

Journal of Rehabilitation
2009, Volume 75, No. 2, 3-11

The Power of Models of Disability

Julie F. Smart

Utah State University

Models of disability define disability, determine which professions serve people with disabilities, and help shape the self-identities of those with disabilities. Although these models have a pervasive influence in the lives of people with disabilities and in the way in which services are delivered, their power is rarely acknowledged. In this paper, a broad, general overview of three models of disability is presented. These models are: the Biomedical Model, the Functional Model, and the Sociopolitical Model. No single model reflects all the needs of people with disabilities. However, a complete understanding of each model will allow practitioners from diverse disciplines to understand the disability experience. Diversity in models has the potential to be both strengthening and enriching.

Much of the way in which rehabilitation practitioners, educators, and researchers undertake their work is guided by the model of disability to which they subscribe (Harper, 1991; Tate & Pledger, 2003). Models of disability define disability, determine casual and responsibility attributions, influence professional practice, drive payment systems, and guide legislation (Dembo, 1982; Hahn, 1993; Nagi, 1969; Zola, 1989). Models of disability permeate every professional relationship in rehabilitation; these models also serve as the structure for rehabilitation and disability research development, providing the rationale for the funding of large studies. Further, every type of rehabilitation/disability resource allocation has its basis in a model of disability and agency policies and regulations trace their origins to a model of disability (Albrecht, 1981, 1992; Berkowitz, 1987; Bickenbach, 1993; Fox, 1993; Wolfensberger, 1972). Thus, the daily lives of people with disabilities, if and how they are educated, if and where they work, and their social and familial life, in large part are determined by models of disability. Perhaps, most important, models of disability exert a powerful influence on the public perception of disability and the public's response to people with disabilities. Consequently, models of disability have the capacity to shape the self-identity of those with disabilities (Conrad, 2004; Davis, 1997; Hannah & Midlarsky, 1987; Hulnick & Hulnick, 1989; Longmore, 1995; Nagi, 1969).

Surprisingly, the power of models of disability is rarely acknowledged or addressed; nor, are these models questioned or challenged (Gill, Kewman, & Brannon, 2003; Harper, 1991; Pledger, 2003). Indeed, most practitioners are only marginally aware that there are other models and that patients/clients/consumers may, and often do, subscribe to a different model. A therapeutic alliance, therefore, is difficult to establish if the professional and client define the disability differently and, as a result, envision different treatments and services. Most practitioners function in the way in which they have been educated and trained

Julie F. Smart, Professor/Director of Rehabilitation Counseling,
Special Education and Rehabilitation Department, Utah State
University, 2300 Old Main Hill, Logan, UT 84322.
Email: jsmart@cc.usu.edu

(Bauman & Drake, 1997; Bluestone, Stokes, & Kuba, 1996; Gill et al., 2003; Hogben & Waterman, 1997; Kemp & Mallinkrodt, 1996; Parsons, Hernandez, & Jorgensen, 1998). For example, if a practitioner has been trained to view disability as solely a clinical concept, he or she will conceptualize the necessary response to be clinical treatment.

Models of disability are the underlying structure for large, complex diagnostic/defining systems, such as the *International Classification of Disabilities, Impairments, and Handicaps – 2 (ICIDH-2)* (WHO, 1993, 2001) and the *Diagnostic and Statistical Manual IV – Text Revision (DSM-IV-TR)* (American Psychiatric Association, 2000) and the *International Classification of Functioning, Disability, and Health (ICF)* (World Health Organization, 2001). In turn, these diagnostic systems are used not only for clinical purposes but also for research development, and administrative and social planning. Diagnoses, therefore, have profound political, social, and financial consequences (Hahn, 1985; Smart, 2005b).

Models provide both casual and responsibility attributions; these attributions determine which academic disciplines study and teach the disability experience. If disability is viewed as only a medical concern, then the cultural, historical, social, and political aspects will not be taught in psychology, sociology, political, science, law, or history curricula. Moreover, most people with disabilities, after medical stabilization has been achieved, consider the social, cultural, and political aspects of the disability experience to be their most important concern (Bowe, 1980; Dembo, 1974; Smart, 2005a, 2005b). However, it is likely that there are few professionals, who possess the adequate background, training and clinical experience to provide these social, cultural, and family support services.

Despite the persuasive power and influence of models of disability and their very tangible results, these models are not reality or fact, but rather human-made representations of reality (Eisenberg, Griggins, & Duval, 1982; Smart, 2001). Each model, then, reflects the needs, values, and purposes of its definers and thus none is morally neutral (Clendinen & Nagourney, 1999; Kirk

& Kuchins, 1992; Stone, 1984; Zola, 1993). All models are somewhat time-bound and culture-bound; different concepts of disability have historically led to different methods of dealing with disability and ways of responding to individuals who experience disabilities. Further, at present, there is no single model with the capability to describe and explain every aspect of the disability experience, probably due to the fact that disability is a complex, multivariate experience (Tate & Pledger, 2003). Stated differently, each model is reductionistic or incomplete, emphasizing some aspects of the disability experience and ignoring others (Bickenbach, Chatterji, Badley, & Ustin, 1999; Zola, 1989).

