

disability and illicit drug use: an application of labeling theory

Li Li and Dennis Moore

Wright State University School of Medicine Dayton, Ohio, USA

Applying the concept of "secondary deviance" from Labeling Theory, this study hypothesizes that perceptions of disability labeling are relevant to individuals' acceptance of disability. Such reactions may lead to an entitlement attitude toward substance use and encourage further deviant activities such as illicit drug use. The findings from our analyses tend to confirm our expectations that perceived discrimination and acceptance of disability play important roles in illicit drug use by persons with disabilities. The present study also suggests that perceived discrimination against persons with disabilities is significantly associated with disability acceptance, and, in turn, indirectly related to illicit drug use attitudes and practice. In addition, severe disability conditions, such as the presence of multiple disabilities, are important factors in predicting negative reactions to labeling that might result in drug abuse. This study does not support all elements of the labeling perspective, but it suggests that the labeling approach provides a useful framework for understanding the relationships between disability and substance abuse.

Given the demographic changes associated with an increasing aged population, the number of persons with disabilities in the United States has risen in the past 25 years (Kaye et al. 1996).

Received 21 June 1999; accepted 8 January 2000.

Address correspondence to Li Li, 215 Medical Science Building, Wright State University School of Medicine, P.O. Box 927, Dayton, OH 45401-0927. Email: li.li@wright.edu

Like other minority groups, most persons with disabilities desire to achieve acceptance by and integration into society. The philosophy embodied by the Americans with Disability Act (1990) creates an environment essential to this process (Nagler 1993). However, persons with disabilities continue to be affected by stigma and prejudice in societal life. As a group or as individuals, persons with disabilities constantly contend with the issue of how much they believe they are included as members of society. What is most interesting to the authors of this article is how the issues of societal stigma and self-acceptance of disability are related to subsequent substance abuse. A labeling perspective on deviance is reexamined and applied.

DISABILITY AND LABELING

Disability, as the consequence of an impairment, is the expression of a physical or mental limitation in a social context—the gap between a person's capabilities and the demands of the environment (Scheer and Groce 1988; Pope and Tarlov 1991). This gap is socially defined as undesirable, and people living with disabilities are often regarded by others or themselves as deviating from what is believed to be normal or appropriate (Freidson 1965).

For a half century much attention has been paid to stigmas and labeling in studying persons with disabilities. Barker (1948) suggests that persons with physical disabilities belong to a minority group like other traditional minorities and are subject to group stereotypes. Goffman's book *Stigma* (1963) is devoted to people with various forms of stigma. Thomas Scheff (1963, 1966) makes a notable attempt to apply the general concepts of stigma and labeling to people with mental illness. Since then the importance of stigma and labeling in studying disability has been examined (English 1971; Scheff 1974; Gove 1970, 1982; Weinstein 1983; Link 1987; Liachowitz 1988; Finkelstein 1993; Hahn 1996).

The literature on disability as deviance has some general implications. First, disability can be regarded as deviant, not as a form of behavior, but in the sense of a condition over which the individual has no control (Clinard and Meier 1992). Here, the term "deviant" is used to refer to a condition that is considered different from what ought to exist rather than a norm-violating behavior. Second, like other stigmatized groups, persons with disabilities tend to be evaluated based on their categorical membership rather than on individual characteristics. In other words, their physical or mental disabilities become a master trait, overwhelming other personal differences and abilities (Blaxter 1976). Third, social stigma and reactions associated with disability may be different based on the perceptions of personal responsibility for the causes of disability. For instance, when an individual is believed to be responsible for his or her disability, he or she may receive less permissive treatment from others (Freidson 1965).

SOCIAL STIGMA AND SELF-REACTIONS

According to the labeling perspective, once an individual becomes aware of his or her stigmatized label, his or her self-perceptions are affected. This proposition is derived from Mead's argument (1934) that one's sense of self arises from taking the role of generalized others. According to Becker (1963), a deviant is one to whom the label has successfully been applied. Thus, the process through which an individual reacts to social labeling, whether by accepting or rejecting, becomes relevant.

According to Safilios-Rothschild (1970), an individual may react to social stigmas related to his or her disability in three ways: denying the stigmas' existence, accepting them, or seeking indirect benefits from the situation. In a similar vein, Link and colleagues (1991) specify and measure secrecy, avoidance-withdrawal, and educating others as three kinds of individual responses to stigma and labeling. There are two basic assumptions underlying this process of self-reaction. First, stigmatized individuals tend to hold the same standards of what "normal" is as does the rest of society (Eisenberg, Griggins, and Duval 1982; Thoits 1985). The second assumption is that individuals are not just passive recipients of negative labels; rather, they are actively managing these labels (Poole et al. 1986). According to this perspective, persons with disabilities have at least partly bought into society's value system in which everything young, beautiful, and healthy is seen as desirable, and everything that deviates from this norm is seen as bad. Thus, persons with disabilities, while struggling with labeling by others, have to cope with their own perceptions of self. Becker and Arnold (1986) describe a process of normalization that stigmatized individuals may undergo. This process makes the stigma less salient and is used as a survival strategy for various stigmatized minorities, including persons with disabilities.

