

**MENTAL ILLNESS, SOCIAL STATUS AND
HEALTH CARE UTILIZATION:
A TEST OF SOCIETAL REACTION THEORY**

by

Daniel W. Phillips III

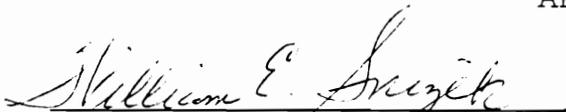
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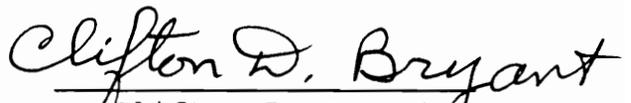
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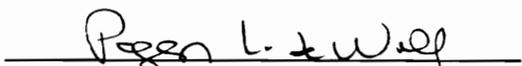
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Sociology

(ABSTRACT)

Sociology has made many contributions to the study of mental illness. One of those contributions has been in the area of theory. Sociologists maintain that social variables such as age, social class, marital status, gender, and race are important in understanding mental illness and its treatment. Although sociologists agree that social variables are important in understanding mental illness, they are not always in agreement about the direction of the relationships. Labeling theorists claim that psychiatric symptoms do not differentiate those who seek treatment from those who do not. Instead, they believe that those who have the least amount of social power are most likely to be forced into treatment. Conversely, sociologists who are critical of labeling believe that there is a positive correlation between symptoms and mental health treatment. However, critics of labeling also maintain that social characteristics are related to treatment. Unlike labeling perspective theorists, critics of labeling claim that the greater the amount of social resources people have, the more likely they are to seek treatment. Besides these general perspectives, other sociologists have developed theories which are hybrids of the labeling and the critics of labeling. Former tests of these theoretical perspectives have utilized small, convenience samples. These studies have produced conflicting results. This work uses data from the Epidemiologic Catchment Area (ECA) study, a community sample, to test research questions from the labeling perspective, critics of labeling, and combined perspectives. Results provide mixed support for each perspective. Results vary by inpatient and outpatient treatment and by particular sector of treatment.

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The comments above reflect the fact that this work did not flow from one person. This work truly has been a collective effort. I have been the most fortunate one in this process because I have been the recipient of these many efforts.

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CHAPTER 1

INTRODUCTION

The study of mental illness may appear to be the sole dominion of psychologists and psychiatrists. Other disciplines, however, also have made contributions to the understanding of mental illness. Research has shown [see Faris and Dunham (1939), Hollingshead and Redlich (1953), Srole et al. (1962), and Leighton et al. (1963)] that social factors, such as gender, race, income, education, marital status, and age, are correlated with psychiatric disorders. While many sociologists agree that social characteristics are important in understanding mental illness, sociologists have not always been in agreement about the specific relationships between social characteristics and mental illness. During the 1960s and early 1970s, a debate, sometimes referred to as the Gove/Scheff debate, began concerning the role of social characteristics in mental illness. Variations of this debate have developed since the 1970s and continue to be developed today.

On one side of the debate are labeling theorists [primarily represented by Goffman (1961) and Scheff (1966)], and on the other side are critics of labeling [represented

primarily by Gove (1970a, 1970b, 1975b); Murphy (1982) and Weinstein (1983)]. Briefly, labeling theorists claim "mental illness" is a phrase applied to people who violate norms for which there are no specific categories to classify their behaviors; labeling theorists have viewed mental illness as a residual category of deviance. According to labeling theorists, "mentally ill" people can be differentiated from non-mentally ill people by social characteristics not by individual differences in psychiatric symptoms. Labeling theorists also maintain once people are officially labeled "mentally ill" the label becomes internalized. People who have internalized the "mentally ill" label are more likely to engage in bizarre behaviors which hurts life chances (e.g., marriage, employment, and educational opportunities). Finally, labeling theorists state that those who lack social resources (i.e., economic, educational, and marital) are most likely to receive a strong reaction (i.e., inpatient treatment) to their bizarre behavior (Goffman 1961, Scheff 1966).

Critics of labeling such as Gove (1970a, 1970b, 1975b), Gove and Howell (1974) and Weinstein (1983) have responded to labeling theorists's claims. Critics of labeling state that people are designated mentally ill primarily because

they have psychiatric symptoms/disorders. Critics of labeling recognize, however, that social resources enable people to receive adequate psychiatric care. Critics of labeling believe that treatment is dependent upon social resources, although they still consider symptoms/disorders to be the primary reason people seek treatment (Gove and Howell 1974).

Gove and Howell (1974) and Weinstein (1983) have responded to labeling theorists's claims that treatment stigmatizes people. Critics of labeling agree with labeling theorists that mentally ill people are stigmatized because of their behavior. Critics of labeling contend, however, that bizarre behavior is the result of psychiatric symptoms/disorders not the result of being labeled mentally ill. Psychiatric treatment, which labels people, should not reduce life chances, instead, psychiatric treatment should lead to a reduction in symptoms which should decrease bizarre behaviors and ultimately increase life chances. Finally, critics of labeling maintain that people with social power are more likely than those without social resources to receive a strong reaction (i.e., psychiatric treatment) to their bizarre behavior (Gove 1970a). This is because socially powerful people find treatment efficacious.

This is the opposite of labeling theorists's claims that people with few social resources are most likely to receive a strong reaction to their behavior.