Thus, there are weaknesses and limits to each model of disability. Furthermore, the definitions, casual attributions, and interventions of each model conflict with their counterparts in the other models; however, adherents of one model often do not reject the viewpoints of other models. Nonetheless, each model is capable of change and, indeed, all models are required to make refinements and modifications. The evolutionary path of all models can be easily traced, often through reviewing their results.

In view of the power and influence of models of disability, a general overview of the models will provide insight into the rationale and evolutionary path of each, the weaknesses and strengths of each model and their results in four broad areas: legislation and policy, training and education, professional practice, and research. It is important to discuss all of these models in order to view the evolutionary path and to construct a basis upon which to make comparisons. To present a comparative overview, it is necessary to be somewhat brief, general, and broad. Accordingly, first a brief description of each of three models of disability will be presented. Secondly, the weaknesses and strengths of each model will be discussed. Finally, the diversity of these three models will be considered as broadening the definition and response to disability. All models have strengths and weaknesses and the vestiges of these models are deeply entrenched in the broader culture. Nonetheless, each model fills important needs.

Three Broad Models of Disability

Biomedical Model of Disability

Only the Moral/ Religious Model has a longer history than the Biomedical Model. The Biomedical Model has the prestige and authority of established academic areas of study and professions: science and medicine (Kerr & Myerson, 1987; Stone, 1984). In addition, the Biomedical Model has a great deal of scientific rigor and objectivity. Perhaps the greatest strength of this model is the ease with which its diagnostic/definitional system is understood by the general public. Because of the intuitive understanding of the general public, the Biomedical Model has had dominance in shaping the public's perception and attitude toward disability (Ferguson, Ferguson, & Taylor, 1992).

In the Biomedical Model, disability is thought to be pathology, disorder, dysfunction, or deformity that is located within an individual (Bickenbach, 1993). This has been termed the "pathology orientation" or "deficit orientation" (Wright, 1991). In this model, disability can be classified, quantified, measured, and

standardized. Thus, disability appears to be an objective, standardized entity. Many medical diagnoses include an evaluative rating (using "normality" as the standard) of the severity of disability or degree of impairment. However, in this rating, the degree of stigma and prejudice against the particular disability is never considered. Since, in any model, the conceptualization or definition of the disability leads to treatment/intervention decisions, in the Biomedical Model, all treatment is geared toward medical rehabilitation of the individual (Conrad, 2004; Taylor & Bogden, 1992).

The Biomedical Model ignores the social aspects of disablement and essentially treats all individuals with the same diagnosis with identical treatment plans, regardless of differences in the individuals' needs, resources, or assets. This tendency to see the individual as a diagnosis has led disability scholars to term the Biomedical Model "diagnosis-driven" rather than "individual-focused".

Reexamining the Biomedical Model

The discrimination and injustice conferred upon people with disabilities by the Biomedical Model was not created with deliberate intention (Bickenbach, 1993). Conversely, the combined successes of medicine, medical technology, and pharmacology have greatly enhanced (and saved) the lives of people with disabilities. Nor, would anyone, including the strongest proponents of the Sociopolitical Model, advocate for the complete abandonment of the Biomedical Model simply because there are biological realities to the experience of disability. Finally, it is society that has endowed the medical profession with its power. In many ways, it can be shown that the medical professions are only carrying out society's mandate. However, it makes sense to question and challenge the Biomedical Model and to discuss its results, especially in comparison with other types of models.

The well-rehearsed criticisms of the Biomedical Model include the pathologization of the disability, the inherent power differential between the practitioner and the individual with the disability (Engel, 1977; Kiesler, 1999; Perkins & Zimmerman, 1995), and the privatization of both the cause/source of the disability and the response/intervention (Weisgerber, 1991). However, there may be important weaknesses and limitations of the Biomedical Model which are less visible and rarely acknowledged, but have far greater implications. Indeed, Hahn (Wade & de Jong, 2000) has termed the Biomedical Model a "metahandicap," asserting that the prejudice and discrimination toward people with disabilities has developed not **in spite** of the Biomedical Model, but **because** of it. Hahn claimed that the roots of prejudice and discrimination toward people with disabilities can be traced to the Biomedical Model.

Among the more subtle shortcomings is the fragmentation of the disability community into rival factions identified by their medical diagnosis—"the blind," "the deaf," and "the mentally ill." Such fragmentation effectively discourages a broad coalition of people with all types of disabilities who seek to address and redress difficulties and prejudice experienced by those who experience disabilities. Bickenbach (1993) summarized:

Groups representing the rights of people with disabilities are invariably organized around diagnostic categories and must compete among themselves for social attention. As a result, few attempts are made to form alliances or collations that might facilitate the emergence of a broad social and political movement of citizens with various types of disabilities. (p. 85)

Further, "by polarizing people with disabilities into interest groups, success or losses for one group are viewed as victories or losses for competing groups" (Walkup, 2000, p. 411). Furthermore, patients with disabilities are understandably reluctant to be categorized by professionals who have little or no understanding of the experience of living with a disability.

A second criticism of the Biomedical Model concerns the inferred validation and legitimization of prejudice and discrimination in the broader culture by viewing disability as individual inferiority. This view subsequently, allows others in the broader culture to view their prejudicial and discriminating treatment of people with disabilities as somehow justified because, after all, the prestigious, authoritative, scientific medical profession has labeled people with disabilities as biologically inferior, or "special," or abnormal. The Biomedical Model also creates prejudice and discrimination by allowing the general public to consider disability to be the concern of medical practitioners, thus relieving the public of any need to provide services, civil rights, or access. Indeed, when people with disabilities are not integrated into the broader culture, their absence is rarely noticed. In contrast, the Sociopolitical Model would view this as a type of "blaming the victim" (Parsons et al., 1988).

