. One bad episode can mean the termination of parental rights, an involuntary commitment or involuntary medication. It is all or nothing in American society ... (2001, p. 59)

Episodic course disabilities present the greatest adjustment demands. Toombs (1995), a university professor with multiple sclerosis, described her disability as "global uncertainty."

Our sense of who we are is intimately related to the roles we occupy, professional and personal . . . and to the goals we hold dear. Chronic, progressive disabling disease necessarily disrupted (or threatened to disrupt) my every role in ways that, at the outset, seemed to reduce my worth as a person. Moreover, the uncertainty of the prognosis transformed my goals and aspirations into foolishness. This sense of diminishment was accompanied by a sense of guilt. But still, in my heart of hearts, I felt in a myriad of ways that I was failing to do as I ought. (p. 16)

Individuals with episodic disabilities cannot afford to forget the disability, even in times of "normal" functioning. They must take their medication, adhere to all treatment regimens, wear a medical bracelet, ensure that they do not engage in any activities that might trigger a relapse, and control their environment at all times, understanding that symptom exacerbation could occur at any time. Often, families with a member with an episodic disability, have practice "relapse drills," in which everyone, including the youngest child, is trained to perform certain activities when a relapse occurs.

Degenerating Course Disabilities

In the brief section that described disabilities, we saw that some disabilities were terminal, such as ALS or Lou Gehrig's disease. Those with ALS, on average, die 3 years after diagnosis. Many other disabilities are degenerating; but they do not necessarily result in death. Degenerating disabilities have a steady rate of worsening of symptoms and degenerating episodic disabilities have cyclic periods of degeneration coupled with periods of remission. In both types of degenerating courses, the disability becomes worse.

Accepting the reality of the degeneration of abilities and functioning and facing greater limitations and losses places great demands on the individual and his or her family. As the disability degenerates, the environment tends to become more and more inaccessible. Robert Neumann (1988) described the damage to his joints caused by rheumatoid arthritis as "Joint-of-the Month Club." (Note also his relief in being diagnosed "at last.")

Early in 1960, I went to the Mayo clinic, where my arthritis was diagnosed at last, and where more appropriate treatment was prescribed. Nonetheless, even this was not able to halt the progression of the disease to my other joints. First, it my other knee, then my ankles, then my fingers, then my elbows, then my neck, then my hips.... With a sort of gallows humor, I'd say that I had joined the Joint-of-the Month Club. But, behind this façade, I was terrified at how my body was progressively deteriorating right before my eyes. (p. 157)

Degree of Visibility

It is not possible to discern if an individual has a disability, including a very severe disability, simply from his or her appearance. Invisible disabilities include many health conditions, psychiatric disabilities, and many more disabilities. Often, it is not the disability that is apparent, but rather the accommodations, such as hearing aids or insulin pumps. Occasionally, IWODs mistakenly think that an invisible disability cannot be very serious or impair the individual's functioning very much. Nonetheless, some visible disabilities are very mild (such as some orthopedic impairments), while many invisible disabilities can be both severe and limit functioning in many different areas. For example, many psychiatric disabilities are considered to be invisible, but these are often very serious. Some individuals with episodic disabilities often appear to be "normal." We may become angry when a seemingly able-bodied person parks his or her car in a "handicapped" parking space, but the individual may have multiple sclerosis and be conserving his or her energy for the shopping. One woman wrote to Ann Landers, the newspaper advice columnist, explaining that she doesn't appear physically handicapped at first glance, but, due to multiple operations and surgeries, she can only walk or stand for a few minutes before becoming tired and needing to sit down. Despite having a handicapped tag prominently displayed in her car, she was approached by a stranger in a supermarket parking lot:

A "gentleman" walked up and said, "You certainly don't look handicapped to me. You should not be parking in that space." I looked at him and said, "And you, sir, look intelligent, but I guess looks can be deceiving." (Landers, 2010)

Individuals with invisible disabilities confront the challenge of disclosure. When, where, and to whom should the individual disclose his or his disability? It is difficult to hide something that is so central to one's identity, such as a disability. Furthermore, the disclosure decisions are not based on anything about the individual or the disability. Disclosure decisions are necessary because of the prejudice and stigma toward IWDs. Richard Cohen, a journalist, who was diagnosed with multiple sclerosis, described his quandary.

I learned a valuable lesson then and there. Honesty is not the best policy. Candor about health problems works in the confines of academia and maybe in the movies. Full disclosure does not work so well in the real world. Hard times in a competitive industry at a tough moment in history leave little room for dealing fairly with a serious illness. People with serious problems can be perceived as weak candidates for employment in the dollars-and-cents world. The right to do has currency when nothing is at stake... Don't tell nobody nuthin... My stealth approach bothered me enough to write my private rulebook outlining when dishonesty went too far and when it was permissible. (Cohen, 2004, pp. 54–55)

A reporter for *Time* magazine tells of his decision not to hide his disability. In an article, entitled "How I Lost My Hand but Found Myself," Weisskopf (2006, p. 37) related that he acquired his disability when covering the war in Iraq. Weisskopf's hand was amputated when he caught a grenade and threw it out of the Humvee. This action probably saved the lives of the soldiers with whom he was riding.

Before Iraq, the technology of arm prostheses hadn't changed much since World War II. The tiny population of amputees created little market incentive. Miguelez [the prosthetist] used the burst in demand from Walter Reed [Hospital] to lean on manufacturers for progress. Before long, he was outfitting Iraq war amputees with an electronic hand that opened and closed $2\frac{1}{2}$ times faster and could be programmed to function at different speeds and grip strength.

The cosmetic arts had also improved. I received a silicone hand that was so life-like it passed for real in social settings. But Pretty Boy, as I called it, kept tearing and afforded the precision of a boxing glove. It was too spongy to grasp anything small and too slippery to hold most objects for long.

Function was only part of the problem. The idea of trying to pass had begun to trouble me. It made me [feel] as if I had something to hide or to be ashamed of. When I started to go bald, I shaved my head. No comb-overs, no transplants or toupees for me. So why try to conceal a handicap? I was proud of how I had lost my hand. The stump had a story to tell . . . (p. 37)

As we read in Weisskopf's story, often those who try to "pass" as not having a disability sacrifice functioning. The silicone prosthetic hand was very lifelike and yet it was almost useless. The only function "Pretty Boy" served was to decrease the discomfort of IWODs. There are many examples of people who do not wear their hearing aids in public (others may think the person is rude and aloof when in reality he or she cannot hear) or of individuals who try to walk when the use of the wheelchair is available. President Franklin Roosevelt was a polio survivor who had no hip muscles and yet, in public, he had his sons and other aides, each would take one of his arms and make it appear as if he were walking. In private, he was carried in the arms of the Secret Service men or used a wheelchair. Of course, in this case, the public *knew* Roosevelt was a polio survivor; but Roosevelt did not want to *remind* the public.

Sometimes it is better to disclose the disability rather than allow others "to think the worst." We have seen that ambiguity is stressful and uncomfortable and that, in the absence of knowledge, we tend to ascribe negative aspects to the individual or the situation. For example, a gap of time of months or years in a résumé as a result of a hospitalization may raise more questions than simply telling the job interviewer the truth. Motor neuron disabilities are another example of when it is best to disclose an invisible disability. When symptoms recur, especially when the individual is fatigued or stressed, the individual loses coordination and stamina and stumbles, staggers, trips, and may fall. There are numerous cases in which these individuals were thought to be intoxicated. An individual who requires time off from work to attend Alcoholics Anonymous meetings (or other types of treatment and support meetings) may appear to coworkers as a goof-off. An individual with a psychiatric disability who chooses not to disclose must remain silent and listen to friends' jokes about "wackos," "fruitcakes," and "loonies" (Weingarten, 1997).

Prevalence or Incidence of the Disability

Prevalence or incidence of disability means the number of people who experience the disability. Old age deafness is very common and termed "high incidence," while spina bifida is very uncommon and called low incidence. Typically, high-incidence disabilities place fewer adjustment demands on the individuals. There are four reasons for this: (a) The public has more awareness and experience with the disability; (b) services and accommodations are more readily available; (c) individuals with high-incidence disabilities and their families can find more social support with others who have the disability; and (d) there is no lack of role models.

We have learned that the perceived ambiguity of the disability often leads to prejudice and discrimination (Pfeiffer, 2005a, 2005b; Phillips, 1990). Those who are blind and those who use a wheelchair experience less prejudice and discrimination because the public has had more experience with these disabilities and therefore thinks that they understand blindness and orthopedic impairments (Deshen, 1992; Mirzoeff, 1997; Scott, 1969; Tuttle, 1984). Blindness and orthopedic impairments do not elicit the fear and hostility that psychiatric disabilities often do. Ambiguity can also be experienced by those who have the disability. Due to all the medical and scientific advances, physicians are treating patients with conditions that they have never seen and, in some cases, conditions with which very few physicians are familiar. In these cases, the diagnosis is delayed or changed while the physicians try to accurately describe the condition.