While the Gove/Scheff debate occurred during the 1960s and 1970s, there have been more recent theoretical developments in mental illness theory some of which attempt to combine parts of labeling and critics of labeling.¹ Similar to critics of labeling, Link, Cullen, Struening, Shrout, and Dohrenwend (1989) state that people are labeled mentally ill because they have symptoms of mental illness. Similar to labeling theorists, Link et al. (1989) also contend that being labeled mentally ill can harm life chances. Horwitz (1982) does not deny the importance of psychiatric symptoms in being labeled but maintains that reaction, as it relates to treatment, varies by social characteristics. Rosenfield (1984) focuses on the correlation between race and reaction to bizarre behaviors. Chesler (1989) has also discussed gender as it relates to the reaction to bizarre behaviors.

¹Even Gove and Howell (1974) recognized that the psychiatric and labeling perspectives were simply different point along the social characteristic/psychiatric continuum.

While the labeling and critics of labeling perspectives are useful in understanding mental illness, the critics of labeling perspective should have more explanatory power. Research continues to discover evidence for the physiological components of mental illness (Winokur and Clayton 1994). Despite the difficulties of diagnosis, psychiatric diagnoses are not just a repressive label; psychiatric diagnoses play a role in people receiving treatment. This does not mean that social characteristics are unimportant, only that psychiatric disorders are more important in receiving treatment than labeling theorists admit. While it is important to critique the mental health system, it is also important to recognize the benefits of recent discoveries concerning mental illness. Because of medication and therapy, many disordered individuals have been able to lead better lives. Labeling theorists should move away from questioning whether illnesses, such as schizophrenia, really exists to questioning the diagnosis and treatment process. If labeling theorists fail to change their critique as new medical evidence is uncovered, then labeling theorists will fail to play a useful role in the study of mental illness.

Statement of the Problem

Determining whether one theoretical perspective explains mental illness better than another perspective is interesting but insufficient to influence mental health care policy. Both labeling theorists and their critics will concede the other is partially correct but this leads to a good deal of ambiguity. Government agencies and insurance companies are not as likely to provide funds for treatment services based on an ambiguous description of mental health care. What is really needed is a description of the specific relationships between social characteristics, psychiatric symptoms, and societal reaction or psychiatric treatment. Determining this relationship is not a trivial matter as there is a great deal at stake: interpersonal relationships, social standing, individual liberty, emotional well-being, and millions of dollars.

If labeling theorists have accurately described mental illness, then the mental health care system accomplishes the following:

1. increases and validates existing power differentials in interpersonal relationships as well as in the broader social context,
2. decreases personal liberty and harms the emotional well-being of its clients, and
3. costs millions of dollars each year needlessly.

If labeling theorists are correct, mental health treatment should be discontinued to the benefit of society. Defunding mental health treatment should lead to increased equality since power differentials are not validated/caused by the mental health system. Discontinuing mental health treatment should also lead to increased personal liberty and save millions of dollars annually.

If the critics of labeling are correct about the mental health care system, then a different view of psychiatric treatment exists:

1. mental health treatment is reserved primarily for those who suffer from a disorder,

2. mental health treatment helps to reduce psychiatric symptoms which has the potential to increase individual liberty and emotional well-being, and
3. the cost of treatment is justified because it helps people live more enjoyable and productive lives.

Critics of labeling believe mental health treatment can effectively decrease the symptoms of mental illness. If that is true, then mental health treatment ultimately increases personal liberty by helping people to regain control over their lives. The cost of treatment is legitimated as it helps people live more enjoyable lives and decreases the productivity costs of mental illness. If critics of labeling are correct, then providing mental health care for those who need it should have positive effects for people: psychiatric symptoms should be alleviated allowing people to lead more enjoyable lives.

Despite all that is at stake regarding mental health treatment, the specific relationships between social characteristics, psychiatric symptoms, and mental health treatment has not been adequately explored. The data used

to support claims made by labeling theorists and their critics have come from small, convenience samples collected during the 1960s and 1970s. This, combined with the fact that there have been new attempts to combine the perspectives, requires new research to be conducted in this area.

This work will examine the specific relationship between social characteristics, psychiatric symptoms, and the utilization of mental health services to explore implications for mental health treatment policy². It may be the case that labeling and critics of labeling perspectives explain different types of treatment better than the other perspective. For instance, labeling may have more explanatory power for those hospitalized in state hospitals, while the critics of labeling may best explain outpatient treatment in a private psychiatrist's office.

To examine the issues described above, this work will use data from the Epidemiological Catchment Area (ECA) study. The ECA data is sufficiently large to examine the correlates of mental health treatment. ECA data include the

²Utilization of mental health services is divided into outpatient and inpatient treatment. Outpatient and inpatient treatment is further divided into different sectors such as private hospital, general hospital, and state hospital.

responses of 20,861 persons, from both the community and institutions (nursing homes, psychiatric facilities, and jails).

The following three chapters will explore labeling theory (Chapter 2), the perspective developed by the critics of labeling (Chapter 3), and the attempt to combine the two (Chapter 4). This will be followed by a methods section (Chapter 5) where the ECA study will be discussed along with the *DSM-III* and the *DIS*. Chapters 6-8 will display the results of this work. Chapter 6 will contain the results of the relationships between social characteristics and recent treatment. Chapter 7 will describe the relationships between psychiatric variables and recent treatment, while Chapter 8 will combine social and psychiatric characteristics. Finally, Chapter 9 will provide conclusions.