Although centuries of evidence have documented the higher disability rates among those in the lower socioeconomic and undereducated groups (including the "developed" nations), the general public continues to ignore environmental factors and social policy decisions as factors in causing disability. Certainly, such factors as lack of insurance coverage, lack of preventative medical care, and employment in physically dangerous and demanding jobs result in disabilities. Moreover, all of these factors are the products of national social policies and these policies could be changed.

A third weakness in the Biomedical Model is its failure to adequately respond to the changing definitions of disability (Fox, 1993). Payment systems for disability, both service provision and indemnification, are rooted in the Biomedical Model's two-outcome paradigm of death or cure. Obviously, chronic, long-term conditions, which most disabilities are, require other types of payment systems. Nonetheless, after medical stabilization, it is difficult to justify payment for psychoeducation, or social/emotional interventions as the individual with a disability negotiates the developmental stages of life, or to deal with an episodic disability.

The Biomedical Model lacks the capability to deal with the cultural/ethnic/racial/linguistic identities of people with disabilities because this model views the individual as a biological

machine and fails to recognize any social aspects of the individual or his/her subjective experience. Furthermore, the diagnostic systems of the medical professions are based on the Western model of medicine with the sharply defined dichotomy between mind and body. There are axes and a glossary to the diagnostic systems (the ICDH-2 and DSM-IV-TR) which are intended to heighten the medical practitioner's sensitivity to the individual's social world; however, these resources are considered only as adjuncts which are not required in order to establish a reimbursable diagnosis and therefore receive only secondary attention (Bickenbach, 1993; Smart & Smart, 1997).

Due to a combination of factors, the Biomedical Model may be ill equipped to respond to psychiatric disabilities. Psychiatric disabilities are chronic and can be exacerbated by the environment, factors which the Biomedical Model typically underestimates or ignores. Stefan (2001) summarized the need for a more flexible, interactional approach:

. . . mental health problems are episodic, highly responsive to context to environment, and exist along a spectrum, which theoretically could be cause for hope—people with mental illness are frequently strong, talented, competent, and capable, and their environments can be structured in a way to support and increase their strengths, talents, competence, and capabilities. (p. 10)

The use of highly trained experts, such as physicians, has created a large power differential between the expert and the individual with a disability and also has effectively relieved "society" of any responsibility to respond to people with disabilities. In addition, the use of medical experts has led to the public's lack of knowledge about disability (Fleischer & Zames, 2001). Conrad (2004) observed, "By defining a problem as medical it is removed from the public realm where there can be discussion by ordinary people and put on a plane where only medical people can discuss it" (p. 22).

This absence of discussion, and the resulting lack of knowledge about disability among the general public, has played an important role in creating the unrealistic fear of acquiring a disability in spite of the fact that disability is a common, widespread experience.

Work Disincentives and the Role of the Biomedical Model of Disability

Allowing the medical profession to have the dominant role in responding to people with disabilities includes determining eligibility for financial benefits. The Social Security system has not radically changed since its inception, while Vocational Rehabilitation (VR) law has been confined to two acts, the first Rehabilitation Act of 1920 and the Rehabilitation Act of 1973. Berkowitz and Hill (1986) summarized another shortcoming of disability service law:

Disability policy has not developed in the United States in a unified and coherent fashion. Unlike the attack on poverty in the 1970s or the current attention to the problems of aging, disability has not been the subject of concentrated concern. (p. 26)

Certainly the nation's response to disability emphasizes insurance (indemnification) rather than assistance (Stefan, 2001), illustrating the way in which the Biomedical Model has been formalized into law. The underlying assumptions of the Biomedical Model including the strong pathological orientation, the individualization of the responsibility for disability, and the non-interactive approach which does not consider accommodations have contributed, in combination, to the work disincentives in SSDI.

The Functional Model: Interactional Approach

The Functional Model of Disability defines disability as "role failure", meaning that the individual is not able, due to disability, to perform his or her functions or roles. In this model, disability is not always present because, for certain functions, the disability would not present difficulties (Reno, Mashaw, & Gradison, 1997). The major thrust of the response to the disability in the Functional Model is to provide accommodations for, and adaptations to the functions of the individual (Brant & Pope, 1997; Tannebaum, 1986). Thus, the focus is deflected from the rehabilitation of the individual to the adaptation of functions. It is the functions that are changed rather than the individual (Thomason, Burton, & Hyatt, 1998). Also, this model stipulates that it is the lack of accommodations that is disabling or is the cause/source of the disability.

The Functional Model is considered to be an "interactional" or "ecological" model of disability in that the disability is defined as a three-way interaction between the individual, the disability, and the functions of the individual (Liachowitz, 1988). Thus, this model has the capacity to focus on individuals, their strengths and assets, and their functional needs and desires. As individuals change, such as gaining more education or acquiring secondary disabilities, their functions accordingly must change. On a broader level, as the worldwide economy and workforce needs shift, the functions of workers, (including workers with disabilities) are modified (Yelin, 1992). For example, in the economy of 100 years ago, most workers participated in physical labor and therefore a physical disability was very handicapping. In today's economy, workers are needed in service and technology jobs and therefore, a cognitive disability is more handicapping than a physical disability. Furthermore, the advances in assistive/adaptive technology change the requirements of an individual's functions.