The most extensive investigations on this topic have been conducted for populations with mental illness. Scheff (1966) argues

that people who are labeled mentally ill may internalize the negative cultural stereotypes of mental illness. Some previous studies have revealed that people with mental illness appear to accept the negative stereotypes associated with their conditions (Giovanni and Ullman 1963; Crumpton et al. 1967). Warner and associates (1989) found that mentally ill patients exhibit lower self-esteem if they perceive higher levels of stigma while those who reject the label have higher self-esteem. A similar reverse relationship between self-esteem and perceived stigma is also reported in a recent study of people with various mental and physical disabilities (Li and Moore 1998).

ILLICIT DRUG USE AS A SECONDARY DEVIANCE

A fundamental element of labeling theory is the consequences of stigmatizing certain individuals with a deviant label. In other words, social reactions play an important role in pressuring individuals to engage in further deviant actions (Traub and Little 1985). Lemert's concepts of primary and secondary deviance, in which secondary deviance is defined as the behavior of a person who uses his or her deviant situation as a means of defense or adjustment to the problem caused by the label (Lemert 1951, 1967), are relevant here. This approach has been used in studying the etiology of mental disorder. Scheff (1966) proposes that stigmas cause individuals to see themselves as damaged, and this change in self-concept leads them into a long-term pattern of abnormal behavior. A modified labeling perspective suggests that even if societal labeling does not directly create mental disorder, it may lead to self-devaluation, defenses, isolation and, in turn, increase an individual's vulnerability to new disorders or to repeat episodes of existing disorders (Link et al. 1989).

APPLICATION OF LABELING THEORY IN CURRENT STUDY

This study applies the labeling approach similar to the studies described earlier, with several distinguishing features. First, unlike most previous studies focusing on the process by which deviant conditions, e.g., mental illness, may become stabilized by the societal labeling, this study views illicit drug abuse as a secondary deviance and examines its relations with social stigmas associated with disability. Specifically, the focus of this study is to apply the labeling approach to investigate the relationships between disability, a deviant *condition*, and illicit drug use, a new form of deviant *behavior*. The theoretical model in Figure 1 illustrates the connections proposed in this study and will be tested later with four statistical models.

We argue that social reactions to disability in the form of discrimination increase the likelihood for more serious deviant behavior, such as illicit drug use. However, the connections between the two may be indirect and complex. A number of studies have demonstrated that the presence of a physical, mental, or psychological disability can place an individual at great risk for drug abuse (Rasmussen and Deboer 1980/1981; Stern et al. 1987; Heinemann et al. 1989; Moore and Polsgrove 1991; Moore et al. 1994; Moore and Li 1998). Like the general population, persons with disabilities face a variety of situations that may encourage illicit drug use. However, there are some drug abuse risk factors that are more frequently associated with disability. Compared to the general population, individuals with disabilities are more likely to encounter problems of personal adjustment and unemployment, as well as the experienced medical and health difficulties. It seems logical then that disability conditions and demographic characteristics may be directly linked to illicit drug use; yet, there are reasons to speculate that perceived discrimination, acceptance of disability, and other disability related attitudes may play critical roles in the relationships between disability and illicit drug use.

Individual reactions to societal discrimination against persons with disabilities vary according to a number of personal factors.

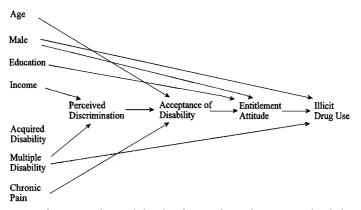


FIGURE 1 Theoretical model of relationships between disability and illicit drug use.

It is hypothesized in this study that an individual's demographic characteristics, such as age, gender, education, and income, may affect his or her perceptions of social discrimination. Also, disability attributes, such as disability onset, multiple disabilities, and chronic pain, may also be related to personal perceptions of discrimination. The assumption underlying this hypothesis is that people with lower functioning levels are more likely to be subject to social stigmas or obstacles than those with less severe disabilities. There is no doubt that discrimination and stigma in our society create barriers that make it difficult for persons with disabilities to participate in the full spectrum of life. For some individuals, these social barriers also impede personal adjustments to disability. Here, acceptance of disability should not be understood as equivalent to labeling acceptance or self-labeling. According to Wright (1960), acceptance of disability does not require preference of one's own state over others, but involves experiencing conditions that facilitate acceptance of one's disability as nondevaluating. Through this process, an individual is able to seek satisfaction in activities that befit his or her own characteristics as a person rather than those of a normal standard (Wright 1960). In this way, personal acceptance of disability is a better measure of the degree of rejecting social labeling and the level of normalization.

Another unique feature of this study is its sample population. The study sample includes a variety of disability conditions, representing a more general population of persons with disabilities than most previous studies which have focused on hospitalized patients with mental illness. Furthermore, all participants of this study were seeking state vocational rehabilitation services at the time when the survey was conducted. By definition, they have been officially labeled with their disability status. This kind of agency contact itself may have significant consequences for their views of disability or self in general (Hawkins and Tiedeman 1975). With the sample population, this study provides an opportunity to examine the variations in self-reactions to social discrimination, and, more important, their relationships with further deviance in drug use.