In the story about Weisskopf and the amputation of his hand, he stated that prostheses were becoming more functional and available, simply due to the increase in the number of soldiers with amputations in the Iraq and Afghanistan wars. Thus, it was the *demand* or need for better prostheses that accelerated their development. For individuals with low-incidence disabilities, there is no market demand for their accommodations or services. People living in rural areas who have a family member with a low-incidence disability often must move (or travel long distances) to receive services, treatment, and monitoring from a large university hospital.

Individuals with low-incidence disabilities experience less social support, although with the Internet this is somewhat ameliorated. Social support helps to "normalize" the disability ("Oh, other people are experiencing what I am!"), provide role models, and give validity to their experience, and, in general, improve the quality of life for IWDs. Anne Finger had polio (which was not a low-incidence disability). She described her first experience of associating with other polio survivors at a conference on post-polio:

I sat for the first time in my life in a room filled with other disabled people. I remember how nervous I felt. I'd always gone to "regular" schools; I had been mainstreamed before there was a word for it. I had moved through the world as a normal person with a limp. (Finger, 1991, pp. 16–17)

One 9-year-old boy was born without any functioning muscles, due to a type of muscular dystrophy. He is on a ventilator (because he cannot breathe on his own), is fed through tubes in his stomach (because he cannot swallow), and uses a motorized wheelchair. Every year, this boy attends Easter Seals Camp for children with muscular dystrophy. While he loves going to this camp with other children with his disability, he reports, "No one is as bad[ly disabled] as me."

There are no role models for those with low-incidence disabilities. The following are three examples of the value and life-changing aspects of role models. In the first example, the mentor assists by assuring the newly disabled person that her feelings are normal, or typical, and that the future will be good.

I didn't want to admit that I was also handicapped.... She [mentor] tells me that she felt like that, too, and that you get over this feeling. And you know that life goes on and that there's a lot out there that you can do, anything you want to.... You can still be just as much a person without [your legs]. (Veith, Sherman, Pellino, & Yasui, 2006, p. 293)

In this next personal experience, Joan Tollifson (a woman born without one of her arms) feels a greater sense of self-worth and self-empowerment after learning that others have experienced what she has. Rather remarkably, she sees that the prejudice and discrimination she has experienced all of her life is not the result of her own personal failings, but rather is the result of society's failures.

They shared so many of what I had always thought was my own isolated, personal experiences that I began to realize that my supposedly private hell was a social phenomenon. We had eye-opening, healing conversations. We discovered, for example, that we had all had the experience of being patronized and treated like children even though we were adults. It wasn't simply some horrible flaw in my own character that provoked such reaction, as I had always believed, but rather, this was a part of a collective pattern that was much larger than any one of us. It was a stereotype that existed in the culture at large. Suddenly, disability became not just my personal problem, but a social and political issue as well. (Tollifson, 1997, p. 107)

Role models provide practical information and can share their own experiences, answering such questions as, "How long will it take to go through my morning routine?" or "Who is your doctor? Does he or she understand your disability?" A woman with an SCI related that she received information to her specific questions.

... how [the mentor] got around and what had happened to her and how she dealt with cooking and how she dealt with her kids, how she had sex, and what kind of bed she had. Lots of different questions [about] life and living . . . Spasticity and, oh God, just everything. . . . And the more I learned, the less scared I got. (Veith et al., 2006, p. 291)

The Degree of Stigma and Prejudice

There is nothing inherent in the disability or in the individual who has the disability that warrants the prejudice and discrimination of IWODs. The expression of this prejudice and discrimination (often termed "ableism" or "handicapism") ranges from minor inconveniences for IWDs to the type of housing, government services, education, and employment they receive (Frank & Elliot, 2000). The ADA (1990) and its Amendments (2008) have done a great deal to reduce ableism.

The general society holds great prejudice for some types of disabilities over others. Generally, society holds the least prejudice toward physical disabilities, more prejudice toward cognitive disabilities, and finally, the greatest prejudice toward psychiatric disabilities. This is called the "hierarchy of stigma" (Antonak, 1988; Antonak & Livneh, 1991; Horne & Ricciardo, 1998; 2004; Smart, 2009d; Tringo, 1970) and, while a theoretical concept, this hierarchy of stigma results in the daily lived experiences of IWDs. For example, the history of federal funding for disability services follows this hierarchy. Those with physical disabilities were granted

services first; those with cognitive disabilities second; and those with psychiatric disabilities were the last disability group to be given services and protection under the law. It is thought that, to the general public, physical disabilities are more readily perceived to be understood. Cognitive and psychiatric disabilities appear strange, ambiguous, and fear provoking and often individuals with these disabilities are "blamed" for having the disability. Blaming the individual for his or her disability includes attitudes such as, "He brought this upon himself," or that the individual should have done something or not done something to avoid the disability. Especially with psychiatric disabilities, the general public often feels that "these people should just try harder" (Leete, 1991). One author (Lewis, 2006) illustrated the hierarchy of stigma by referring to all nonpsychiatric disabilities as "the whole flock" and psychiatric disabilities as "the most vulnerable lamb." He also warned that, after the wolf takes the lamb, he might also return to take the entire flock. "When a wolf wants to target a whole flock, it looks for the most vulnerable lamb. The Bush administration is targeting psychiatric survivors today, but the whole disability movement is the target tomorrow" (p. 348).

The way in which the disability was perceived to have been acquired also plays a role in determining the degree of prejudice and stigma. Individuals who are thought (or known) to have caused their disability experience the most prejudice. Those who disabilities are congenital experience less prejudice because the public feels that the individual could not have avoided the disability; and those who receive the least stigma are individuals whose disability is the result of "noble" endeavors, such as a workplace accident or a combat injury. Obviously by simply looking at a person, it is impossible to know the type of onset of the disability. Empirical research has shown that those individuals whose disability is a result of dangerous behavior, such as drunk driving or riding a motorcycle without a helmet, experience a great deal of prejudice.

Other aspects of the disability determine the degree of prejudice and discrimination (Albrecht, 1976). Invisible disabilities and even mild disabilities elicit more prejudice. Under the ADA, IWDs cannot request accommodations if they do not disclose their disability. However, individuals with invisible disabilities and mild disabilities often do not appear to have a disability and, therefore, unreasonable expectations are placed upon them, and when these IWDs fail to accomplish these expectations, IWODs think the worse. Somewhat surprising, individuals with mild disabilities often wish their disability was more apparent so that they could receive more services and accommodations. Invisible disabilities are also more ambiguous than visible disabilities and, like the woman in the Ann Landers's column, others, including strangers, feel they have the right to voice their negative and irrational criticisms.

Stigma and prejudice are complex, but entirely unwarranted (Goffman, 1963; Leytens et al., 2000). Those who hold these prejudices literally pay for them in dollars and cents (May, 2005). Not allowing a group of individuals, in this case IWDs, to develop their potential and talents, to be educated, and to contribute to the national economy is expensive (Lynch & Thomas, 1994).

■ FROM STIGMA MANAGEMENT TO IDENTITY POLITICS

Stigma directed toward IWDs, with all its false beliefs, can become self-fulfilling. When societies and governments (incorrectly) assume that all IWDs are totally economically dependent, legal and economic laws and policies are enacted that

simply provide financial resources to IWDs (National Organization on Disability, 2004). Accepting this false premise (of economic dependence), governments and societies can feel that they have discharged their responsibility to IWDs. Economic dependence and exclusion from the workforce leads to segregation (Hahn, 1997; O'Keeffe, 1994).

Stigma management meant recognizing that regardless of one's accomplishments and resources, the IWD understands that he or she is a member of a devalued, politically disenfranchised group (Lefley, 1991). IWDs with visible disabilities (or those who disclosed an invisible disability) understood that society did not value them and did not view the provision of accommodations as desirable or necessary (Frank, 1995; Pelka, 1997; Pfeiffer, 2005b). The author of a book, *The Anatomy of Prejudice* (Young-Bruehl, 1996), summarized:

Unkind words against homosexuals, African Americans, Hispanics, and other minorities at least prompt rebuke from people who, though not members of these stigmatized groups, still recognize the prejudice. But prejudice against individuals with disabilities commonly goes undetected by a general public too unaware of its own feelings to recognize what has been said or written is prejudicial.

IWDs could manage this stigma by refusing to internalize society's stigma by feeling self-doubt and humiliated (Hahn, 1988). One IWD explained that he considered this prejudice to be justified, "The worst part about it is that I felt it my fault" (Holzbauer & Berven, 1996, p. 481). For those IWDs who have been teased and harassed since childhood, managing stigma as an adult may be overwhelming (Coleman, 1997; Heumann, 1997).