The Functional Model is not easily understood or accepted by the general public. Indeed, the Biomedical Model is much better understood because the causal attributions (pathology located in the individual) and the responsibility attribution (rehabilitate the individual) are much more straightforward than conceptualizing the lack of accommodations to be the cause or source of handicapping conditions (Akabas, 2000; Allen-Meares & Garvin, 2000).

Another weakness of the Functional Model is its focus on work as the only function taken into consideration (Trieschmann, 1987). Therefore, the Functional Model does not have a lifespan perspective in that typically only working-age adults are employed, thus excluding children and older adults (Smith, 2002). In addition, many disability scholars term the Functional Model

the "Economic Model" since work and economics are closely related. These scholars assert that the Functional Model reduces individuals with disabilities to their economic value or their ability to contribute to the economy. Thus, there is the possibility that the Functional Model could result in prejudice and discrimination against those who do not work, either because of the limitations of their disability, or more commonly, due to the strong work disincentives system constructed by the government. Taken to its extreme, the Functional Model could also result in the public perception of people with disabilities as "burdens" or "drains" or "luxuries" that society can ill-afford (Hahn, 1988, 1991, 1997; Singer, 2000).

Viewing the Functional Model of disability as an economic model or work model may, indirectly, lead to prejudice and discrimination against people with disabilities. Akabas (2000) perceptively noted that it is a widely held belief that the American workplace is equally open to all qualified applicants, when in fact, the workplace may not be accessible for the "most disadvantaged," including people with disabilities:

As the most significant institutional force in American society, the workplace might serve as the great equalizer by providing opportunity for all, but it does not appear to do so.... Instead, it tends to bar the way to self-sufficiency for the most disadvantaged—those with modest education, those with physical and mental health disabilities, the aging, and people of color. (p. 502)

Therefore, according to Akabas, in spite of the fact that obtaining work is difficult for people with disabilities due to social systems which do not provide equal opportunity, it is the person with the disability who is blamed for not working. In social work and other disciplines, this is defined as "blaming the victim" (Allen-Meares & Garvin, 2000). Akabas summarized: "social work is participating in the problem rather than its solution if its efforts are all victim-focused individual intervention" (p. 512).

The Functional Model of disability has the capability to add the individual's strengths, skills, and resources to the equation of disability. However, in this model, disability is viewed as pathology, abnormality, or deviance. Although this deficit-orientation is less straightforward and visible than the Biomedical Model, in the Functional Model it is, nonetheless, considered to be better to be able to work and to perform one's roles and functions. Gill, Kewman, and Brannon (2003) summarized:

However, although ecological frameworks indicate that the environment mediates the consequences of an individual's functional difference (through barriers or accommodations), those differences still are deemed aberrant or abnormal at the level of individual functioning. (p. 306)

As would be expected, it is a difficult task, requiring great professional skill, to capture and understand the individual's environment, functions, and individual strengths and needs.

The Sociopolitical Model

The Sociopolitical Model has also been termed the "Minority Group Model" (Hahn, 1985, 1996) or the "Independent Living Model" (Morris, 2004) or the "Radical Democratic Approach" (Neath & Reed, 1998). In this model, the disability is not seen as the identified "problem" and therefore neither individuals nor their disabilities are the focus of intervention or treatment. Rather, the "problem" of disability is the lack of civil rights, and unequal opportunity that consigns an individual with a disability to a life of reduced opportunity, inferiority, and marginalization (McCarthy, 2003). There is nothing in the disability, or the individual, that warrants such prejudice and discrimination (Dembo, Leviton, & Wright, 1975). Therefore, the "solution" to disability is to change attitudes and laws. Since society creates the difficulties of disability, according to this model (Anspach, 1979), the onus for change is on society (Gill et al., 2003). In this model, individuals with disabilities view themselves as an American minority group who has been denied their rights, rather than as a group of people who are biologically inferior and deviant. Instead of viewing disability as biological inferiority, proponents of this model view disability as a "social" and "civil" inferiority (McCarthy, 2003). The tendency of the Biomedical Model to seek both the cause for the disability and all solutions in the individual is challenged in the Sociopolitical Model.

Some disability scholars believe that discrimination against people with disabilities, including the denial of government protection, is more widespread and pervasive than race or gender discrimination. Stefan (2001) concluded: ". . . people who are generally sympathetic to race and gender discrimination laws may be skeptical or even hostile to disability discrimination law" (p. 74) while Hahn (1985) described the prejudice and discrimination against people with disabilities to have much in common with government-sanctioned racial segregation:

Disabled (sic) citizens have confronted barriers in architecture, transportation, and public accommodations which excluded them from common social, economic, and political activities than the segregationist policies of a racist government. (p. 94)

Higgins (1992) stated that Americans with disabilities are "foreigners in their own country."