METHODS

Data Collection and Sample

Data for this study were collected from the Medication and Other Drug Use Survey during 1994–1995. The survey was conducted

by the Rehabilitation Research and Training Center on Drugs and Disability, located at Wright State University School of Medicine and funded through the National Institute on Disability and Rehabilitation Research (NIDRR). The population from which the sample was drawn included all individuals who were active clients of state vocational rehabilitation services in Ohio, Michigan, and Illinois at the time of data collection.

Data collection was conducted in two stages. In the first stage, a computer generated, random probability sample design was utilized to select prospective respondents from the central databases of Ohio Rehabilitation Services Commission (ORSC), Michigan Rehabilitation Services (MRS), and Illinois Department of Rehabilitation Services (DORS). Questionnaires were mailed to all the randomly selected individuals, along with informed consent forms, and return envelopes. The majority of respondents (68.5%) participated via the mail surveys. The second stage of data collection consisted of personal interviews and paper and pencil self-reports. Trained data collectors randomly recruited prospective respondents at six local offices in each state. Participants either completed self-administered questionnaires or were interviewed directly. Personal interviews were conducted specifically for those individuals whose disabilities prevented them from completing the survey in a paper and pencil format. Overall, approximately onethird of the individuals (n = 1, 876) who were asked to participate completed the survey.

Response biases were assessed by comparing the demographics of selected populations with those who returned the survey. For the Michigan sample, for instance, the percentage of female respondents paralleled that of the sampling population, 41.8% and 42.6% respectively. As expected, response rates from minority groups were lower; although African Americans were over-sampled to 25% of the potential respondent population, the response rate for this group was 20% of all persons solicited. In 1995 about 15.1% of the Ohio vocational rehabilitation consumers were African American (ORSC 1996) and the percentage had increased to 22% by the end of 1999. The over-sample strategy utilized in this study tended to parallel the projected demographic increase of ethnic minorities in the system (Feist-Price 1995).

Of the 1,876 respondents in the survey, 52% were male and 70% were Caucasians. The median age for this sample was 33 years and more than half of the respondents (55.6%) had never married. About 43.2% of the respondents were completely unemployed

and not in school, and slightly more than half of the respondents (50.4%) reported that their total annual family income fell below \$10,000, which is comparable to the larger population of adults with disabilities (LaPlante 1988). Percentages of selfreported primary disabilities were: mental illness, 18.5%; learning disability, 14.3%; spinal cord/back injury, 12.4%; deafness/hearing impairment, 5.3%; and blindness/visual impairment, 5.3%.

For the purpose of the present investigation, the study sample was largely reduced. Using the questions on the age of disability onset and the age of the first use of illicit drug use, we selected only those respondents who had at sometime used illicit drugs *and* whose first illicit drug use occurred after, or in the same year as, the onset of their disability. A total of 304 respondents met the selection criteria and were included in this study. Among respondents in the subsample, 56.3% were male, compared to 52% for the overall sample. The subsample and the overall samples had the same average number of years of education (12.7), similar percentages of Caucasian respondents (69.9% and 70%, respectively), and similar mean ages (32 and 33, respectively). Approximately one third of the subsample, or 33.9%, had congenital disabilities. Those identified with multiple disabilities totaled 50.7%, and 38% of the sample reported ongoing problems with chronic or steady pain.

Instrumentation and Measures

The Medication and Other Drug Use Survey contained 102 questions regarding demographics, disability conditions, attitudes toward disability, family background, employment and psychosocial functioning, and substance use. A key dependent variable in this study was illicit drug use, which was defined as the most recent use of the following drugs for nonmedical purposes: marijuana/hashish, cocaine, crack, inhalants, hallucinogens, heroin or other opiates, stimulants, and sedatives/tranguilizers. To parallel the National Household Survey on Drug Abuse (Substance Abuse and Mental Health Services Administration 1995), the most recent use of drugs was divided into three categories: ever used in lifetime, used during the past year, and used during the past month. A drug use index was created using the following formula, wherein different weights were assigned to each of the categories: Drug Use Index = $(Ever used^*1) + (Use past vear^*2) +$ (Used past month *3)

These analysis weights were chosen to reflect current drug use problems. For instance, if an individual reported the most recent cocaine use during the past year, his or her cocaine use would be considered more problematic than those who reported only lifetime cocaine use and less serious than those who reported cocaine use in the past 30 days. A similar application of this index can be found elsewhere (Li et al. 2000). The possible scores for each drug ranged from zero to six. Eight different drugs were added into a single scale with a possible range from 0–48, where the higher numbers indicate severer illicit drug use. The resulting scores ranged from 1-27 for the sample in this study.

Attitude of entitlement was a measure proposed by Moore (1991) as a risk factor associated with substance abuse by persons with disabilities. It is based on the belief that persons with disabilities are more socially entitled to use drugs than persons without disabilities; this entitlement view contributes to the enabling of drug abuse (Moore 1991). The measurement in this study was determined by the self-rating of agreement with three statements: 1) People with disabilities have more reasons to use alcohol or other drugs than those without disabilities; 2) Because I have a disability, I sometimes feel that I have less to lose and more to gain from using alcohol or other drugs; and 3) People with disabilities already have many problems, so alcohol or drug use is not a big deal. By adding all the items, a 12-point scale was constructed in which the higher numbers indicate more favorable attitudes toward substance use by persons with disabilities. The internal consistency of this scale was tested by Cronbach's alpha, resulting in an alpha coefficient of .77.