The passage of the ADA (1990) resulted in a group social identity for IWDs, crossing all diagnostic lines (Batavia & Schriner, 2001; DeJong & Batavia, 1990). No longer were IWDs divided into competing groups, such as "the blind," "the deaf," or the "mentally ill" (Berkowitz, 1987). Large national cross-disability groups, such as the American Coalition of Citizens with Disabilities and Disabled Peoples International, began to organize. Americans with disabilities began to view themselves as a large citizen body with interests and needs, with the goal of creating disability policies and services (Humphrey, 1999). They modeled a great deal of their political movement on the Civil Rights Movement of the 1960s; indeed, much of the language for the ADA was borrowed from the Civil Rights Act of 1964.

Naturally not all, or even a majority of IWDs, are politically active. However,

Once a shared identity is established, those defined as having a disability can become a distinct interest group which may become capable of mobilization... By the 1990s, many appointed government officials responsible for making and enforcing government disability policies were recruited to their posts from ... organizations of people with disabilities. (Asch & Scotch, 2001, p. 224)

However, not all IWDs feel inclined to become politically active, and moreover, IWDs consider their lack of access and full civil rights as the concern of everybody, including IWODs. IWDs, in much the way as individuals in other disenfranchised groups, feel that advocating for their rights places another responsibility or "job" on them. A woman in the United Kingdom (Slack, 1999) expressed her frustration with two issues—first, the added burden of disenfranchised groups to advocate for

their rights, and, second, the lack of insight of IWODs into the prejudice and discrimination directed toward IWDs:

When well-meaning people respond with "you should write to them about it," I am then deemed responsible for all the changes which need to happen in order to access ordinary places. If I spent my time writing to "them" I would have little time or energy left to earn a living or socialize. Yet I am left thinking if I don't write they won't either and the barrier will not be removed. I have to reach a compromise by writing about some things and letting others do by. I try to encourage non-disabled people to take responsibility but with a few exceptions they do not feel that it has anything to do with. Not yet in their life anyway. (Slack, 1999, p. 28)

When did you last hear a non-disabled person get excited about a public toilet which they could use? Of the thrill of seeing automatic doors and a lift [elevator] in a building? (p. 32)

This new political and social identity of IWDs has encouraged a new view of IWDs. Some social scientists term this "a narrative of emancipation." Life course developmental theory positions individuals in various historical periods of time, such as World War II or the baby boomers, allowing us to view their lives through a historic lens. This has been termed "cohort specificity" (Elder, 1998). Erikson (1950, 1964) believed that self-identities were formed by social expectations and social definitions. Presently, there is a cohort of young adults with disabilities who were born after the passage of the ADA. It will be interesting to observe and study their lives (Hahn, 2005).

WHAT DO IWDs WANT?

- American public education is a free entitlement program
- Disability should be considered a public responsibility
- If disability were considered a public responsibility, IWDs would not be required to fight for their civil rights
- IWDs want to be acknowledged as the moral and legal equal of IWODs

IWDs, and their families, want full civil rights and legal protection under the law when these rights are violated. They want a quality of life comparable to most Americans, including housing, transportation, education, and work (Bickenbach, 1993; Bryan, 1996; Burgdorf, 2002; Charlton, 1998).

Most of all, they would like to see disability conceptualized in the same way as education. American children, by law, are entitled to a free, appropriate, public education. Education is not viewed as a family, private affair (except for the small minority who home-school their children). All citizens pay taxes that support public education, regardless of whether they have children enrolled in school. The rationale behind free public education for all children is based on the benefits to the nation of an informed, educated citizenry.

RELATED TOPICS

- The family and disability
- Cultural, developmental stages, and disability
- Intersectionality and disability

The Family and Disability

American public education is a free entitlement program; proof of age and American citizenship are all that are required to enter school. In contrast, disability is still considered to be a private, family affair (Friesen, 1996) and services and resources are often difficult to access. Families are often overburdened; parents are forced to leave the workforce in order to care for their family member with a disability, and IWDs are not given the services and financial work incentives to be able to use their potential to benefit the American people. Of course, there are some government-funded services for IWDs, but these are eligibility programs with long, difficult application processes and prolonged waiting lists. In addition, many IWDs are not able to access these services. There are private charities that serve and provide funds to IWDs and finance research to eliminate various types of disabilities. Charity, while good intentioned, is not always reliable and many IWDs resent the costs to their dignity and self-respect these charities extract. American public education is not based on charitable contributions nor are there application and eligibility processes required to enter school.

Continuing to conceive of disability as a private, family affair is costing the American nation in many ways: in a literal financial way because any time a group of individuals is prevented from fulfilling their full potential, the nation loses tax dollars and assumes responsibility for public assistance programs. Not viewing America's response to the disabilities of its citizens as a public entitlement also perpetuates the fear of disability. When IWDs are not integrated into American public life, IWODs continue to fear disability. Furthermore, IWDs have a term for IWODs—TABs (Temporarily Able-Bodied) or CRABs (Currently Regarded as Able-Bodied)—emphasizing the potential for anyone to acquire a disability.

Culture, Developmental Stages, and Disability

In the following chapters, the question will be asked: "Are developmental stages determined solely by biology or do societal expectations, cultural definitions of role functioning, sex roles, and religious beliefs and practices play a role?" The next question would be: "Who or what decides the timing and length of the various developmental stages? Governments, medicine, or religious institutions?" The answers to both these questions are "all of the above." Third, with the exception of Freud's, most, if not all, of the developmental theories were biased toward White, straight males without disabilities and this group of individuals was the only group studied. (This is not to say that White, straight males without disabilities are not worthy of study, only that there are other groups who are equally worthy of study.) Societal institutions, theory development and the resulting research, governmental opportunity structures, and treatment and service provision have not taken cultural identities into consideration. Therefore, developmental theories have given the briefest of attention to the cultural identification of individuals. Further, the little attention to those of minority groups has been based on the deficit model, which states that a "problem" or "deficiency" must be determined before services and resources can be allocated to individuals. The opposite, the "strengths-based" model, looks for and implements cultural assets.

Consideration of disability as a single factor (which is never possible in reality) shows that disability is a very culture-laden concept. Symptom perception, description of symptoms, help-seeking behaviors, and treatment and services are all culturally defined.

The way in which individuals define themselves, their families, and their disabilities are moderated by their cultural identification. For example, in individualistic cultures, people tend to base their decisions on what they consider to be best for themselves while those in collectivistic societies tend to base decisions on what is best for their families. In all these examples, it is the level of acculturation of the individual that is important, rather than some type of label.

Intersectionality and Disability

Are IWDs Part of Intersectionality?

- This book considers IWDs to be part of the intersectionality discussion
- IWDs, and disabilities, are rarely discussed by proponents of intersectionality

Intersectionality occurs when an individual identifies with two (or more) disenfranchised groups or others perceive the individual to belong to two or more disenfranchised groups. In 1989, Kimberle Crenshaw, a law professor at the University of California Los Angeles (UCLA) and at Columbia University, developed the idea of intersectionality in her words, "as a prism to see certain problems." "Intersectionality" is a term used to describe the situation in which an individual is oppressed or experiences stigma, prejudice, and discrimination for two or more minority statuses, thus increasing the stigma and making it difficult for the individual to determine the specific source of prejudice. For an African American lesbian with a psychiatric disability, the prejudice may be greater than fourfold, but might increase exponentially when each minority status is considered. Those in disenfranchised groups also have fewer resources and a narrow range of opportunities and the effects of intersectionality reduce the number of opportunities.

Those who describe and explain intersectionality rarely mention disability as a minority status, nor acknowledge the prejudice and discrimination directed toward IWDs. Browsing in any bookstore, including online, there are sections devoted to each of these groups, such as African American Studies, Women's Studies, and LGBTQ Studies. There are no sections assigned to Disability Studies and the few books on disability are found in the Health section. Therefore, disability is still viewed as a medical issue and as deviance, and not as diversity. When disability rights advocates have tried to join other rights-based groups, such as women's, LGBT, or racial groups, they report being asked, "What's wrong with you?" while other new members are asked, "Who are you?" Intersectionality advocates have paid little attention to IWDs.

There can be no doubt that IWDs are not considered the moral and legal equivalent of most Americans. On that basis, and their centuries of oppression in almost every society and culture, IWDs should have a place at the intersectionality table. Like other disenfranchised groups, IWDs consider themselves to be "normal," ordinary people who have a great deal to contribute to their societies.