CHAPTER 2

LABELING PERSPECTIVE

The labeling perspective emerged during the 1960s in response to traditional theories of crime/deviance/mental illness (Williams and McShane 1994). During the 1960s, traditional authority was challenged along with the legitimacy of traditional theories. Labeling was facilitated by the political atmosphere of the 1960s; labeling's propositions complemented the ideologies of social movement groups.

Labeling theorists broke with the functionalist ideology that prevailed prior to the 1960s. The labeling perspective combined elements from the conflict and symbolic interactionist perspectives. Whereas functional theories of deviance/criminology/mental illness focused on rule breakers, labeling theorists chose to examine rule makers and rule enforcers (Gibbs 1996). Before discussing labeling theory completely, a brief examination of pre-1960s criminological theory is presented.

Prior to the 1960s, criminological theories tried to explain why people engaged in criminal behavior. No matter what their specific focus was, most pre-1960 criminologists

were trying to discover the difference between criminals and non-criminals. During the latter part of the nineteenth century, criminologists believed criminals were biologically different from others. Lombroso (1911) claimed criminal behavior was the result of atavistic qualities. Lombroso stated criminals were physiologically distinct from non-criminals, the result of genetic inferiority. Biological theories, such as Lombroso's, ultimately decreased in popularity as their analyses suffered from serious methodological flaws (Shoemaker 1990, p. 17). These theories were followed by functional theories of deviance/crime/mental illness.

Functional theorists, such as Spencer (1898), Durkheim (1933), and Merton (1957), used biology to construct an organismic view of society. According to these functionalists, society's members had roles to fulfill that promoted the society's existence. Functionalists believed each role had a particular set of norms attached to them. For instance, the role of being a husband required earning a wage and being strong; the role of wife required taking care of the household and being emotionally supportive. According to the functional view of society, deviance was defined as the violation of norms attached to people's

roles. Since functionalists believed these roles supported society as a whole, deviance was thought to be constructed through a consensus of the people. According to functionalists, norms developed from the will of the people; norms reflected the general sentiments of the population at large. Laws against murder, then, were created because society's members agree collectively that killing someone was wrong. The belief that norms arose from a consensus of society's members is an important part of functionalist theory. Only with the consensus component of functionalist could deviance/crime/mental illness be viewed as something harmful to society.

In the 1960s, people began to question society, its institutions, and the assumptions made by functional theorists. Specifically, the consensus assumption and the harmfulness of deviant behaviors/criminal acts/mentally ill behavior were challenged by the labeling perspective. The labeling perspective has its intellectual roots in conflict theory and the symbolic interaction perspective. Conflict theorists state that norms are constructed by the socially powerful and forced on the socially weak. According to conflict theorists, norms are not constructed through a consensus of society's members. Conflict theorists claim

norms do not prohibit behaviors which are dangerous to society, only behaviors that are dangerous to the interests of those in power. Norms prohibiting behaviors such as homosexuality, types of dress, drugs, and prostitution are considered unjust by some conflict theorists; they do not believe that deviance is inherently harmful to society. Assuming conflict instead of consensus makes conflict theory different from functionalism and labeling different from traditional theories of deviance. Besides conflict theory, labeling theorists also draw from symbolic interactionism.

Functionalists had a tendency to consider people to be unfeeling, unthinking, and unreflective objects. Symbolic interactionists, in contrast, claim human beings are "conscious, feeling, thinking, and reflective subjects rather than a nonconscious, unfeeling, unthinking, and unreflective object" (Thio 1995, p. 46). Symbolic interactionists focus on the symbols people use in social interaction. They examine the ways individuals construct symbols and the meanings others attach to them.

The labeling perspective encompasses the work of many authors (Becker 1963; Chesler 1972, 1989; Goffman 1961; Erickson 1962, 1966; Rushing and Esco 1977; and Scheff 1964, 1966). While each contributes to the labeling perspective,

their contributions do not address the same concerns. The multifaceted nature of labeling theory can lead to conceptual confusion. To clarify the labeling perspective, I present a conceptual scheme developed by Gibbs (1981). Gibbs (1981, pp. 35-37) defines three general foci which cumulatively form the labeling perspective: the reactive conception of deviance, the theory of secondary deviance, and the societal reaction theory.

Reactive Conception of Deviance

Adherents of the reactive conception of deviance do not believe that deviance is defined by absolute standards; deviance is not inherent in the act. Instead, deviance is defined by audience reaction (Erickson 1962, p. 253). To those who argue that norms are important in understanding deviance, Becker (1963) concedes some ground. Becker admits there are people who do not violate social norms who are labeled conformists, and there are those who have violated norms and are so labeled (pure deviant). Becker, however, claims there are those who do not violate norms who are labeled deviants (falsely accused), and people who violate norms who are not labeled deviants (secret deviant). Falsely accused people and pure deviants are sanctioned by

society while conformists and secret deviants are not. Being labeled, therefore, not the violation of norms, is the crucial part of the deviant labeling process.

When applied to mental illness labeling theory says audiences, such as families, communities or psychiatrists, react to people's behavior and in doing so defines them mentally ill. The audience may or may not use psychiatric symptoms to define people mentally ill, but people are considered mentally ill only when they are labeled. Labeling theorists do not focus on the physiological causes of mental illness, instead they focus on the social forces involved in the construction of the definition of mental illness.