The Sociopolitical Model is the newest model of disability, capitalizing upon the methods and successes of the civil rights movement of the 1960s in which African Americans and women refused to accept their disenfranchised status and, instead, reclaimed their identity and history as a source of pride. Certainly, there is a political/legislative element to the definition of disability because the formalized, collective public actions of governments define who has a disability and who does not have a disability. Thus, disabilities are "politically manipulated categories" (Stefan, 2001). Liachowitz (1988) explained:

(There are) ways that legislation conditions the abilities of . . . impaired people to function. (1) Laws disable . . . handicapped (sic) people by prescribing their activities. (2) Less directly and perhaps more effectively, laws also construct disability by promoting particular expectations among the able bodied segment of the population. And, (3) because knowl-

edge of these expectations can shape the personality and behavior of handicapped individuals, laws can lead to ostensibly "self-inflicted" disability (p. 19). Thus, in this model, disability becomes political identity rather than medical diagnosis (p. 19).

Disability benefit and service laws are products of the 20th century while disability discrimination law was enacted within the last 19 years. Only with the passage of the Americans with Disabilities Act (ADA) in 1990, did it become illegal to discriminate against Americans because of a disability. Furthermore, until the passage of the ADA, there was no legal recourse or protection for those who had experienced disability-related discrimination.

In the Sociopolitical Model, policy makers, legislators, professional service providers, and the general public are considered part of the "problem" of disability and therefore disability is a collective concern which requires collective responses and amelioration (Hahn, 1985). The Sociopolitical Model is considered to be the most interactional of all the models. Some disability scholars believe that people with disabilities have experienced great successes in refusing the pathological, deviant, and inferior role of disability and gaining their civil rights. Other disability scholars assert that when, compared to the gains of the general population, people with disabilities have not yet achieved entrance into mainstream American society.

Physicians and policymakers, particularly those without disabilities, have had power in determining the allocation of both services and benefits for people with disabilities (Kleinfeld, 1979). In addition, the collective history and voices of people are not considered as part of the broader culture. Linton (2004) explained:

Their needs, their contributions, and perspectives are not generally noted. Researchers outside disability studies have not been actively interested in this history nor in examining the meaning and function of disability except in the lives of a few well-known people with disabilities. (p. 149)

Further, in addition to gaining their rights, claiming their own identity, and forging a group identity, people with disabilities desire to contribute to American life, just as other American minority groups have strengthened and enriched the broader culture of American life (Parsons et al., 1998). Proponents of the Sociopolitical Model seek to change political and cultural life by incorporating the history, the experiences, and the viewpoints of individuals with disabilities. Additionally, adherents of the Sociopolitical Model advocate for a change in the public conceptualization of disability to a more realistic viewpoint of disability as a natural and very common part of human experience rather than the exaggerated, unrealistic conceptualization of disability as exotic, alien, ambiguous, dangerous, or deviant.

The Sociopolitical Model works on both an individual (or micro) level and on a societal level (or macro) level. Many individuals with disabilities consider the Sociopolitical Model to have provided them the tools to challenge prejudice and discrimination, the opportunity to speak about their disability experiences, and a

sense of commonality of shared experiences with others who have disabilities. Liz Crow (as cited in Morris, 1996) described her introduction to the Sociopolitical Model and its results in her life:

Discovering this way of thinking about my experiences was a powerful raft in stormy seas. It gave me an understanding of my experiences, shared with thousands, even millions, of other people in the world, and I clung to it.... I don't think it is an exaggeration to say that (this model) has saved lives. (p. 4)

The strengths of the Sociopolitical Model lie in two areas. First, this model most closely reflects the daily lives of people with disabilities. Certainly, after medical stabilization, most of the difficulties experienced are related to reduced opportunity, lowered expectations, and being perceived as a member of a stigmatized category. Second, this model has the power to mobilize people with all types of disabilities, rather than dividing individuals with differing disabilities into rival factions. Naturally, not every individual with a disability will automatically decide to become a politically active advocate; but nonetheless there is a potential for forming strong and effective coalitions.

Strengths of Interactional Models

The Functional Model is an interactional model. Interactional models challenge many of the basic concepts of the Biomedical Model and therefore, possess strengths that the Biomedical Model does not. Certainly, it is irrational to consider the individual's response and experience of disability until professionals understand the social context of the individual (Norcross, 2002; Wright, 1991). Viewing the person with a disability as a complete individual with skills, abilities, and demands, and conceptualizing the individual within context allows both service-providers and the general public to see the client as more than a disability. Disability will no longer become the salient or master characteristic. Further, labels and diagnoses will not carry as much power in defining the individual to himself/herself or to others (Thomas, 2004). It will be more difficult to dehumanize people with disabilities and to marginalize them (Tate, 2001). The public's exaggerated, negative conceptions of disability will be reduced. Diagnostic categories will no longer be as powerful and defining as they once were. Naturally, the capability to view the individual as a whole person within a context depends upon the ability to understand the person's subjective reality (McCarthy, 1993).

Interactive models also have the capability to incorporate the individual's cultural/ethnic/linguistic identity into the disability experience. Also, any other characteristics of the individual toward which the public holds (unfounded) prejudice can be taken into consideration. Individuals with disabilities who are of racial/ethnic/linguistic minority groups, or gay, lesbian, or transgendered, often experience multiple oppressions.

Diversity in Models

All models of disability have the intent to assist people with disabilities. Rather than attempting to synthesize the models of disability into a single model, it makes more sense to train practi-

tioners, including physicians, rehabilitation counselors, social workers, and general counselors, in a thorough grounding of each of the models. In this way, the strengths of each model can be fully exploited and the limitations of each model can be clearly acknowledged and addressed. Obviously, this approach will require both flexibility and skill on the part of all professionals. Disability will become the concern of all human service practitioners.