Possible Reasons Why Other Disenfranchised Groups Do Not Include IWDs

- Disability has an inherently negative component while other disenfranchised identities do not have an inherently negative component
- The widespread, but incorrect, public view that all needs of IWDs are met by the medical professions

- Protection under the ADA requires the documentation of a need, or in other words, a disability
- The Civil Rights Act of 1964 is based on citizenship and, therefore is not a right based on need
- Abortion, infanticide, euthanasia are never discussed for other disenfranchised groups. Many IWDs (as large diagnostic groups) feel that their lives are a subject of debate
- Televised charity telethons are never held for other disenfranchised groups
- Those in the majority never fear becoming a minority individual while IWODs understand that they can become a minority by acquiring a disability

Having laid out the arguments for including IWDs in the intersectionality discussion, we will consider the drawbacks. First, there is nothing inherently negative about any of the other group identities, gender, race, and sexual choices. But there is something inherently negative about disability. Simply stated, it is better not to have a disability. Perhaps for this reason, other groups organized to gain social justice do not consider IWDs. There would be no discussion of aborting or euthanizing individuals in these other groups and there are no television charity telethons for racial, ethnic, gender groups, and more commonly, there are few attempts to "fix" individuals in racial, ethnic, gender, or LBGTQ groups.

The second rationale for failing to include IWDs in discussions on intersectionality concerns the public perception that all of the needs of all IWDs are met by the medical professions. For example, in order to be protected by the ADA, the individual must document a disability. In a somewhat twisted logic, it is thought that if the medical needs of IWDs are met, IWDs should not expect civil rights. The third rationale concerns the public perception of IWDs, that they are defined only by the disability. In contrast, individuals in other disenfranchised groups are perceived as having a gender, a race, a profession, a family, and friends. IWDs have only been viewed as their disability (and disability is almost always viewed negatively.) Finally, those who are considered "the majority" do not fear becoming a racial minority, or another gender. For example, White people don't fear becoming African American nor do most men worry about becoming a woman. However, most IWODs understand they can, at any time, become a minority person if they acquire a disability. We discuss in later chapters the way in which IWDs who also belong to other disenfranchised groups are treated.

The ADA is not based on the concept of justice where everyone receives the same resources and services, but, rather, on the concept of justice of everyone receiving what he or she needs. Most civil rights laws are based on everyone receiving the same resources and services.

In short, there are questions whether the concept of intersectionality is truly pertinent for IWDs. In this book, however, disability is considered part of intersectionality. The point is: Disability is indeed a negative, but most IWDs manage their disabilities, are proud of their mastery, and do not consider themselves less than anyone else. Furthermore, IWDs are "normal" in the sense that they have the same emotions, same life tasks, and same motivations as IWODs. Many IWDs think that their biggest problem is IWODs, who exaggerate and sensationalize a life with a disability. For example, there are no longer films about racial or sexual minorities that exaggerate, stereotype, and disparage the characters. Today, there are the sad "Movie of the Week" or "After School Special" that portray IWDs solely as symbols for deviance, violence, and pitiful weakness.

This book discusses intersectionality and the way in which IWDs might be included. Certainly, IWDs should be included in the diversity discussion since they have a great deal to add to the broader American culture.

CONCLUSION

The concept and description of disability are complex. One short chapter in a text-book cannot begin to explain this complexity and, furthermore, each individual conceptualizes and responds to his or her disability in different ways. Therefore, disability is a very idiosyncratic experience. Having acknowledged the impossibility of completely describing disabilities, it is important to gain a very introductory clinical knowledge in order to learn about the personal, cultural, and social aspects of the experience of disability.

This chapter began with some social aspects of disability, but the largest part of the chapter is devoted to clinical descriptions. It was important that a few of the ways in which IWODs see both the disability and the individual with the disability be considered before moving on to clinical categorizations and descriptions.

Next, in an attempt to point out some of the difficulties and shortcomings of categorization and large diagnostic manuals, it may appear that I disapprove of both. I do not, acknowledging that both categorical decisions and the construction and implementation of these diagnostic manuals are the result of years of labor by many professionals who only seek to improve the lives of IWDs. To my knowledge, there are no other systems that are thought to be better, more accurate, or more complete.

Finally, we have made the assertion that the increasing numbers of IWDs is an advance for society and are due to the successes of medicine. However, when a disability can be prevented, that is the best solution and this is the rationale for laws that mandate seat belt use and helmets and punish drunk drivers. Nonetheless, when the alternative to a disability is death, surviving with a disability is thought to be a success.

In the past, with the two-outcome paradigm of medicine, total cure or death, there were very few IWDs. In this obsolete paradigm, disabilities were thought to be failures and IWDs living reminders of these medical failures. Without science, medicine, and technology, there would be very few IWDs.

Also, social change and government laws and policies follow these medical successes. Here is a simple illustration. In World War I, 90% of all American combat veterans with lower limb amputations died before they reached the United States. Infection and gangrene killed these men (Shapiro, 1993). During World War II, antibiotics were developed, tested, and implemented. Veterans Affairs has tracked the 40,000 amputation and paralysis survivors and most of these veterans lived decades after their medical stabilization. In the Iraq Wars, due to the use of body armor, fewer men and women have died, but many have endured amputations. This specific type of disability which resulted from the Iraq wars has been the impetus to develop more functional prostheses. Medical advances (antibiotics) and functional advances (better prostheses), both the result of wars, when combined, have resulted in great social acceptance and a wider range of choices for IWDs. Assistive technology, such as wheelchair sports, would not have been possible without medical successes.

In short, the successes of medicine have created a type of demographic progress, most IWDs, and these numbers will increase.

KEY TERMS

- Syndrome
- Normalization
- TAB, normies, or CRABs
- Anoxia
- Ataxia
- Choreoathetosis
- Dyskinesia
- Spina bifida

- Autoimmune diseases
- ASD—Autism Spectrum Disorder
- Quadriplegia
- Paraplegia
- Chronic illnesses as a disability
- Cross-disability focus
- Handicapism or Ableism
- Intersectionality

VIDEOS TO VIEW

- View the 30-minute video, "Abandoned to Their Fate: A History of Social Policy Toward People With Disabilities" available from Insight Media. The producers describe this video: "This program traces the origins of social stereotypes of exclusionary practices toward individuals with disabilities from the Middle Ages through modern times. It explores the moral, aesthetic, and economic policies that have shaped the lives of individuals with disabilities."
- View the 42-minute video, "Recollections of the Institution 1: Personal Reflections" available from Insight Media. The producers describe this video: "Featuring rare archival footage and excerpts from individuals who once lived in institutions for individuals with mental retardation, this program explores daily life in institutions."
- View the 20-minute video, "What Is Mental Retardation?" available from Insight Media. The producers describe this video: "Explaining that mental retardation is a development disorder with many known and unknown causes, this program describes mental retardation, using the criteria of the *DSM-IV-TR*. It covers known causes of mental retardation, outlines normal growth and development from birth to age five, and explores associated comorbidities."
- View the Walter Brock film, "If I Can't Do It," in which "an unflinching portrait of one cantankerous and courageous disabled man, who, with many others, is pushing for independence and an equal slice of the American pie. Born with cerebral palsy in an isolated cabin in the Kentucky Mountains in 1944, Campbell spent the first 38 years of his life at home, sheltered by his overprotective parents." This film was seen on PBS on the series, P. O. V. and was partially funded by the Corporation for Public Broadcasting.
- View the 56-minute video, "Without Pity: A Film About Abilities" available from Insight Media. The producers describe this video: "This [video] celebrates the efforts of people with disabilities to live full, productive lives. Profiling diverse individuals with such disabilities as cerebral palsy, blindness, polio, quadriplegia, and missing limbs, this program emphasizes the resilience and potential of individuals who are determined to be self-sufficient." Emmy Award. Gold Apple, National Educational Media Network.
- View the HBO-produced video, "Baghdad ER," available from Films for the Humanities. This 65-minute program includes some nudity. The producers describe this video: "Combat-zone medicine has inspired innovations in civilian trauma care for decades. A particularly compelling model can be found in Iraq, where injured troops have a 90% chance of survival. This program

- follows U.S. Army medevac teams to crash and combat sites, depicts surgeries and amputations, and records the feelings of those who treat the effects of war every day. Viewer discretion is advised."
- Read the New York Times Disability Series. Many of the excerpts in this book are taken from this series.
- In August 2016, The New York Times kicked off a new weekly opinion series dedicated exclusively to publishing essays by disabled writers. Its first offering was "Becoming Disabled," by Rosemarie Garland Thompson, a foundational voice in the field of disability studies (https://www.nytimes.com/column/disability).

LEARNING ACTIVITIES AND WRITING EXERCISES

(Note: These may be used for class presentations.)