Scheff (1966) develops nine propositions to explain the factors involved in people being labeled "mentally ill." Scheff (1966, prop. 1) argues that mental illness is a residual category that "arises from fundamentally diverse sources." Mental illness encompasses those behaviors which people are prohibited from engaging in but are too trivial or impractical to be prohibited legislatively. For instance, people are not supposed to stare out of a window too long and are supposed to respond when addressed. Violation of either is not considered illegal or immoral.

If the audience is not able to determine the reason for the peculiar behavior, the audience may consider the actor to be deviant.

Whereas there are names for people who rape ("rapists") and people who murder ("murderers"), there are not names for people who stare out of a window for too long or for people who don't answer when called. Because no-name deviants are not placed into existing categories they are, according to Scheff, placed into a residual category: mentally ill. There are many times, however, when people violate residual rules and are not considered mentally ill. In some instances, people who behave in some bizarre manner (i.e., commit residual deviance) may be considered mentally ill. In other instances, people may act just as strangely and be considered eccentric. Residual rule breaking is not reacted to systematically. Many people who commit residual deviance are never considered mentally ill while others are considered mentally ill. Due to the variability in reaction to residual rule breaking, individual behaviors or diseases cannot be the cause of the mental illness diagnosis. There must be other factors involved in the diagnosis process such as environmental factors.

Becker (1963), Scheff (1966), and Goffman (1961) agree that the definition of mental illness is determined by factors which primarily exist in the social environment, not within individuals. Labeling theorists do not spend time dissecting the human body in search of disease but instead deconstruct society in search of its pathological components.

Theory of Secondary Deviance

As mentioned previously, labeling theory consists of the reactive conception of deviance, secondary deviance, and societal reaction theory. Whereas the reactive conception of deviance focuses on how people are labeled, the theory of secondary deviance focuses on the consequences of being labeled. Tannenbaum (1938), Lemert (1951), Goffman (1961), and Scheff (1966) all make contributions to the theory of secondary deviance and are discussed below.

Tannenbaum (1938) describes the way in which delinquents come to be separated from others in the community by a labeling process. In his analysis, Tannenbaum (1938, p. 17) describes how juveniles' deviant behaviors are first viewed as bad; as they continue their pattern of deviant behavior all of their behaviors are

reinterpreted as delinquent. Any activity, legitimate or deviant, becomes suspect. This ultimately separates juveniles from the community, and they become outsiders. The community's "dramatization of evil" causes the labeled individual to further participate in deviant behavior that was to be discouraged, because he is not allowed to engage in normal interaction with law-abiding people (Tannenbaum 1938, p. 19).

While Tannenbaum's (1938) work indirectly discussed secondary deviance, Lemert (1951) specifically discusses the notion of primary and secondary deviance. Lemert (1951, p. 75) defines primary deviance as those norm violations that occur before people internalize the deviant label. Secondary deviance theorists believe that people come to internalize the deviant label, because others have labeled them (Lemert 1951, p. 76). Instead of the label keeping people from engaging in deviance, it actually encourages people to engage in deviance further as they are cut off from mainstream interactions.

Scheff (1966, p. 65, prop. 6) claims psychiatric patients internalize their deviant roles and begin to use "the role of the insane as the framework within which he organizes [his] own behavior[s]." Those who are labeled

mentally ill behave mentally ill, because they have had their deviant role forced upon them. Scheff also claims that psychiatric patients may adopt the role of mentally ill people, because patients "[are] highly suggestible and may accept the proffered role of the insane as the only alternative" (prop. 8). As damaging as the mentally ill role is, it may be seen as the only course to pursue after being labeled. Psychiatric patients may be further encouraged to remain in the mentally ill role, because they may not be accepted when they try to return to normal roles after being labeled (prop. 7).

Finally, Scheff (1966, proposition 9) states that "among residual deviants, labeling is the single most important cause of a career of residual deviance." For Scheff, mental illness is a social construction which results in those labeled mentally ill acting mentally ill. Scheff's views run counter to the psychiatric position that claims labels reflect, not cause, individual pathology and are valuable in directing psychiatric attention to reduce the symptoms of mental illness.

Secondary deviation theorists claim people's chances of achieving socially valued goals (e.g., personal income) are decreased when they are labeled. The longitudinal data necessary to test this assertion are not available, so ECA data will be used instead.

Societal Reaction Theory

According to Gibbs (1981, p. 37), societal reaction theory states that:

the character of the reaction to a real or alleged deviant act by an individual is primarily contingent on:

- 1) social identity of the individual
- 2) the social identity of the reactors
- 3) the operating rules of the reactors' organization
- 4) and/or circumstances before, during, or after the act.

Goffman (1961) makes this position clear when he states that since there are many more people with psychiatric symptoms outside than inside the hospital, "mental patients distinctively suffer not from mental illness, but from contingencies" (Goffman 1994, p. 189). These contingencies include the "visibility of the offense, proximity to a mental hospital, amount of treatment facilities available, [and] community regard for the type of treatment given in available hospitals" (Goffman 1994, p. 188).

Goffman does not deny the presence of psychiatric symptoms; he only diminishes their importance in causing people to enter treatment. Goffman's analysis of psychiatric patients is similar to that of Erickson (1962) who states that the number of officially recognized deviants in a given society typically remains constant. This is because society only has the resources to focus on a certain amount of deviance at any given time.