Acceptance of disability was defined by Wright (1960) as a process through which a person comes to view his or her disability as nondevaluating. In this study, disability acceptance was measured by a short version of the Acceptance of Disability Scale, developed by Linkowski (1971). The original scale is a 50-item, self-reported measure employing a Likert-type response format. This study adapted 10 items from the original scale: 1) My disability prevents me from doing things I want; 2) My disability affects those aspects of my life that I care most about; 3) A person who has a disability is no different from anyone else; 4) My disability is so overwhelming to me that I cannot enjoy anything; 5) It is important for me to accept myself as I am; 6) I feel I am able to offer a lot to other people; 7) My disability has disrupted my life greatly; 8) My disability does not interfere with achieving what I want to do; 9) I feel OK talking about my disability with others; and 10) A person with a disability can enjoy many things

in life. By adding the 10 items, a 41-point scale was constructed in which the higher numbers indicated higher degrees of disability acceptance. Cronbach's alpha for this scale was .78.

Perceived discrimination was measured as the extent to which respondents believe that most people discriminate against a person with a disability. This variable was quantified via an additive scale seeking relative agreements with four statements: 1) Most people would be willing to accept a person with a disability as a close friend; 2) Most people believe that a person with a disability is just as intelligent as the average person; 3) Most people in my community would treat a person with a disability as they would treat anyone else; and 4) Most employers will hire a person with a disability if he or she is qualified for the job. These statements were adapted from a 12-item scale developed to assess the belief of devaluation or discrimination against a person with a history of psychiatric treatment (Link et al. 1989). A high score in this 4-item scale indicates a belief that persons with disabilities will be discriminated against. Internal consistency reliability utilizing Cronbach's alpha was assessed with a value of .72 for this scale.

Disability characteristics were measured in terms of disability onset, multiple disabilities, and the presence of chronic pain. Disability onset was determined by a single question asking the age when a respondent's primary disability occurred. This variable was coded into two categories: congenital (disability at or before birth) and acquired disability. Both multiple disabilities and chronic pain were coded as dichotomous variables in data analysis. Demographic variables such as age, gender, education, and income were also included in the analysis.

RESULTS

Table 1 summarizes results from bivariate analyses, with means and standard deviations for all variables. First, note that illicit drug use was significantly correlated with entitlement attitudes toward substance abuse by persons with disabilities (r = .348) and acceptance of disability (r = -.208), followed by gender (r = .200) and multiple disabilities (r = .151). Four variables were associated with the entitlement attitudes of use: gender (r = .198), education (r = -.231), chronic pain (r = .183), and acceptance of disability (r = -.412). These relationships were all significant in the expected directions. Also, multiple disabilities and chronic pain were related

TABLE 1 Zero-Order Correlation Coefficients Among All Variables ($N = 304$)	rder Corr	elation C	oefficient	s Among	All Variab	oles (N =	304)				
	1	2	3	4	5	9	7	8	6	10	1
1. Drug use	1.00										
2. Entitlement of	.348***	1.00									
use (12-point scale)											
3. Acceptance of disability (41-	- .208***	— .412 ^{***}	1.00								
point scale)	0	0.0	***0	0 7							
4. Perceived discrimination	810.	690.	- .349	00.1							
(17-point scale)	110	110	*** 10	*** ~ / ~							
 Age (exact age) Gender 	.200***	.198***	- .272 - .053	.161 - .087	.021	1.00					
(male = 1)											
7. Education (exact	– .108	- .231***	.087	.048	.062	— .246 ^{***}	1.00				
# of years) 8 Income (10-point	– 019	– 081***	203***	— 143*	- 204***	047	30 Ε***	1 00			
scale)	<u>.</u>	- 00.	CO7.			È.	C77.				
9. Disability onset	.098	.071	– .039	- .043	.103	- .127*	.021	- .110 1.00	1.00		
(acquired = 1)	- L1 **	107	200°***	1 70**	1 0 0 ^{***}	101	090	100	980	1 00	
disability	- <u></u> -	<u>.</u>	(D7-	0/	061.		000.		000.	00.1	
(multiple = 1)		:		:							
11. Chronic pain (chronic pain = 1)	.084	.183**	- .309***	.149**	.184**	- .026	- .147**	– .106 – .027	- .027	.375*** 1.00	1.00
Mean	5.43	6.42	33.82	11.78	31.34	0.56	12.71	3.29	0.66	0.51	0.38
Standard deviation	4.27	3.05	7.29	3.55	9.37	0.50	2.21	2.81	0.47	0.50	0.49
* p < .05; ** p < .01; *** p < .001.	11; *** p < .	.001.									

to disability acceptance (r = -.209 and r = -.309, respectively) and perceived discrimination (r = .170 and r = .149), suggesting that those who had multiple disabilities or chronic pain were more likely to perceive social discrimination against persons with disabilities and less likely to report self-acceptance of disability. Similarly, those respondents who were younger or had higher family income were more likely to be associated with acceptance of disability (r = -.272 and r = .203, respectively) and less likely to perceive disability discrimination in society (r = .161 and r = -.143, respectively). As expected, chronic pain was significantly correlated with multiple disabilities (r = .375).