- Using the following variables, discuss two physical disabilities, two cognitive disabilities, and two psychiatric disabilities:
 - Type of onset
 - Time of onset
 - Type of course
 - Degree of visibility
 - Prevalence of disability
 - O Degree of prejudice and discrimination.
- Write a five-page paper on why psychiatric disabilities should be legally and clinically considered a disability. Write another five-page paper on why psychiatric disabilities should not be considered a disability.
- Write a three-page paper explaining the statement, "disability has precious little to do with impairment and a great deal to society's defects."
- Visit these websites:
 - The U.S. Census Bureau, Disability Selected Characteristics of Persons 16-74: www.census.gov/content/dam/Census/library/publications/2018/demo/p70-152.pdf;www.nod.org/service
 - The Disability Statistics from the American Community Survey (ACS) at Cornell University in Ithaca, NY: www.disabilitystatistics.org
 - Note the two levels of disability: severe and not severe. Which age group reports the greatest number of disabilities?

Are there conditions that you had not considered to be disabilities?

- Go to the library and access the second edition of Radius CD-ROMs. These 19 CD-ROM data sets are the largest single source on disability. Their website is www.socio.com and their email address is socio@socio.com. Write a paper on the prevalence of one disability. In this 10-page paper, address the following demographic variables: sex, age, geographic area, income, level of education, and racial/ethnic groups.
- Write a 10-page paper with the title, "Disability Is a Natural and Common Part of Life."
- Write three pages on ways in which the existential angst of IWODs could be reduced.
- Write a 10-page paper in which you describe and conceptualize two IWDs whom you know. In case study style, compare their disabilities and their impact, using the terms described in this chapter.

- Write a 10-page paper in which you agree with this statement, "Biological deficits and disabilities can be triggers for growth and development."
- Write a three-page paper defending the decision of the American Psychiatric Association to lower diagnostic thresholds in the *DSM-5*.

WEBSITE RESOURCES

www.ldonline.org/educators

http://www.easterseals.com/site/PageServer?pagename=ntl_understanding

www.advocadopress.org/representing-disability-in-an-ableist-world

http://dsc.ucsf.edu/main.php?name=understanding

Brault, M. W., United States Economics and Statistics Administration, & United States Bureau of the Census. (2012). *Americans with disabilities: 2010* (Current population reports. no. 131). Retrieved from https://www.census.gov/library/publications/2012/demo/p70-131.html

National Center for Special Education Research, Institute of Education Sciences, & U.S. Department of Education. Retrieved from http://ies.ed.gov/ncser/

National Eye Institute. Statistics and data: Blindness. Retrieved from https://www.nei.nih.gov/eyedata/blind

Prevent Blindness America. Vision problems in the U.S.: Prevalence of adult vision impairment and age-related eye disease in America. Retrieved from http://www.visionproblemsus.org/index.html

United States Bureau of the Census. American fact finder. Retrieved from http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

REFERENCES

Abelson, R. (2010, September 16). Census numbers show 50.7 million uninsured. *The New York Times*. Retrieved from https://prescriptions.blogs.nytimes.com/2010/09/16/census-numbers-show-50-million-uninsured/

Albrecht, G. L. (Ed.). (1976). The sociology of physical disability and rehabilitation. Pittsburgh, PA: University of Pittsburgh Press.

Alfano, D. P., Nielsen, P. M., & Fink, M. P. (1993). Long-term psychosocial adjustment following head or spinal cord injury. *Neuropsychiatry*, *Neuropsychology*, and *Behavioral Neurology*, 6, 117–125.

American Association on Intellectual and Developmental Disabilities. (1992). *Mental retardation: Definition, classification, and systems of support* (Special 9th ed.). Washington, DC: Author.

American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author

Antonak, R. F. (1985). Societal factors in disablement. Rehabilitation Counseling Bulletin, 28, 188–201.
Antonak, R. F. (1988). Methods to measure attitudes toward people who are disabled. In H. E. Yuker (Ed.), Attitudes toward persons with disabilities (pp. 109–126). New York, NY: Springer Publishing Company.

Antonak, R. F., & Livneh, H. (1991). A hierarchy of reactions to disability. *International Journal of Rehabilitation Research*, 14, 13–24. doi:10.1097/00004356-199103000-00002

Asch, A., & Scotch, R. (2001). Disability politics. In J. Krieger, M. E. Crahan, L. R. Jacobs, W. A. Joseph, G. Nzongola-Ntalaja, & J. A. Paul (Eds.), The Oxford companion to politics of the world (2nd ed., pp. 223–225). Oxford, UK: Oxford University Press.

Barnes, C., Mercer, G., & Shakespeare, T. (1999). Exploring disability: A sociological introduction. Cambridge, UK: Polity.

Batavia, A. I., & Schriner, K. (2001). The Americans with Disabilities Act as an engine of social change: Models of disability and the potential of a civil rights approach. *Disability Policy Studies Journal*, 29, 690–702. doi:10.1111/j.1541-0072.2001.tb02122.x

- Batshaw, M. L. (Ed.). (2001). When your child has a disability. Baltimore, MD: Paul H. Brookes.
- Batshaw, M. L. (2001). Why my child? Causes of developmental disabilities. In M. L. Batshaw (Ed.), When your child has a disability (pp. 11–12). Baltimore, MD: Paul H. Brookes.
- Berkowitz, E. D. (1987). Disabled policy: America's programs for the handicapped. London, UK: Cambridge University Press.
- Bickenbach, J. E. (1993). *Physical disability and social policy*. Toronto, ON, Canada: University of Toronto Press.
- Bogdan, R. (1988). Freak show: Presenting human oddities for amusement and profit. Chicago, IL: University of Chicago Press.
- Brain Awareness Week. (2019). Retrieved from https://faculty.washington.edu/chudler/baw.html
- Bronfin, L. (2005). Neuromuscular disorders. In H. H. Zarestsky, E. F. Richter, & M. G. Eisenberg (Eds.), *Medical aspects of disability: A handbook for the rehabilitation professional* (3rd ed., pp. 383–426). New York, NY: Springer Publishing Company.
- Brown, S. C. (1991). Conceptualizing and defining disability. In S. Thompson-Hoffman & I. F. Storck (Eds.), *Disability in the United States: A portrait from national data* (pp. 1–14). New York, NY: Springer Publishing Company.
- Brueggemann, B. J., & Burch, S. (Eds.). (2007). Women and deafness: Double visions. Washington, DC: Gallaudet University.
- Bryan, W. V. (1996). In search of freedom: How people with disabilities have been disenfranchised from the mainstream of American society. Springfield, IL: Charles C Thomas.
- Burgdorf, R. (2002). Supreme Court decisions thwart intent of ADA. San Diego, CA: Center for an Accessible Society.
- Butcher, J. N., Mineka, S., & Hooley, J. M. (2010). Abnormal psychology (14th ed.). Boston, MA: Allyn & Bacon.
- Byrd, E. K. (1979). Magazine articles and disability. American Rehabilitation, 4, 18-20.
- Byrd, E. K., Byrd, P. D., & Allen, C. (1977). Television programming and disability: A descriptive study. Journal of Applied Rehabilitation Counseling, 8, 28–32. doi:10.1891/0047-2220.8.1.28
- Byrd, E. K., & Elliott, T. R. (1988). Media and disability: A discussion of the research. In H. E. Yuker (Ed.), *Attitudes toward persons with disabilities* (pp. 82–95). New York, NY: Springer Publishing Company.
- Byrd, E. K., Williamson, W., & Byrd, P. D. (1986). Literary characters who are disabled. *Rehabilitation Counseling Bulletin*, 30, 57–61.
- Charlton, J. I. (1998). Nothing about us without us: Disability oppression and empowerment. Berkeley, CA: University of California Press.
- Cohen, R. M. (2004). Blindsided: Living a life above illness: A reluctant memoir. New York, NY: Harper Collins.
- Coleman, L. M. (1997). Stigma: An enigma demystified. In L. J. Davis (Ed.), *The disability studies reader* (pp. 216–231). New York, NY: Routledge.
- Corrigan, J. D. (1995). Substance abuse as a mediating factor in outcome from traumatic brain injury. Archives of Physical Medicine and Rehabilitation, 76, 302–309. doi:10.1016/ S0003-9993(95)80654-7
- Crewe, N. M. (1993). Aging and severe physical disability. Patterns of change and implications for change. In M. Nagler (Ed.), *Perspective on disability* (2nd ed., pp. 355–361). Palo Alto, CA: Health Markets Research.
- Crewe, N. M. (1997). Life stories of people with long-term spinal cord injury. Rehabilitation Counseling Bulletin, 41, 26–42.
- Cruickshank, W. M. (1990). Definition: A major issue in the field of learning disabilities. In M. Nagler (Ed.), *Perspectives on disability* (2nd ed., pp. 389–406). Palo Alto, CA: Health Markets Research.
- Dailey, S. F., Gill, C. S., Karl, S. L., & Minton, C. A. B. (2014). DSM-5: Learning companion for counselors. Alexandria, VA: American Counseling Association.
- Davis, L. J. (Ed.). (1997). The disability studies reader. New York, NY: Routledge.
- Davis, L. J. (Ed.). (2010). The disability studies reader (3rd ed.). New York, NY: Routledge.
- Deegan, P. E. (1991). Recovery: The lived experience of rehabilitation. In R. P. Marinelli & A. E. Dell Orto (Eds.), *The psychological and social impact of disability* (3rd ed., pp. 47–54). New York, NY: Springer Publishing Company.
- DeJong, G., & Batavia, A. I. (1990). The Americans with Disabilities Act and the current state of U.S. disability policy. *Journal of Disability Policy Studies*, 1, 65–75. doi:10.1177/104420739000100305