According to the societal reaction portion of labeling theory, individuals who have fewer social resources will be reacted to more strongly by society. Having a low SES or not being married will be positively correlated with psychiatric treatment (Goffman 1961, Scheff 1964). Among those who are treated, those with a lower SES or who are not married should be more likely to be an inpatient particularly in a state mental hospital, the harshest form of treatment.

In addition to social class, gender and race also influence societal reaction. Chesler (1989) focuses on the relationship between mentally illness and gender. She claims most clinicians have an anti-female sentiment (Chesler 1989). Chesler also claims that "madness" is acting in a way that is different from one's gender role

(Chesler 1989). Chesler states that men, however, can deviate more from their gender role than women can from their role without being hospitalized.

Rosenfield (1984) has shown that being African-American increases the chances that a person will be involuntarily committed. This relationship, however, only holds true for men. Horwitz (1982, p. 151) also claims that African-Americans are more likely to receive custodial and coercive treatment, while whites are more likely to receive therapeutic treatment. These hypotheses cannot be examined directly as there is no ECA data on involuntary hospitalization. It is possible, however, to examine the relationship between race and treatment. Rosenfield and Horwitz have provided evidence that blacks receive a more severe reaction because of their race. These hypotheses will be supported if the ECA data show blacks are more likely to be hospitalized, particularly in a state hospital (i.e., the most severe reaction).

In addition to race, class, and gender, other labeling theorists claim that being married decreases the severity of social reaction to mental illness (Rushing and Esco 1977, p. 137). Rushing and Esco (1977, p. 137) have shown that married people are less likely to be involuntarily

committed. Never having been married, therefore, is positively correlated with involuntary hospitalization. This is similar to what Durkheim (1964) found concerning suicide: people who lacked social integration were more likely to commit suicide than those properly integrated.

According to these theorists, people's social resources impact on their chances of receiving treatment. These theorists do not reject the existence of psychiatric symptoms. Rather, they believe that *who people are* has more of an impact on getting into treatment than *how people behave*.

Overview of the Labeling Perspective

The labeling perspective has been described with regard to its three aspects: reactive conception of deviance, the theory of secondary deviance, and societal reaction theory. Together, the three aspects focus on the way in which the concept of mental illness is constructed, how the label of mental illness increases the likelihood that people will be deviant, and societal reaction (i.e., experience treatment) based on their social identity.

Labeling theory can be used to make predictions about the social and psychiatric correlates of mental health treatment. Labeling theory states that societal reaction is inversely related to having social resources. Labeling theorists, therefore, would predict mental health treatment to be inversely related to social class as measured by income, education, and job prestige. Labeling theorists would also claim treatment is inversely related to being married. Extending this argument, treatment should be inversely related to having children as those with children have more family resources.

In addition to predictions about getting into treatment, labeling theory can also be used to predict the results of treatment. As discussed previously, labeling theorists believe that treatment is detrimental to the individual; treatment hurts life chance. Specifically, labeling theorists would predict the results of mental health treatment to be negative. Those treated should have less income and a lower job prestige than those who have not been treated. Treated persons also should be less likely to be married and have children than untreated persons.

Early labeling theorists, such as Goffman and Scheff, focused primarily on social class and its inverse correlation with treatment. Social inequality, however, includes more than social class; social inequality also includes race and gender. Chesler predicted that women would be reacted to more strongly than men. Concerning race, Rosenfield and Horwitz predicted blacks would be reacted to more strongly than whites.

Next, I examine the model of treatment put forth by critics of labeling. While labeling predicts those without power are most likely to be treated, critics of labeling predict something quite different. Critics of labeling claim people are considered mentally ill primarily because of their symptoms. Critics of labeling do not consider social characteristics to be as important as symptoms when it comes to societal reaction or treatment.

CHAPTER 3

CRITICS OF LABELING

Although the labeling perspective of mental illness was popular during the 1960s, it has since been challenged by critics of labeling (Gove 1968, 1970a, 1970b, 1982; Gove and Howell 1974; Murphy 1982; and Weinstein 1982, 1983, 1994). Critics of labeling argue that there is something different between people who receive psychiatric treatment and people who do not. Critics of labeling also argue that the difference between mentally ill and mentally well people is negative and the mental illness should be corrected. This is in opposition to labeling theorists who argue mentally ill people are not different from others but are simply people who have been singled out, because they lack social power. For labeling theorists, the origins of mental illness exist outside the individual. For critics of labeling, mental illness exists inside the individual even though there may be environmental influences involved. Critics of labeling have criticized the three major components of the labeling argument: reactive definition of mental illness, secondary deviation, and reaction theory of deviance.

Critics of Labeling General Statement

Critics of labeling argue that mentally ill people are those who suffer from psychiatric disorders. Critics of labeling state that psychiatric disorders do not constitute alternative kinds of behavior. Psychiatric disorders are negative in nature. Specifically, psychiatric disorders are associated with the presence of subjective distress (Gove 1968) and social impairment (Gove 1970b, p. 302). Social impairment may range from the inability to feed one's self to the inability to carry out one's daily roles (e.g., spouse, worker, parent) to simply performing daily roles in a noticeably deficient manner (e.g., parenting but doing so with great difficulty and distress). According to critics of labeling, people enter treatment primarily because of these symptoms, although social resources may play a role.

Critics of Labeling Response to Reactive Definition of Mental Illness

Reactive theorists (Scheff 1966; Rosenhan 1973) claim psychiatric symptoms are culturally and historically relative. Their argument is that psychiatric disorders are

constructions of a particular socio-historical period; therefore, people are not labeled mentally ill for something they have done but because of social conditions.