Four multiple regression models are presented in Table 2. These four models were developed based on the theoretical model and hypotheses described earlier. Several basic questions are answered with the four statistical models: How do disability conditions and socioeconomic status influence the perceptions of social discrimination by persons with disabilities? How are the negative reactions perceived from others related to their own delabeling process or acceptance of disability? And how are these responses to social reactions to disability associated with their attitudes toward and practice of substance abuse?

Specifically, perceived discrimination was regressing in Model 1 on the four demographic characteristics and three disability variables. Multiple disability had a significant, positive effect on perceived discrimination ($\beta = .149$) when other demographic and disability attributes were controlled. The impact of family income on perceived discrimination remained negative and significant in the regression model ($\beta = -.133$). The significant effects of income and multiple disability on the dependent variable indicated that those who had more than one disability condition or those who had a lower family income were more likely to score higher on perceived social discrimination than persons with a single disability or higher income levels.

The second regression model included perceived discrimination as well as all the demographic and disability variables. When acceptance of disability was regressed on these variables, about 27% of the variations were explained. The effects of age ($\beta = -.154$) and chronic pain ($\beta = -.195$) on disability acceptance continued to be significant while other variables were held constant. It is noteworthy that perceived discrimination was the most important variable in the model for predicting acceptance of disability ($\beta = -.318$). Model 3 included entitlement attitudes toward substance abuse by persons with disabilities as the dependent variable. Acceptance of disability exhibited the strongest relationship ($\beta = -.407$) with entitlement attitude in the model; this indicated that favorable attitudes toward substance use were significantly associated with lower levels of disability acceptance when other variables were controlled. Also, a favorable entitlement attitude was more likely to be reported by male respondents than their female counterparts ($\beta = .149$), as is with education attainment ($\beta = -.131$). However, the significant relationship between chronic pain and entitlement attitudes became negligible when other factors were held constant.

The last model in Table 2 contained all the variables used in this study. In this regression analysis, the drug use index was regressed on all explanatory variables. It was observed that entitlement attitude was the most important predictor in the model ($\beta = .276$), followed by gender ($\beta = .192$) and multiple disabilities ($\beta = .157$). These findings suggested that respondents who were male, with multiple disabilities, or with favorable entitlement attitudes were more likely to report illicit drug use. Moreover, it is noteworthy that neither perceived discrimination nor acceptance of disability had a meaningful, direct impact on illicit drug use. Their effects

Independent variable	Model 1 Perceived discrimination	Model 2 Acceptance of disability	Model 3 Entitlement attitude	Model 4 Drug use
Age	.091	— .154**	- .058	068
Gender	- .056	- .101	.149*	.192**
Education	.106	.050	- .131*	.013
Income	— .133*	.078	.023	.007
Disability onset	- .091	- .069	.055	.095
Multiple disability	.149*	060	.078	.157*
Chronic pain	.084	— .195**	.031	- .032
Perceived discrimination		— .318***	090	.009
Acceptance of disability			- .407***	- .066
Entitlement attitude				.276***
R ²	.093	.270	.233	.187

TABLE 2 Standardized Regression Coefficients of Perceived Discrimination, Acceptance of Disability, Entitlement Attitude, and Illicit Drug Use with Explanatory Variables (N = 304)

Note: See Table 1 for coding information.

*p < .05; **p < .01; ***p < .001.

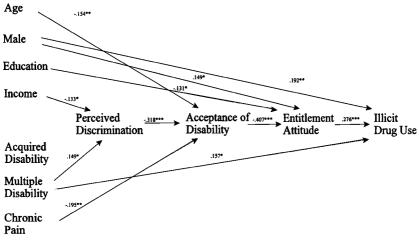


FIGURE 2 Model of significant factors on perceived discrimination, acceptance of disability, entitlement attitude, and illicit drug use.

on illicit drug use, however, seem indirect. For instance, disability acceptance had an insignificant, direct impact on illicit drug use ($\beta = -.066$); yet its indirect effect through entitlement attitude was substantially meaningful (Indirect Effect: $-.407 \times .276 = -.112$), as shown in Figure 2.

DISCUSSION

The main focus of this research is on exploring the links from disability, through reactions to social discrimination and selfacceptance of disability, to illicit drug use attitudes and behavior. The findings from our analyses tend to confirm our expectations that perceived discrimination and acceptance of disability play important roles in illicit drug use by persons with disabilities. The present study also reveals that perceived discrimination against persons with disabilities had a strong relationship with acceptance of disability, and was, in turn, indirectly related to illicit drug use attitudes and practice. In addition, disability conditions, such as the presence of multiple disabilities, were important factors in predicting illicit drug use, yet disability onset failed to show any significant relationships with the variables under investigation.