- Deshen, S. A. (1992). Blind people: The private and public life of sightless Israelis. Albany, NY: State University of New York Press.
- Dixon, T. M., Layton, B. S., & Shaw, R. M. (2005). Traumatic brain injury. In H. H. Zarestsky, E. F. Richter, & M. G. Eisenberg (Eds.), Medical aspects of disability: A handbook for the rehabilitation professional (3rd ed., pp. 119–149). New York, NY: Springer Publishing Company.
- Douard, J. W. (1995). Disability and the persistence of the "Normal." In S. K. Toombs, D. Barnard, & R. A. Carson (Eds.), *Chronic illness: From experience to policy* (pp. 154–175). Bloomington: University of Indiana.
- Drew, C. J., Logan, D. R., & Hardman, M. L. (1992). Mental retardation: Life cycle approach (5th ed.). Columbus, OH: Merrill.
- Elder, G. M. (1998). The life course as development theory. Child Development Theory, 69, 1–12. doi:10.1111/j.1467-8624.1998.tb06128.x
- Elliott, T. R., Frank, R. G., Corcoran, J., Beardon, L., & Byrd, E. K. (1990). Previous personal experience and reactions to depression and physical disability. *Rehabilitation Psychology*, 35, 111–119. doi:10.1037/h0079050
- Erickson, W., Lee, C., & von Schrader, S. (2019). 2017 Disability status report: United States. Ithaca, NY: Cornell University Yang-Tan Institute on Employment and Disability (YTI).
- Erikson, E. H. (1950). Childhood and society. New York, NY: W.W. Norton.
- Erikson, E. H. (1964). Insight and responsibility. New York, NY: Norton.
- Falvo, D. R. (1991). Medical and psychosocial aspects of chronic illness and disability. Gaithersburg, MD: Aspen.
- Falvo, D. R. (1999). Medical and psychosocial aspects of chronic illness and disability (2nd ed.). Gaithersburg, MD: Aspen.
- Fine, M., & Asch, A. (1988a). Disability beyond stigma: Social interaction, discrimination, and activism. *Journal of Social Issues*, 44, 3–21. doi:10.1111/j.1540-4560.1988.tb02045.x
- Fine, M., & Asch, A. (1988b). Introduction: Beyond pedestals. In M. Fine & A. Asch (Eds.), *Women with disabilities: Essays in psychology, culture, and politics* (pp. 1–37). Philadelphia, PA: Temple University Press.
- Fine, M., & Asch, A. (Eds.). (1988c). Women with disabilities. Philadelphia, PA: Temple University Press.
- Finger, A. (1991). Past due: A story of disability, pregnancy, and birth. Seattle, WA: Seal Press.
- Fleischer, D. Z., & Zames, F. (2001). The disability rights movement: From charity to confrontation. Philadelphia, PA: Temple University Press.
- Frank, A. W. (1995). The wounded storyteller: Body, illness, and ethics. Chicago, IL: University of Chicago Press.
- Frank, R. G., & Elliot, T. R. (Eds.). (2000). *Handbook of rehabilitation psychology*. Washington, DC: American Psychological Association.
- Freund, A. M., Nikitin, J., & Ritter, J. O. (2009). Psychological consequences of longevity: The increasing importance of self-regulation in old age. *Human Development*, 52, 1–37. doi:10.1159/000189213
- Friesen, B. J. (1996). Family support in child and adult mental health. In G. H. S. Singer, L. E. Powers, & A. L. Olson (Eds.), Redefining family support: Innovations in public private partnerships (pp. 259–274). Baltimore, MD: Brookes.
- Gill, C. J. (2001). Divided understandings: The social experience of disability. In G. L. Albrecht, K. D. Seelman, & M. Bury (Eds.), *The handbook of disability studies* (pp. 351–373). Thousand Oaks, CA: Sage.
- Glass, P. (2001). Your baby was born prematurely. In M. L. Batshaw (Ed.), When your child has a disability (pp. 59–71). Baltimore, MD: Paul H. Brookes.
- Goffman, E. (1963). Stigma: Notes on the management of spoiled identity. Englewood Cliffs, NJ: Prentice-Hall.
- Gold, J. T. (1996). Growth hormone treatment of children with neural tube defects. *Journal of Pediat- rics*, 129(5), 771.
- Grossman, H. J. (Ed.). (1983). Classification in mental retardation. Washington, DC: American Association on Mental Deficiency.
- Hahn, H. (1988). The politics of physical differences: Disability and discrimination. *Journal of Social Issues*, 44, 39–47. doi:10.1111/j.1540-4560.1988.tb02047.x
- Hahn, H. (1993). The political implications of disability definitions and data. *Journal of Disability Policy Studies*, 4, 41–52. doi:10.1177/104420739300400203

- Hahn, H. (1997). Advertising the acceptably employable image: Disability and capitalism. In L. J. Davis (Ed.), *The disability studies reader* (pp. 172–186). New York, NY: Routledge.
- Hahn, H. (2005). Academic debates and political advocacy: The U.S. disability movement. In G.
 E. May& M. B. Raske (Eds.), *Ending disability discrimination: Strategies for social workers* (pp. 1–24). Boston, MA: Pearson.
- Heinemann, A. W., & Rawal, P. H. (2005). Spinal cord injury. In H. H. Zarestsky, E. F. Richter, & M. G. Eisenberg (Eds.), Medical aspects of disability: A handbook for the rehabilitation professional (3rd ed., pp. 696–721). New York, NY: Springer Publishing Company.
- Herman, D. (1998). Helen Keller: A life. New York, NY: Knopf.
- Heumann, J. (1997). Personal narrative. In R. Mackelprang & R. Salsgiver (Eds.), *Disability: A diversity model in human service practice* (pp. 51–54). Pacific Grove, CA: Brooks/Cole.
- Higgins, P. C. (1992). Making disability: Exploring the social transformation of human variation. Springfield, IL: Charles C. Thomas.
- Himmelstein, D. U., Woolhandler, S., & Wolfe, S. M. (1992). The vanishing health care safety net: New data on uninsured Americans. *International Journal of Health Services*, 22, 381–396. doi:10.2190/5FBA-VEKK-K2DK-JF8V
- Hockenberry, J. (1995). Moving violations: War zones, wheelchairs, and declaration of independence. New York, NY: Hyperion.
- Holzbauer, J. J., & Berven, N. L. (1996). Disability harassment: A new term for a long-standing problem. *Journal of Counseling and Development*, 74, 478–483. doi:10.1002/j.1556-6676.1996. tb01896.x
- Horne, M. D., & Ricciardo, J. L. (1988). Hierarchy of response to handicaps. *Psychological Reports*, 62, 83–86. doi:10.2466/pr0.1988.62.1.83
- Humphrey, J. C. (1999). Disabled people and the politics of differences. Disability & Society, 14, 17–188. doi:10.1080/09687599926253
- Johnson, H. B. (2005, March/April). Too late to die young. *American Association of Retired Persons Bulletin*, 44, 46–99.
- Johnson, H. M. (2003, February 16). Should I have been killed at birth? The case for my life. *The New York Times Magazine*, 50, 52–56, 74.
- Jones, M., Stanford, J., & Bell, R.B. (1997). Disability demographics. How are they changing? *Team Rehab Report*, 38, 36–44.
- Joseph P. Kennedy, Jr. Foundation. (1991). Facts about mental retardation. Washington, DC: Author. Kleege, G. (2006). Blind rage: Letters to Helen Keller. Washington, DC: Gallaudet University.
- Krause, J. S. (1992). Adjustments to life after spinal cord injury: A comparison among three participant groups based on employment status. *Rehabilitation Counseling Bulletin*, 35, 218–229.
- Krause, J. S. (1997). Adjustment after spinal cord injury: A nine-year longitudinal study (1985–1994). Archives of Physical Medicine and Rehabilitation, 78, 651–657. doi:10.1016/S0003-9993(97)90432-9
- Krause, J. S. (1998a). Changes in adjustment after spinal cord injury: A 20-year longitudinal study. *Rehabilitation Psychology*, 43, 41–55. doi:10.1037/0090-5550.43.1.41
- Krause, J. S. (1998b). Dimensions of subjective well-being after spinal cord injury: An empirical analysis by gender and race/ethnicity. Archives of Physical Medicine and Rehabilitation, 79, 900–909. doi:10.1016/S0003-9993(98)90085-5
- Krause, J. S., & Crewe, N. M. (1991). Chronologic age, time since injury, and time of measurement: Effect on adjustment after spinal cord injury. Archives of Physical Medicine and Rehabilitation, 72, 91–100. doi:10.5555/uri:pii:000399939190112V
- Kriegel, L. (1987). The cripple in literature. In A. Gartner & T. Joe (Eds.), Images of the disabled, disabling images (pp. 31–46). New York, NY: Praeger.
- Landers, A. (2010, October31). Looks can be deceiving. Salt Lake City, UT: Salt Lake Tribune.
- LaPlante, M. P. (1991). The demographics of disability. In J. West (Ed.), *The Americans with Disabilities Act: From policy to practice* (pp. 55–80). New York, NY: Milbank Memorial Fund.
- LaPlante, M. P. (1993). State estimates of disability in America. Disability Abstracts No. 3. Washington, DC: National Institute on Disability and Rehabilitation Research.
- LaPlante, M. P. (1996). Health conditions and impairments causing disability. Disability Abstracts, No. 16. Washington, DC: National Institute on Disability and Rehabilitation Research.
- LaPlante, M. P. (1997). *How many Americans have a disability: Disability Statistics Abstract Number* 5 [On-line]. San Francisco: University of California at San Francisco. Retrieved from https://www.milbank.org/.../volume-69/issue-s1/69-S1-2-The-Demographics-of-Disability.pdf