Murphy (1982) attacks the idea that symptoms are culturally and historically specific. Murphy claims that in preliterate societies psychosis is defined in a similar fashion to the way it is defined in twentieth century Western culture. To provide evidence for her claim, Murphy describes her experiences living with an Eskimo tribe who subsisted through hunting and gathering and a tribe in Nigeria who subsisted through agriculture. The Eskimo lived on an island in the Bering Sea and were visited during the period 1954-1955. The Nigerians, the Egba Yorubas, were visited from 1961 to 1963. As can be seen, these groups are different from each another in where they live and what they do to survive. Because of the difference in these two groups, Murphy's results were not the result of selecting groups with similar conditions.

During her work, Murphy found that the Eskimos and Nigerians had words for personal experiences that resembled Western psychiatry's notion of psychosis. Eskimos used the term *nuthkavihak* which refers to "a complex pattern of multiple possible behavioral processes of which the hallmark

is conceived to be that something inside the person - the soul, the spirit, the mind - is out of order." Phrases used to describe these behaviors were "talking to oneself," "screaming at somebody who does not exist," "refusing to eat for fear it will kill the person," "refusing to talk," and "hiding in strange places" (Murphy 1982, p. 60).

The Yorubas used the word "were" to explain similar behaviors. *Were* and *nuthkavihak* were never used to describe one symptom but for a pattern in which 3-4 symptoms existed together. No one ever exhibited all of the symptoms. Many people exhibited one or two symptoms without being considered mentally ill. Therefore, psychosis has its own definition (i.e., it is not a residual category) and is not simply the exhibition of a single behavior which is defined as deviant (i.e., people are not considered psychotic because they refuse to speak).

Murphy (1982) also addresses the relationship between mental illness and shaman. Some have claimed that mentally ill people have served in the role of shaman. Their argument is that psychotic behaviors are actually committed by people as part of a ceremony (healing, for instance) and are labeled by those who do not understand the culture. This leads to two possible conclusions. The first is that

shaman are not really unorganized and because of this are not mentally ill. Therefore, there is no true psychosis among these people, only people acting in ways in which shaman are expected. Another possibility is that there are tribal members who really are psychotic. Tribal societies differ from modern Western societies in that tribal societies have been able to find a role, the shaman, for those who are psychotic.

According to Murphy, even though shaman often engaged in delusional or hallucinatory behavior, it was socially sanctioned and was not the same exhibited by those who were psychotic. There was little correlation between being mentally ill and being a shaman. In fact, when mentally ill people were shaman, they did not appear to adequately perform their roles. Therefore, in these tribal societies psychosis did exist (it wasn't simply the expression of the shaman role), and those who were psychotic did not appear to have an elevated social role.

To summarize Murphy's (1982) depiction of mental illness, preliterate groups from different physical environments have conceptions of psychosis that are similar to those in modern Western culture. Generally, psychosis symptoms included behaviors that were unorganized. People

were not considered psychotic, because they exhibited one of these symptoms. People were only considered psychotic when they had 3 or 4 symptoms. Mental illness was not a residual category; it had its own name (*nuthkavihak* or *were*) and its own definition. Finally, other deviants, such as criminals, were defined in the preliterate cultures which means that mental illness maintained its own category; it was distinct.

Gove had similar findings in the United States. Gove (1970b) re-analyzed previous studies of psychiatric admissions (the original studies were Scheff 1966 and Wilde 1968) to see if the data could be interpreted in other ways. Gove made some conclusions which are contrary to previous interpretations of the data. Gove concluded that patients were screened for psychiatric disorders before they were placed in a psychiatric facility (Gove 1970b, p. 298). This screening was an attempt to admit only those with psychiatric disorders, not simply those who were socially undesirable. Gove also found that contrary to previous interpretation, "a very substantial majority of the patients... appear[ed] to have a committable disorder" (Gove 1970b, p. 302). This research shows that people are considered mentally ill primarily because they have symptoms not because of their social characteristics.

Critics of Labeling Response to Secondary Deviation

Previously, the labeling theorists' position on secondary deviation has been discussed. Labeling theorists contend that labeling people mentally ill encourages those labeled to continue in their deviant roles as they internalize a negative image of themselves. Scheff's (1966) ninth proposition of mental illness states labeling is the most important factor in the career of the mental patient.

Conversely, critics of labeling contend that labeling, or diagnosing, is an essential part of helping the individual to alleviate her symptoms. A psychiatric diagnosis (label) allows psychiatrists to communicate more accurately about a patient, to predict future behavior, and to develop a treatment program to benefit the individual.

To the labeling theorist, treatment is damaging, and all that remains after treatment is the label which condemns the individual to a stigmatized existence. However, researchers (Dohrenwend and Chin-Song 1967) have shown that psychiatric treatment and those who undergo it have become more acceptable to the public. The critics of labeling maintain that not only is psychiatric treatment effective,

but it can even decrease the stigma and its effects. Why then is there such a discrepancy between psychiatric and labeling theorists?

Labeling theorists assume that stigmas mentally ill people experience come from the official label. Critics of labeling claim the stigma of mental illness is directly linked to the display of psychiatric symptoms, not the label of mental illness. Therefore, the psychiatric community claims effectual treatment decreases psychiatric symptoms which then decreases stigmatization of the individual (Gove 1970a, p. 881). How can psychiatrists claim treatment, such as hospitalization, is beneficial to the patient, while labeling theorists (see Goffman 1961) claim that the experience is dehumanizing to the patient?