There are several limitations that suggest that caution needs to be taken in interpreting these findings. First, the study population consists of only those who used state rehabilitation services in

14

Ohio, Michigan, and Illinois. Researchers should be cautious in applying the results of this study to populations in other geographic areas and to those individuals who do not receive disability services. Second, due to the lack of longitudinal data and analyses, causal relationships between variables cannot be fully explored. For instance, an attitude of entitlement can be either antecedent to drug use or a consequence of drug use. With the cross-sectional data in this study, we can only speculate about the relationship. Third, because of the nature of the sample, it is impossible to compare individuals who are officially labeled, as were those in this study, and those who have never sought disability-related social services.

This study does not support all elements of the labeling perspective described earlier, but it benefits from the theory in establishing a useful framework to study relationships between disability and illicit drug use. The main assumption underlying this research is based on the propositions of primary and secondary deviance. Disability, either congenital or acquired, is often seen as an undesirable difference in this society. Consequently, this deviation becomes a characteristic of "special kind of people" or "master status," and all other statuses and attributes become subordinate to it (Becker 1963). The indisputable fact is that this labeling process is not only applied by social control agencies and much of the general population, but also internalized by many persons with disabilities; this assumed essential nature is a major obstacle to a positive self-concept and a "normal" life for persons with disabilities. The results of this article suggest that social stigma and discrimination are somewhat associated with disability adjustment and further deviant behavior and attitudes.

The labeling approach portrays deviance, especially secondary deviance, as a social construction which is achieved through a process of infractions and reactions. Since their main focus is on social structure, agency control, and societal reactions, conventional labeling theorists do not emphasize the process of individuals' reactions to societal stereotype and agency labeling (Blaxter 1976). We believe, however, that the examination of relationships between stigmatization against disability and further deviant behaviors such as illicit drug use would not be complete unless a process is delineated by which an individual reacts to, copes with, and accepts or rejects the labeling. It is found in this study that an individual's disability acceptance is closely related to his or her perceptions of societal responses to disability, and disability acceptance is negatively related to the attitudes that persons with disabilities are entitled to use alcohol or drugs.

Acceptance of disability can be further understood by applying the notion of "normalization." Becker and Arnold (1986) define normalization as a process in which stigmatized individuals adapt themselves to society by making an effort to reduce their variance from cultural norms. Acceptance of disability, with the tendency to emphasize competencies over limitations and abilities over disabilities, is an operational definition of this normalization process. The present study implies that the extent to which a person normalizes disability is significantly related to his or her view as well as his or her behavior. The success of normalization leads to conscious, positive conceptions of self (Becker and Arnold 1986). This positive view of self appears critical in preventing destructive behaviors and related entitlement attitudes, as suggested in this study.

Nevertheless, the developments of disability acceptance do not occur in a vacuum, but in a social context. Stigma and discrimination against disability in our society create barriers that prevent persons with disabilities from participating in the full spectrum of life. For persons with disabilities, the fact of exclusion from most of American life, such as being sent to a special school in childhood and having difficulty finding employment as an adult, can become a continued reminder of the stigma associated with disability (Becker and Arnold 1986). For some individuals, these experiences lead them to believe that they belong to a category most people view negatively, and the social stigma or discrimination they perceive impedes their personal adjustments to disabilities. The present study provides more evidence that acceptance of disability is significantly affected by perception of social discrimination against persons with disabilities. The more the persons with disabilities believed that they would be devalued and discriminated against, the less likely they were to have achieved disability acceptance.

These findings about acceptance of disability have practical applications. In our society, the seemingly impenetrable physical and social barriers faced by persons with disabilities must be identified and understood in order to build a community in which persons with disabilities can be fully involved. The process of societal integration for persons with disabilities appears to require self-empowerment as well as the overcoming of problems posed by external prejudice and discrimination. For an individual, acceptance of disability at a personal level may become the first step toward social acceptance.

The study also suggests that individuals' socioeconomic status should not be ignored. It is found that income and education, two major indicators of socioeconomic status, are inversely related to perceived social discrimination and entitlement attitudes. Respondents with low family income are likely to perceive social discrimination against disability and those with low education level are likely to report favorable attitudes toward substance use. This finding provides support for the speculation that the process of labeling, and its effects, may vary in the sense that it makes certain groups of people more liable to imputations of deviance than others (Hawkins and Tiedeman 1975). In fact, persons with disabilities and low socioeconomic status face multiple troubles in society. This is the group of individuals who are likely to rely on the public welfare system. The joint effects of disability and low income make it more difficult for them to achieve respectability and make them more susceptible to social labeling and discrimination.

Furthermore, persons with disabilities are not a homogeneous group, but vary widely in terms of severity of disability and other domains. The present study indicates that multiple disabilities and chronic pain have some meaningful effects on perceived discrimination, acceptance of disability, and illicit drug use. These results are consistent with previous study findings that people with more severe disabilities have more frequent and serious adjustment problems than those with milder disabilities (Barker 1948). However, disability onset, whether congenital or acquired, does not show any significant impact. This finding implies that the severity of a disability may be more important than its onset when disability-related reactions, attitudes, and behavior are examined.