- Leete, E. (1991). The stigmatized patient. In P. J. Fink & A. Tasman (Eds.), *Stigma and mental illness* (pp. 17–25). Washington, DC: American Psychiatric Association Press.
- Lefley, H. P. (1991). The stigmatized family. In P. J. Fink & A. Tasman (Eds.), *Stigma and mental illness* (pp. 127–138). Washington, DC: American Psychiatric Association Press.
- Lewis, B. (2006). A mad fight: Psychiatry and disability activism. In L. J. Davis (Ed.), *The disability studies reader* (3rd ed.). New York, NY: Routledge.
- Leytens, J. P., Paladino, P. M., Rodriguez-Torres, R., Vaes, J., Demoulin, S., Rodriguez-Torres, A., & Gaunt, R. (2000). The emotional side of prejudice: The attribution of secondary emotions to ingroups and outgroups. *Personality and Social Psychology Review*, 4, 186–197. doi:10.1207/S15327957PSPR0402_06
- The Lighthouse. (1995). The Lighthouse National Survey on Vision Loss: The experience, attitudes, and knowledge of middle-aged and older Americans. New York, NY: Author.
- Linton, S. (1998). Claiming disability: Knowledge and identity. New York: New York University.
- Longmore, P. K. (1985). Screening stereotypes. Social Policy, 16, 31–37.
- Longmore, P. K. (2003). Why I burned my book and other essays on disability. Philadelphia, PA: Temple University.
- Love, B., Bryne, C., Roberts, J., Browne, G., & Brown, B. (1987). Adult psychosocial adjustment following childhood injury: The effect of disfigurement. *Journal of Burn Care and Rehabilitation*, 8, 280–285. doi:10.1097/00004630-198707000-00008
- Lubkin, I. M., & Larsen, P. D. (Eds.) (1998). Chronic illness: Impact and interventions (4th ed.). Sudbury, MA: Jones & Bartlett.
- Lubkin, I. M., & Larsen, P. D. (Eds.). (2006). Chronic illness: Impact and interventions. (6th ed.). Sudbury, MA: Jones & Bartlett.
- Lynch, R. T., & Thomas, K. R. (1994). People with disabilities as victims: Changing an ill-advised paradigm. *Journal of Rehabilitation*, 69(1), 8–11.
- Macgregor, F. C. (1951). Some psycho-social problems associated with facial deformities. *American Social Review*, 16, 629–638. doi:10.2307/2087355
- Macgregor, F. C., Abel, J. M., Bryt, A., Laver, E., & Weissmann, S. (1953). Facial deformities and plastic surgery: A psychosocial study. Springfield, IL: Charles C Thomas.
- Mannion, E. (1996). Resilience and burden in spouses with mental illness. *Psychiatric Rehabilitation Journal*, 20, 13–24. doi:10.1037/h0095389
- Marsh, D. T. (1992). Families and mental illness: New directions in professional practice. New York, NY: Praeger.
- May, G. E. (2005). Changing the future of disability: The disability discrimination model. In G. E. May & M. B. Raske (Eds.), *Ending discrimination in social work: Strategies for social workers* (pp. 82–98). Boston, MA: Allyn and Bacon.
- McNulty, M. A. (2003). Dyslexia and the life course. *Journal of Learning Disabilities*, 36, 363–381. doi:10.1177/00222194030360040701
- Mirzoeff, N. (1997). Blindness and art. In L. J. Davis (Ed.), *The disability studies reader* (pp. 382–398). New York, NY: Routledge.
- Moore, D. F. (1987). Educating the D/deaf: Psychology, principles, and practices (3rd ed.). Boston, MA: Houghton Mifflin.
- Morris, R. J., Morris, V. P., & White, P. A. B. (2005). Developmental disabilities. In H. H. Zarestsky, E. F. Richter, & M. G. Eisenberg (Eds.), *Medical aspects of disability: A handbook for the rehabilitation professional* (3rd ed., pp. 343–382). New York, NY: Springer Publishing Company.
- Nagi, S. Z. (1991). Disability concepts revisited: Implications for prevention. In Institute of Medicine (Ed.), Disability in America: Toward a national agenda for prevention (pp. 309–327). Washington, DC: National Academies Press.
- National Center for Health Statistics. (2017). Summary health statistics: National Health Interview Survey. Retrieved from https://ftp.cdc.gov/pub/Health_Statistics/NCHS/NHIS/SHS/2017_SHS_Table_A-6.pdf
- National Council on Disability. (2014). National disability policy: A progress report. Washington, DC: Author.
- National Health Interview Survey. (2007). Age at which hearing loss begins (Chart created by the NIDCD Epidemiology and Statistics Program). Retrieved from https://www.nidcd.nih.gov/health/statistics/age-which-hearing-loss-begins
- National Organization on Disability. (2004, June 24). Press Release. "Landmark survey finds pervasive disadvantages." Washington, DC: Author.