Weinstein (1982) addresses this issue using a meta-analysis. Weinstein (1982) provides evidence that more patients have favorable attitudes toward the hospital than have negative attitudes. Weinstein (1982) claims researchers have drawn false conclusions from their research which has primarily consisted of participant-observation. Goffman's (1961) research of psychiatric patients is a good example of this. The problem with using the participant-observation research technique to examine mental illness is

that a mentally well researcher is different than the patients; the researcher does not have a psychiatric disorder. The mentally healthy researcher perceives the hospital environment as unnecessarily restrictive and dehumanizing because patients are not allowed to leave, and their lives are regimented. Since participant-observers, such as Goffman, feel that hospitalization is oppressive, they assume that patients must also feel the same way (Weinstein 1982). According to Weinstein (1982), labeling theorists' criticisms of psychiatric hospitalization is unwarranted for the majority of former patients.

Critics of Labeling Response to Societal Reaction Theory

Labeling theorists claim those with the least social power will be most likely to be forced into treatment. Critics of labeling suggest the opposite: those with the most social resources will be able to purchase effective treatment (Gove and Howell 1974). Critics of labeling also claim that there are many social factors that keep people out of treatment and those that finally do get into treatment truly suffer from psychiatric disorders. Those suffering from a mental illness tend to be tolerated in the community until their symptoms become severe (Freeman and

Simmons 1963). Yarrow et al. (1955) have shown that wives of mentally ill men utilize several techniques to deny that their husbands are mentally ill. This may even continue after the man has been hospitalized. Gove (1970a) reports that even at that time an increasing number of patients had come to the hospital voluntarily and not all hospitals routinely admitted everyone. All of these suggest that mentally ill people are far more likely to avoid treatment than are non-mentally ill people likely to get into treatment.

Gove and Howell (1974) claim the higher the social class, the higher the likelihood of getting into treatment. There are three reasons for this. The first is that people who have more money have the resources to purchase effective treatment. Second, the higher the social class, the more likely people are to disapprove of deviant behavior (perhaps caused by mental illness) but be understanding of mental disorder. Third, a higher level of social class is associated with greater verbal skills and education which is positively correlated with effectively expressing one's condition to a mental health worker. This enables the individual to recover sooner (Gove and Howell 1974, pp. 88-89).

Gove and Howell (1974) have also shown that being married makes people more likely to get into treatment. This is because people will encourage spouses exhibiting symptoms of mental illness to get into treatment. Those who are married, therefore, will be more likely than those who are not married to get into psychiatric treatment.

The crux of the critics of labeling argument is that people who enter psychiatric treatment do so primarily because they suffer symptoms of mental illness. Critics of labeling realize that social factors have an impact on treatment seeking behavior. Those individuals with more economic and social resources (e.g., are married) will be more likely to enter into treatment. This runs counter to the labeling perspective notion that those with fewer social resources will be more likely to enter treatment.

In summary of this section, critics of labeling believe that people who receive psychiatric treatment are those who suffer from symptoms of mental illness. Critics of labeling do not believe mentally ill people are those who have simply been labeled; mentally ill people are people who have symptoms which are negative and disruptive to their possessors. Giving symptoms a diagnosis aids in the treatment process. Although treatment may not cure mental

illness, it can lead to a decrease or temporary cessation of symptoms. Although critics of labeling focus on the individual, they are not blind to social factors that impact on a mentally ill receiving treatment. Critics of labeling claim that having more financial resources and being married is positively correlated with receiving treatment (Gove and Howell 1974).

Summary of Critics of Labeling

The critics of labeling provide a view of mental illness that differs from the labeling theorists. Labeling theorists claim mental illness is socially constructed, whereas the critics of labeling claims mental illness is the embodiment of undesirable symptoms. The labeling perspective claims labeling people mentally ill injures their self-esteem and causes them to continue in their deviant role. Critics of labeling claim that diagnosing people mentally ill helps to get them into treatment which helps to alleviate their symptoms. Also, critics of labeling claim any stigma received because of mental illness is due to the behavior of mentally ill people not their label. Concerning societal reaction theory, labeling theorists believe that people who lack social resources will

be unable to resist treatment. Critics of labeling predict that social resources will facilitate entry into psychiatric treatment.

From the critics of labeling perspective, general predictions can be made concerning the ECA data. Critics of labeling would predict treatment to be positively correlated with meeting diagnostic criteria or at least having symptoms of a disorder. Treatment should also be positively correlated with income, education, job prestige and being married.

According to critics of labeling, those treated should have higher incomes, more education, higher job prestige, and be more likely to be married than those not treated. A few additional predictions can be derived from the literature discussed above: psychotic males should be more likely to be hospitalized and spend more time while hospitalized. For those with neuroses, men and women should be equally likely to be hospitalized, but men should be hospitalized longer.

To this point, predictions about the ECA study have been developed from labeling and its critics. Since then, however, others have joined and expanded the labeling debate

by combining aspects from labeling and the critics of labeling. The next chapter will explore what has occurred in the labeling debate since the 1960s and 1970s.