The findings of this study indicate that the concept of entitlement is a believable rationalization for drug users with disabilities. A stigmatized person may use the stigma for secondary gains or as an excuse for being unable to comply with norms (Eisenberg, Griggins, and Duval 1982). Persons who use illicit drugs may be inclined to believe that they are entitled to use drugs because of their disabilities. There are few rationalizations for drug use by persons with disabilities more socially plausible or generally acceptable than this attitude. Given that this entitlement attitude focuses on "difference" or "abnormality," it is not surprising to see the negative relationship between entitlement attitude and acceptance of disability, which emphasizes normalization rather than deviation. In addition, the entitlement attitude is often held by family members and friends of persons with disabilities. On the one hand, a stigmatizing label of "disabled" makes it difficult for persons with disabilities to integrate into mainstream social settings. On the other hand, because of their disabilities, persons with disabilities are often excused by family members and the public for behaviors that deviate from social norms. These enabling behaviors and misperceptions often encourage and reinforce substance abuse for this population. Consequently, substance abuse and related problems interfere with medical or vocational rehabilitation progress for the population under study, further damaging their self-esteem, and hindering them from achieving social integration.

The results reported here have important implications for current programs of rehabilitation. Rehabilitation, as a process of socialization, provides not only physical recovery and work skills, but also an opportunity to develop new roles and new self-definitions. In that process, it is important to recognize that value or attitudinal barriers are sometimes more difficult and time consuming to overcome than are problems associated with immediate physical situations. As implied in this study, rehabilitation counselors should take into consideration that self-acceptance of disability, the stigmatizing effects of disability, and attitudes of entitlement toward alcohol and drug use may all play important roles in substance abuse for this population and significantly affect the process of rehabilitation.

REFERENCES

- Barker, Richard C. 1948. "The Social Psychology of Physical Disability." Journal of Social Issues 4:29–38.
- Becker, Gaylene and Regina Arnold. 1986. "Stigma as Social and Cultural Construct." Pp. 39–57 in *The Dilemma of Difference: A Multidisciplinary View of Stigma,* edited by Stephen C. Ainlay, Gaylene Becker, and Lerita M. Coleman. New York: Plenum Press.
- Becker, Howard S. 1963. *Outsides: Studies in the Sociology of Deviance*. New York: Free Press.
- Blaxter, Mildred. 1976. *The Meaning of Disability*. New York: Neale Watson Academic.
- Clinard, Marshall B. and Robert F. Meier. 1992. Sociology of Deviant Behavior. New York: Harcourt Brace Jovanovich College Publishers.
- Crumpton, Evelyn, Alvin D. Weinstein, Charles W. Acker, and Arthur P. Annis. 1967. "How Patients and Normals See the Mental Patient." *Journal of Clinical Psychology* 23:46–49.

- Eisenberg, Myron G. Cynthia Griggins, and Richard J. Duval. 1982. Disabled People as Second-Class Citizens. New York: Springer.
- English, William R. 1971. "Correlates of Stigma Toward Physically Disabled Persons." *Rehabilitation Research and Practice Review* 2:1–17.
- Feist-Price, Sonja. 1995. "African Americans with Disabilities and Equity in Vocational Rehabilitation Services: One State's Review." *Rehabilitation Counseling Bulletin* 39: 119–129.
- Finkelstein, Vic. 1993. "The Commonality of Disability." Pp. 9–16 in Disabling Barriers—Enabling Environments, edited by John Swain, Vic Finkelstein, Sally French, and Mike Oliver. London: Sage.
- Freidson, Eliot. 1965. "Disability as Social Deviance." Pp. 71–99 in Sociology and Rehabilitation, edited by Marvin B. Sussman. Washington, DC: American Sociological Association.
- Giovannoni, Jeanne M. and Leonard P. Ullmann. 1963. "Conceptions of Mental Health Held by Psychiatric Patients." *Journal of Clinical Psychology* 19:398–400.
- Goffman, Erving. 1963. Stigma. Englewood Cliffs, NJ: Prentice-Hall.
- Gove, Walter. 1970. "Social Reaction as an Explanation of Mental Illness: An Evaluation." *American Sociological Review* 35:873–884.
- Gove, Walter R. 1982. *Deviance and Mental Illness*. Beverly Hills, CA: Sage.
- Hahn, Harlan. 1996. "Antidiscrimination Laws and Social Research on Disability: The Minority Group Perspective." *Behavioral Sciences and the Law* 14:41–59.
- Hawkins, Richard and Gary Tiedeman. 1975. *The Creation of Deviance*. Columbus, Ohio: Charles E. Merrill.
- Heinemann, Allen W. Nancy Goranson, Karen Ginsburg, and Sidney Schnoll. 1989. "Alcohol Use and Activity Patterns Following Spinal Cord Injury." *Rehabilitation Psychology* 34:191–205.
- Kaye, H. Stephen, Mitchel P. LaPlante, Dawn Carlson, and Barbara L. Wenger. 1996. "Trends in Disability Rates in the United States, 1970–1994." Disability Statistics Abstract 17:1–6.
- LaPlante, Mitchel P. 1988. *Data on Disability from the National Health Interview Survey, 1983–85.* An InfoUse Report. Washington, DC: U.S. National Institute on Disability and Rehabilitation Research.
- Lemert, Edwin M. 1967. *Human Deviance, Social Problems, and Social Control.* Englewood Cliffs, NJ: Prentice-Hall.
- Lemert, Edwin W. 1951. Social Pathology. New York: McGraw-Hill.
- Li, Li, Jo Ann Ford, and Dennis Moore. 2000. "An Exploratory Study of Violence, Substance Abuse, Disability, and Gender." *Social Behavior and Personality* 28(1): 61–72.
- Li, Li and Dennis Moore. 1998. "Acceptance of Disability and Its Correlates." *The Journal of Social Psychology* 138(1):12–25.
- Liachowitz, Claire H. 1988. *Disability as A Social Construct*. Philadelphia: University of Pennsylvania Press.