Such cross-model service provision will open up opportunities for interdisciplinary and consistent interagency collaboration and interdependent professional services (Humes, Szymanski, & Hohenshil, 1989; Solarz, 1990). Improved interdisciplinary collaboration requires change in training and education (Frank, Gluck, & Buckelew, 1990; Olkin, 1999; Olkin & Pledger, 2003). For example, medical schools might teach a class and provide clinical experience on the lived experience of disability. Such experience and training, coupled with a wellness/preventative approach for people with disabilities will lead to new treatment goals after medical stabilization (Foote, 2000). Furthermore, if physicians facilitate the empowerment of their patients with disabilities and encourage these patients to take control of decision making in treatment, some of the power differential will be decreased. There is great potential for providing services that are not medically based, but nonetheless provided as a valued part of flexible individualized programs (Fox, 1993). In addition to a medical wellness orientation and the prevention of secondary conditions and complications, psychosocial interventions such as individual and family counseling, provision of assistive technology, and a wide array of services designed to encourage independence and function can be provided in a package of services provided by an interdisciplinary team.

A cross-model orientation may lead to research studies that produce more meaningful results because social forces, although more difficult to operationalize, will serve as independent variables (Feinstein & Chapman, 2002). Quality of life issues will become more embedded in research studies, rather than only the clinical/medical aspects of disability (Melia, Pledger, & Wilson, 2003; Meyerson, 1988). In short, such a cross-model orientation "encourages a more systematic analysis of rehabilitation interventions. It also brings structure and order to research" (Wade & de Jong, 2000, p. 1386).

No one model reflects all of the needs of persons with disabilities nor can a single professional/academic discipline respond to all these needs. Diversity in models should be viewed as strengthening and enriching (Walkup, 2000), and these models can be viewed as building upon each other. Professionals, trained and skilled in all the models of disability, will understand the strengths and limitations of the particular model which best fits their profession, and, accordingly, practice only within these boundaries. In order for professional collaboration to take place, however, practitioners must have some training in all the models of disability. The end result of the cross-model approach will be seen in the lives of people with disabilities.

References

- Akabas, S. H. (2000). Practice in the world of work. In P. Allen-Meares, & C. Garvin (Eds.), *The handbook of social work direct practice* (pp. 499-517). Thousand Oaks, CA: Sage.
- Albrecht, G. L. (Ed.). (1981). *Cross national rehabilitation policies: A sociological perspective*. Beverly Hills: Sage.
- Albrecht, G. L. (1992). *The disability business: Rehabilitation in America*. Newbury Park, CA: Sage.
- Allen-Meares, P., & Garvin, C., (Eds.). (2000). *The handbook of social work direct practice*. Thousand Oaks, CA: Sage.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (Fourth edition—text revision; DSM-IV-TR). Washington, DC: Author.
- Americans with Disabilities Act, 4, 42 U.S.C. Sec 12101 (1990).
- Anspach, R. R. (1979). From stigma to identity politics: Political activism among the physically disabled and former mental patients. *Social Science and Medicine*, 13A, 765-773.
- Bauman, H. D. L., & Drake, J. (1997). Silence is not without voice: Including deaf culture within the multicultural curricula. In L. J. Davis (Ed.), *Disability studies reader* (pp. 307-314). New York: Routledge.
- Berkowitz, M. (1987). *Disabled policy: America's programs for the handicapped*. London: Cambridge University.
- Berkowitz, M., & Hill, M. A. (Eds.). (1986). *Disability and the labor market: Economic problems, policies, and programs*. Ithaca, NY: Cornell University.
- Bickenbach, J. E. (1993). *Physical disability and social policy*. Toronto: University of Toronto.
- Bickenbach, J. E., Chatterji, S., Badley, E. M., & Ustun, T. B. (1999). Models of disablement, universalism and the *International Classification of Impairments, Disabilities and Handicaps*. *Social Science & Medicine*, 48, 1173-1187.
- Bluestone, H. H., Stokes, A., & Kuba, S. A. (1996). Toward an integrated program design: Evaluating the status of diversity training in a graduate school curriculum. *Professional Psychology: Research and Practice*, 27, 394-400.
- Bowe, F. (1980). *Rehabilitation America: Toward independence for disabled and elderly people*. New York: Harper and Row.
- Brant, E. N., & Pope, A. M. (Eds.). (1997). *Enabling America: Assessing the role of rehabilitation science and engineering*. Washington, DC: National Academy Press.
- Clendinen, D., & Nagourney, A. (1999). *Out for good: The struggle to build a gay rights movement in America*. New York: Simon & Schuster.
- Conrad, P. (2004). The discovery of hyperkinesis: Notes on the medicalization of deviant behavior. In S. Danforth & S. D. Taff (Eds.), *Crucial readings in special education* (pp. 18-24). Upper Saddle River, NJ: Pearson-Merrill, Prentice-Hall.
- Davis, L. J. (1997). Constructing normalcy: The bell curve, the novel, and the invention of the disabled body in the nineteenth century. In L.J. Davis (Ed.), *Disability studies reader* (pp. 307-314). New York: Routledge.
- Dembo, T. (1974). The paths to useful knowledge. *Rehabilitation Psychology*, 21, 124-128.
- Dembo, T. (1982). Some problems in rehabilitation as seen by a Lewinian. *Journal of Social Issues*, 38, 131-139.
- Dembo, T., Leviton, G. L., & Wright, B. A. (1975). Adjustment to misfortune: A problem of social-psychological rehabilitation. *Rehabilitation Psychology*, 2, 1-100.
- Eisenberg, M. G., Griggins, C., & Duval, R. J. (Eds.). (1982). *Disabled people as second class citizens*. New York: Springer.
- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196, 129-136.
- Ferguson, P. M., Ferguson, D. L., & Taylor, S. J. (Eds.). (1992). *Interpreting disability: A qualitative reader*. New York: Teachers College, Columbia University.
- Feinstein, A. R., & Chapman, H. (2002). *Principles of medical statistics*. Boca Raton, FL: CRC Press.
- Fleischer, D., & Zames, F. (2001). *The disability rights movement: From charity to compensation*. Philadelphia: Temple University.
- Foote, W. E. (2000). A model for psychological consultation in cases involving the Americans with Disabilities Act. *Professional Psychology*, 31, 190-196.
- Fox, D. M. (1993). *Power and illness: The failure and future of America's health policy*. Berkeley: University of California Press.
- Frank, R. G., Gluck, J. P., & Buckelew, S. P. (1990). Rehabilitation: Psychology's greatest opportunity? *American Psychologist*, 45, 757-761.
- Gill, C. J., Kewman, D. G., & Brannon, R. W. (2003). Transforming psychological practice and society: Policies that reflect the new paradigm. *American Psychologist*, 58, 305-312.
- Hahn, H. (1985). Toward a politics of disability: Definitions, disciplines, and policies. *Social Science Journal*, 22, 87-105.
- Hahn, H. (1988). The politics of physical differences: Disability and discrimination. *Journal of Social Issues*, 44, 39-47.
- Hahn, H. (1991). Alternative views of empowerment: Social services and civil rights. *Journal of Rehabilitation*, 57, 17-19.
- Hahn, H. (1993). The political implications of disability definitions and data. *Journal of Disability Policy Studies*, 4, 41-52.
- Hahn, H. (1996). Antidiscrimination laws and social research on disability: The minority group perspectives. *Behavioral Sciences and the Law*, 14, 41-59.
- Hahn, H. (1997). Advertising the acceptable employment image: Disability and capitalism. In L. J. Davis (Ed.), *The disability studies reader* (pp. 172-186). New York: Routledge.
- Hannah, M. E., & Midlarsky, E. (1987). Differential impact of labels and behavioral descriptions on attitudes toward people with disabilities. *Rehabilitation Psychology*, 32, 227-238.
- Harper, D. (1991). Paradigms for investigating rehabilitation and adaptation to childhood disability and chronic illness. *Journal of Pediatric Psychology*, 16, 533-542.