- National Public Radio. (1998, May). Disability history project. Inventing the poster child. Retrieved from https://www.npr.org/programs/disability/ba_shows.dir/index_sh.html
- National Spinal Cord Injury Statistical Center. (2018). Facts and figures at a glance. Birmingham: University of Alabama at Birmingham Press. Retrieved from https://www.nscisc.uab.edu/public_pages/FactsFiguresArchives/Facts%20and%20Figures%20-%202018.pdf
- Neergaard, L. (2009, October 5). Report: One in 10 babies worldwide born premature. Salt Lake Tribune, A6, A10.
- Neumann, R. J. (1988). Personal statement: Experiencing sexuality as an adolescent with rheumatoid arthritis. In P. W. Power, A. E. Dell Orto, & M. B. Gibbons (Eds.), *Family interventions throughout chronic illness and disability* (pp. 156–163). New York, NY: Springer Publishing Company.
- Norden, M. F. (1994). The cinema of isolation: A history of disabilities in the movies. New Brunswick, NJ: Rutgers University Press.
- O'Keeffe, J. (1994). Disability, discrimination, and the Americans with Disabilities Act. In S. M. Bruyere & J. O'Keeffe (Eds.), *Implications of the Americans with Disabilities Act for psychology* (pp. 1–14). Washington, DC: American Psychological Association [co-published with Springer Publishing Company, New York].
- Olkin, R. (1999). What psychotherapists should know about disability. New York, NY: Guilford.
- Orrin, D. (1997). Past the struggles of mental illness, toward the development of quality lives. In L. Spanoil, C. Gagne, & M. Hoehler (Eds.), *Psychological and social aspects of psychiatric disability* (pp. 138–144). Boston, MA: Center for Psychiatric Rehabilitation, Boston University.
- Paris, J. (2015). A concise guide to personality disorders. Washington, DC: American Psychological Association.
- Patterson, D. R., Everett, J. J., Bombardier, C. H., Questad, K. A., Lee, V. K., & Marvin, J. A. (1993). Psychological effects of severe burn injuries. *Psychological Bulletin*, 113, 362–368. doi:10.1037/0033-2909.113.2.362
- Pelka, F. (1997). The ABC-CLIO companion to the disability rights movement. Santa Barbara, CA: ABC-CLIO.
- Perkins, R. (1996). Talking to angels: A life spent in high latitudes. Boston, MA: Beacon.
- Pfeiffer, D. (2005a). Changing the future of disability: The disability discrimination model. In G. E. May & M. S. Raske (Eds.), *Ending disability discrimination* (pp. 82–98). Boston, MA: Allyn & Bacon.
- Pfeiffer, D. (2005b). The conceptualization of disability. In G. E. May & M. B. Raske (Eds.), *Ending disability discrimination: Strategies for social workers* (pp. 25–44). Boston, MA: Pearson.
- Phillips, M. J. (1990). Damaged goods: Oral narratives of the experience of disability in American culture. *Social Science Medicine*, 30, 849–857. doi:10.1016/0277-9536(90)90212-B
- Pullin, G. (2009). Disability meets design. Cambridge: Massachusetts Institute of Technology Press.
- Reeve, C. (1998). Still me. New York, NY: Random House.
- Rehabilitation Act. (1973). 87 Stat. 355, 29 U.S.C. § 701 et seq.
- Rosenthal, B. P., & Cole, R. G. (2005). Visual impairments. In H. H. Zarestsky, E. F. Richter, & M. G. Eisenberg (Eds.), *Medical aspects of disability: A handbook for the rehabilitation professional* (3rd ed., pp. 611–647). New York, NY: Springer Publishing Company.
- Rosin, H. (2014, March). Letting go of Asperger's. *The Atlantic*. Retrieved from https://www.theatlantic.com/magazine/archive.2014/03/letting-go-of-aspergers/357563/
- Safran, S. P. (1998). The first century of disability portrayal in film: An analysis of the literature. *Journal of Special Education*, 31, 467–479.
- Scotch, R. K. (1984). From good will to civil rights: Transforming federal disability policy. Philadelphia, PA: Temple University Press.
- Scott, R. A. (1969). The making of blind men: A study of adult socialization. New York, NY: Sage.
- Shapiro, J. P. (1993). No pity. People with disabilities forging a new civil rights movement. New York, NY: Random House.
- Slack, S. (1999). I am more than my wheels. In M. Corker & S. French (Eds.), *Disability discourse*. Buckingham, UK: Open University Press.
- Smart, D. W., & Smart, J. F. (1997). DSM-IV and culturally sensitive diagnosis: Some observations for counselors. Journal of Counseling and Development, 75, 392–398. doi:10.1002/j.1556-6676.1997.tb02355.x
- Smart, J. F. (2001). Disability, society, and the individual. Austin, TX: Pro-Ed.
- Smart, J. F. (2004). Models of disability: The juxtaposition of biology and social construction. In T. F. Riggar & D. R. Maki (Eds.), Springer Series on Rehabilitation: Handbook of rehabilitation counseling (pp. 25–49). New York, NY: Springer Publishing Company.

- Smart, J. F. (2005a). Challenges to the biomedical model of disability: Changes to the practice of rehabilitation counseling. *Directions in Rehabilitation Counseling*, 16(4), 33–43.
- Smart, J. F. (2005b). The promise of the international classification of functioning, disability, and health (ICF) [Special Issue]. *Rehabilitation Education*, 19, 191–199.
- Smart, J. F. (2006). Challenging the biomedical model of disability. Advances in Medical Psychotherapy and Psychodiagnosis, American Board of Medical Psychotherapists, 12, 41–44.
- Smart, J. F. (2007). The promise of the international classification of functioning, disability, and health (ICF) the psychological and social impact of illness and disability (5th ed., pp. 528–595). New York, NY: Springer Publishing Company.
- Smart, J. F. (2009a). The Americans with disabilities act. In D. Carr, R. Crosnoe, M. E. Hughes, & A. M. Pienta (Eds.), Encyclopedia of the life course and human development (Vol.2). Farmington Hills, MI: Macmillan Reference.
- Smart, J. F. (2009b). Counseling individuals with disabilities. In I. Marini & M. S. Stebnicki (Eds.), *Professional counselors desk reference* (pp. 639–646). New York, NY: Springer Publishing Company.
- Smart, J. F. (2009c). Disability in adulthood. In D. Carr, R. Crosnoe, M. E. Hughes, & A. M. Pienta (Eds.), Encyclopedia of the life course and human development (Vol.2, pp. 95–100). Farmington Hills, MI: Macmillan Reference.
- Smart, J. F. (2009d). Disability, society, and the individual (2nd ed.). Austin, TX: Pro-Ed.
- Smart, J. F. (2009e). The power of models of disability. Journal of Rehabilitation, 75, 3-11.
- Smart, J. F. (2016). Disability, society, and the individual (3rd ed.). Austin, TX: Pro-Ed.
- Smart, J. F., & Smart, D. W. (1992). Curriculum changes in multicultural rehabilitation. Rehabilitation Education, 6, 105–122.
- Smart, J. F., & Smart, D. W. (2007). Models of disability: Implications for the counseling profession. In A. E. Dell Orto & P. W. Power (Eds.), *The psychological and social impact of illness and disability* (pp. 75–100). New York, NY: Springer Publishing Company.
- Solomon, A. (2012). Far from the tree: Parents, children, and the search for identity. New York, NY: Scribner.
- Stalcup, B. (Ed.). (1991). The disabled, current controversies series. San Diego, CA: Greenhaven.
- Stefan, S. (2001). Unequal rights: Discrimination against people with mental disabilities and the Americans with Disabilities Act. Washington, DC: American Psychological Association.
- Sutkin, L. C. (1984). Introduction. In M. G. Eisenberg, L. C. Sutkin, & M. A. Jansen (Eds.), Chronic illness and disability through the life span: Effects on self and the family (pp. 1–19). New York, NY: Springer Publishing Company.
- Taylor, D. M. (2018). Americans with disabilities: 2014: Current population reports, P70–152. Washington, DC: U. S. Census Bureau.
- Toombs, S. K. (1995). Sufficient unto the day: A life with multiple sclerosis. In S. K. Toombs, D. Barnard, & R. A. Carson (Eds.), Chronic illness: From experience to policy (pp. 2–23). Bloomington, IN: University of Indiana Press.
- Tringo, J. L. (1970). The hierarchy of preference toward disability groups. The Journal of Special Education, 4, 295–306. doi:10.1177/002246697000400306
- Tuttle, D. W. (1984). Self-esteem and adjusting with blindness: The process of responding to life's demands. Springfield, IL: Charles C Thomas.
- U.S. Department of Health and Human Services. (2000). *Healthy people 2010: Understanding and improving health* (2nd ed.). Washington, DC: U.S. Government Printing Office.
- Vash, C. L. (1981). The psychology of disability. New York, NY: Springer Publishing Company.
- Veith, E. M., Sherman, J. E., Pellino, T. A., & Yasui, N. Y. (2006). Qualitative analysis of the peer-mentoring relationship among individuals with spinal cord injury. *Rehabilitation Psychology*, 51, 289–298. doi:10.1037/0090-5550.51.4.289
- Vermeij, G. (1997). Privileged hands: A scientific life. New York, NY: Freeman.
- Vernellia, R. R. (1994). Impact of managed care organizations on ethnic Americans and underserved populations. *Journal of Health Care for the Poor and the Underserved*, 5, 224–237. doi:10.1353/ hpu.2010.0154
- Walkup, J. (2000). Disability, health care, and public policy. Rehabilitation Psychology, 45, 409–422. doi:10.1037/0090-5550.45.4.409
- Weihenmayer, E. (2001). Touch the top of the world: A blind man's journey to climb farther than the eye can see. New York, NY: Dutton.
- Weingarten, R. (1997). How I've managed my mental illness. In L. Spanoil, C. Gagne, & M. Hoehler (Eds.), *Psychological and social aspects of psychiatric disability* (pp. 123–129). Boston, MA: Center for Psychiatric Rehabilitation, Boston University.

- Weisgerber, R. A. (1991). Quality of life for persons with disabilities: Skill development and transitions across life stages. Gaithersburg, MD: Aspen.
- Weisskopf, M. (2006, October 2). How I lost my hand but found myself. Time, 28-37.
- West, T. G. (1994). Slow words, quick words—Dyslexia as an advantage in tomorrow's work place. In P. J. Gerber & D. S. Brown (Eds.), *Learning disabilities and employment* (pp. 349–370). Austin, TX: Pro-Ed.
- Young-Bruehl, E. (1996). The anatomy of prejudice. Cambridge, MA: Harvard University Press.
- Zola, I. K. (1982). *Missing pieces: A chronicle of living with a disability*. Philadelphia, PA: Temple University Press.
- Zola, I. K. (1992). "Any distinguishing features?" The portrayal of disability in the crime-mystery genre. In P. M. Ferguson, D. L. Ferguson, & S. J. Taylor (Eds.), *Interpreting disability: A qualitative reader* (pp. 233–250). New York, NY: Columbia University.
- Zola, I. K. (1993). Disability statistics: What we count and what it tells us. *Journal of Disability Policy Studies*, 4, 9–39. doi:10.1177/104420739300400202