- Link, Bruce G. 1987. "Understanding Labeling Effects in the Area of Mental Disorder: An Assessment of the Effects of Expectations of Rejection." *American Sociological Review* 52:96–112.
- Link, Bruce G., Francis T. Cullen, Elmer Struening, Patrick E. Shrout, and Bruce P. Dohrenwend. 1989. "A Modified Labeling Theory Approach to Mental Disorders: An Empirical Assessment." *American Sociological Review* 54:400–423.
- Link, Bruce G., Jerrold Mirotznik, and Francis T. Cullen. 1991. "The Effectiveness of Stigma Coping Orientations: Can Negative Consequences of Mental Illness Labeling Be Avoided?" *Journal of Health and Social Behavior* 32:302–320.
- Linkowski, Donald C. 1971. "A Scale to Measure Acceptance of Disability." *Rehabilitation Counseling Bulletin* 4:236–244.
- Mead, George H. 1934. *Mind, Self, and Society*. Chicago: University of Chicago Press.
- Moore, Dennis. 1991. "Substance Abuse and Persons with Disabilities: A Significant Public Health Problem." Paper presented at the American Public Health Association Conference. Atlanta, GA.
- Moore, Dennis, Bobby G. Greer, and Li Li. 1994. "Alcohol and Other Substance Use/Abuse Among People with Disabilities." *Journal of Social Behavior and Personality* 9:369–382.
- Moore, Dennis and Li Li. 1998. "Prevalence and Risk Factors of Illicit Drug Use by People with Disabilities." The American Journal of Addictions 7(2):93–102.
- Moore, Dennis and Lewis Polsgrove. 1991. "Disabilities, Developmental Handicaps and Substance Abuse: A Review." *The International Journal of the Addictions* 26:65–90.
- Nagler, Mark. 1993. *Perspectives on Disability*. Palo Alto, CA: Health Markets Research.
- Ohio Rehabilitation Services Commission (ORSC). 1996. 1995 Annual Report. Columbus, OH: RSC Offices of Public Information.
- Poole, Eric D., Robert M. Regoli, and Mark R. Pogrebin. 1986. "A Study of the Effects of Self-Labeling and Public Labeling." *The Social Science Journal* 23(3):345–360.
- Pope, Andrew M. and Alvin R. Tarlov. 1991. *Disability in America: Toward a National Agenda for Prevention*. Washington, DC: National Academy Press.
- Rasmussen, Garry A. and Ronald P. Deboer. 1980/1981. "Alcohol and Drug Use Among Clients at A Residential Vocational Rehabilitation Facility." *Alcohol Health and Research World* 8:48–56.
- Safilios-Rothschild, Constantina. 1970. *The Sociology and Social Psychology of Disability and Rehabilitation*. New York: Random House.
- Scheer, Jessica and Nora Groce. 1988. "Impairment as a Human Constant: Cross-Cultural and Historical Perspective on Variation." *Journal on Social Issues* 44(1):23–37.

- Scheff, Thomas J. 1963. "The Role of the Mentally III and the Dynamics of Mental Disorder." *Sociometry* 26:436–453.
- -1966. Being Mentally Ill. Chicago: Aldine.
- —1974. "The Labeling Theory of Mental Illness." American Sociological Review 39:444-452.
- Stern, Robert, Pamela J. Byard, Joseph F. Tomashefski, and Carl F. Doershuk. 1987. "Recreational Use of Psychoactive Drugs by Patients with Cystic Fibrosis." *The Journal of Pediatrics* 111:293–299.
- Substance Abuse and Mental Health Services Administration (SAMHSA). 1995. "National Household Survey on Drug Abuse: Population Estimates 1994." DHHS Publication No. (SMA) 95-3063. Rockville, MD: SAMHSA, Office of Applied Studies.
- Thoits, Peggy A. 1985. "Self-Labeling Processes in Mental Illness: The Role of Emotional Deviance." American Journal of Sociology 91(2): 221–249.
- Traub, Stuart H. and Craig B. Little. 1985. *Theories of Deviance*. Itasca, IL: F. E. Peacock.
- Warner, Richard, Dawn Taylor, Moria Powers, and Joell Hyman. 1989. "Acceptance of the Mental Illness Label by Psychotic Patients: Effects on Functioning." *American Journal of Orthopsychiatry* 59(3):398–409.
- Weinstein, Raymond M. 1983. "Labeling Theory and the Attitudes of Mental Patients: A Review." Journal of Health and Social Behavior 24:70-84.
- Wright, Beatrice A. 1960. *Physical Disability: A Psychological Approach*. New York: Harper & Row.