- Higgins, P. C. (1992). *Making disability: Exploring the social transformation of human variation*. Springfield, IL: Charles C. Thomas.
- Hogben, M., & Waterman, C. K. (1997). Are all of your students represented in their textbooks? A content analysis of coverage of diversity issues in introductory psychology textbooks. *Teaching of Psychology, 24*, 95-100.
- Hulnick, M. R., & Hulnick, H. R. (1989). Life's challenges: Curse or opportunity? Counseling families of persons with disabilities. *Journal of Counseling and Development, 68*, 166-170.
- Humes, C. W., Szymanski, E. M., & Hohenshil, T. H. (1989). Roles of counseling in enabling persons with disabilities. *Journal of Counseling and Development, 68*, 145-150.
- Kemp, N. T., & Mallinkrodt, B. (1996). Impact of professional training on case conceptualization of clients with a disability. *Professional Psychology: Research and Practice, 27*, 378-385.
- Kerr, N., & Myerson, L. (1987). Independence as a goal and value of people with physical disabilities: Some caveats. *Rehabilitation Psychology, 32*, 173-180.
- Kiesler, D. J. (1999). *Beyond the disease model of mental disorders*. Westport, CT: Praeger.
- Kirk, S. A., & Kuchins, H. (1992). *The selling of the DSM: The rhetoric of science in psychiatry*. New York: Aldine De Gruyter.
- Kleinfield, S. (1979). *The hidden minority: A profile of handicapped Americans*. Boston: Atlantic Monthly Press.
- Liachowitz, C. H. (1988). *Disability as a social construct: Legislative roots*. Philadelphia: University of Pennsylvania.
- Linton, S. (2004). Divided society. In S. Danforth & S. D. Taff (Eds.), *Crucial readings in special education* (pp. 138-147). Upper Saddle River, NJ: Merrill Prentice Hall.
- Longmore, P. K. (1995). Medical decision making and people with disabilities: A clash of cultures. *Journal of Law, Medicine and Ethics, 23*, 82-87.
- McCarthy, H. (1993). Learning with Beatrice A. Wright: A breath of fresh air that uncovers the unique virtues and human flaws in us all. *Rehabilitation Education, 10*, 149-166.
- McCarthy, H. (2003). The disability rights movement: Experiences and perspectives of selected leaders in the disability community. *Rehabilitation Counseling Bulletin, 46*, 209-223.
- Melia, R. P., Pledger, C., & Wilson, R. (2003). Disability and rehabilitation research. *American Psychologist, 58*, 289-295.
- Myerson, L. (1988). The social psychology of physical disability. *Journal of Social Issues, 44*, 173-188.
- Morris, J. (1996). *Pride against prejudice: Transforming attitudes to disability*. Philadelphia: New Society.
- Morris, J. (2004). *Impairment and disability: Constructing an ethics of care that promotes human rights*. Retrieved from the World Wide Web on July 20, 2005 at <http://iupjournals.org/hypatia/hyp16-4.html>
- Nagi, S. Z. (1969). *Disability and rehabilitation: Legal, clinical, and self-concepts and measurements*. Columbus: Ohio State University.
- Neath, J. F., & Reed, C. A. (1998). Power and empowerment in multicultural education: Using the radical democratic model for rehabilitation education. *Rehabilitation Counseling Bulletin, 42(1)*, 16-24.
- Norcross, J. C. (Ed.). (2002). *Psychotherapy relationships that work: Therapist contributions and responsiveness to patient needs*. New York: Oxford University.
- Olkin, R. (1999). *What psychotherapists should know about disability*. New York: Guilford.
- Olkin, R., & Pledger, C. (2003). Can disability studies and psychology join hands? *American Psychologist, 58*, 296-298.
- Parsons, R., Hernandez, S., & Jorgensen, J. (1998). Integrated problem solving. *Social Work, 33*, 417-421.
- Perkins, D. D., & Zimmerman, M. A. (1995). Empowerment theory: Research and applications. *American Journal of Community Psychology, 23*, 569-579.
- Pledger, C. (2003). Discourse on disability and rehabilitation issues. *American Psychologist, 58*, 279-284.
- Reno, V. P., Mashaw, J. L., & Gradison, B. (Eds.). (1997). *Disability: Challenges for social insurance, health care financing, and labor market policy*. Washington, DC: National Academy of Social Insurance.
- Singer, P. (2000). *Writings on an ethical life*. New York: Ecco.
- 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.
- Smart, J. F. (2001). *Disability, society and the individual*. Austin, TX: Pro-Ed.
- 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). *Rehabilitation Education, 19*, 191-199 Special Issue.
- Smith, J. M. (2002). Foster care children with disabilities. In S. D. Miller (Ed.), *Disability and the Black community* (pp. 81-92). Binghampton, NY: Haworth.
- Solarz, A. L. (1990). Rehabilitation psychologists: A place in the policy process? *American Psychologist, 45*, 766-770.
- Stefan, S. (2001). *Unequal rights: Discrimination against people with mental disabilities and the Americans with Disabilities Act*. Washington DC: American Psychiatric Association.
- Stone, D. A. (1984). *The disabled state*. Philadelphia: Temple University.
- Tannenbaum, S. J. (1986). *Engineering disability: Public policy and compensatory technology*. Philadelphia: Temple University.
- Tate, D. G. (2001). Hospital to community: Changes in practice and outcomes. *Rehabilitation Psychology, 46*, 125-138.
- Tate, D. G., & Pledger, D. C. (2003). An integrative conceptual framework of disability: New directions for research. *American Psychologist, 58*, 289-295.
- Taylor, S. J., & Bogden, R. (1992). Defending illusions: The institutions struggle for survival. In P. M. Ferguson, D. L. Ferguson, & S. J. Taylor (Eds.), *Interpreting disability: A*

- qualitative reader* (pp. 78-98). New York: Teachers College, Columbia University.
- Thomas, K. R. (2004). Old wine in a slightly cracked new bottle. *American Psychologist, 59*, 274-275.
- Thomason, T., Burton, J. F., Jr., & Hyatt, D. R. (Eds.). (1998). *New approaches to disability in the work place*. Madison: University of Wisconsin.
- Trieschmann, R. (1987). *Aging with a disability*. New York: Demos.
- Wade, D. T., & de Jong, B. A. (2000). Recent advances in rehabilitation. *Behavioral Medicine Journal, 320*, 1385-1388.
- Walkup, J. (2000). Disability, health care, and public policy. *Rehabilitation Psychology, 45*, 409-422.
- Weisgerber, R. S. (1991). *Quality of life for persons with disabilities*. Gaithersburg, MD: Aspen.
- Wolfensberger, W. (1972). *The principle of normalization in human services*. Toronto: National Institute on Mental Retardation.
- World Health Organization. (1993). *International classification of impairments, disabilities, and handicaps: A manual of classification relating to the consequences of disease*. Geneva, Switzerland: Author.
- World Health Organization. (2001). *International classification of impairments, disabilities, and handicaps: A manual of classification relating to the consequences of disease*. Geneva, Switzerland: Author.
- Wright, B. A. (1991). Labeling: The need for greater person-environment individuation. In C. R. Snyder & D. R. Forsythe (Eds.), *Handbook of social and clinical psychology* (pp. 469-487). Elmsford, NY: Pergamon.
- Yelin, E. H. (1992). *Disability and the displaced worker*. New Brunswick, NJ: Rutgers University.
- Zola, I. K. (1989). Toward a necessary universalizing of a disability policy. *Milbank Quarterly, 67*, 401-428.
- Zola, I. K. (1993). Disability statistics: What we count and what it tells us. *Journal of Disability Policy Studies, 4*, 9-39.