CHAPTER 4

COMBINING LABELING AND CRITICS OF LABELING PERSPECTIVES

Introduction

Since the initial psychiatric and labeling perspectives were developed, there have been attempts to combine the perspectives. While some authors in this combined perspective are newcomers to the debate (e.g., Link 1982), others have simply revised earlier versions of their work (Scheff 1984, Chesler 1989). During the last 40 years there has been considerable medical success in the treatment of mental illnesses. Medical science has provided compelling evidence that severe mental illnesses have physiological components even though their specific origin has not been determined. Although unable to eradicate mental illness, medical science has helped people to reduce their symptoms with medication and psychotherapy (Cockerham 1992).

Scientific advancements in the area of mental illness have damaged the labeling perspective argument as a whole and provided support for the critics of labeling. Willing to concede defeat on some issues, labeling theorists have been unwilling to admit defeat on all aspects of labeling. Some labeling theorists have transformed themselves into

combined theorists by admitting that mental illness has more physiological components than previously believed. They have retained, however, the secondary deviation and societal reaction aspects of labeling. The process of moving from a labeling theorist to a combined theorist is discussed below. This is followed by a discussion of current research being conducted in the combined perspective.

From a Labeling Perspective to a Combined Perspective

As discussed previously, Scheff (1966) and Chesler (1972) have been proponents of the labeling perspective. Scheff (1966) formulated nine propositions to explain mental illness. In his work, Scheff states mental illness is the result of residual deviance and not physiological disorder (proposition 1), that labeling of the mentally ill is "the single most important cause of careers in residual deviance" (proposition 9), and that "most residual deviance is denied and is transitory" (proposition 3, suggesting that those labeled mentally ill are not psychologically different but socially different).

In the second edition of his book, Scheff (1984) moves from being a labeling theorist to a combined theorist. In the preface to his second edition, Scheff states "there have

been many extraordinary changes in the field of mental illness" since he wrote the first edition. Scheff acknowledges that these changes include advancements in psychological treatment, advancements in drug therapy, advancements in physiological processes and changes in mental health law (Scheff 1984, p. ix). In the second edition, Scheff also reformulates proposition 9. Instead of claiming that labeling is the *single most important cause* of careers in residual deviance, Scheff (1984, p. x) claims that labeling is *among the most important causes*. Despite these and a few other concessions, Scheff (1984, p. ix) states that he has "resisted the temptation to make large changes in the text that was published in 1966, because it is still useful in its original form." Clearly, Scheff (1984) appears to be relinquishing only that part of his original labeling theory that is nearly impossible to defend. Much of the rest of the second edition, however, is similar to the first.

Chesler does much the same in the second edition of her book. Chesler (1989, p. xxiii) admits that since the first edition:

we've learned more about the genetic and chemical bases of mental illness. We've learned that those afflicted with manic-depression or schizophrenia usually respond to the right drug at the right dosage level...

This statement is followed by a discussion on all of the uncertainties and limitations of mental health treatment and knowledge. Much of the rest of Chesler's book is devoted to the same topic of her original work: women's experiences with psychological/psychiatric treatment.

In their second editions, Scheff and Chesler have acknowledged medical advancements by including them in a preface or introduction. Scheff and Chesler have retained the rest of their arguments. In particular, they have retained discussion of the theory of secondary deviation and societal reaction. I am not sure the different aspects of labeling theory are distinct enough that one part, such as the reaction conception of deviance, can be surgically removed (in a preface) without reformulating the other aspects. If people receive mental health treatment because of a physiological disorder, then their treatment is not the result of a label placed on them because of a lack of social power. This is a problem that weakens the arguments made by

traditional labeling theorists. Mindful of new scientific evidence, other theorists have developed new strains of labeling theory.

Other Combined Theorists

Link and his collaborators have admitted that mental illnesses have physiological components. In this way, they differ from traditional labeling theorists. They also differ from traditional critics of labeling such as Gove. Link and Cullen (1990) assert that hospitalization may alleviate the symptoms of mental illness but at the expense of decreased self-esteem. Low self-esteem has been linked to injured work relationships and injured social relationships, undesirable outcomes of treatment. Link and Cullen (1990) also suggest that mentally ill people may suffer from mental illness symptoms, and hospitalization may alleviate those symptoms. According to Link and Cullen (1990), however, treated people will still suffer a stigmatized existence which can ultimately lead to them functioning better than an untreated mentally ill people, but less well than "normal" people due to damaged self-esteem.

Although Link recognizes the role of psychiatric symptoms in the official diagnosis of mental illness, he also believes that the official label of mental illness produces an independent effect which has a negative impact on the labeled persons's life chances. The ECA data do not enable us to untangle the positive effects of treatment from the negative effects. Link's belief that official labeling negatively impacts life chances, however, is identical to the original labeling prediction. Link and his co-authors are good examples of the combined perspective. They, unlike the refurbished traditional labeling theorists (e.g., Scheff; Chesler), make attempts to explain the secondary deviation and societal reaction components of labeling which recognizes the physiological components of mental illness.

Link admits that mental illness is a negative state. He even admits that mental illness is positively correlated with violence in some cases (Link, Andrews, and Cullen 1992). According to Link, there is something inherently different in individuals who suffer from a mental illness; they does not simply suffer from a label. Link, however, does provide some evidence that labeling can exacerbate symptoms of mental illness. This simply places him at a

more central point on the psychiatric symptom/social characteristic continuum than labeling or critics of labeling.

Horwitz (1982) also attempts to combine aspects of the labeling and the critics of labeling perspective. Horwitz does not attempt to determine the origins of mental illness. Instead, Horwitz attempts to develop a theory of social control, a theory in which he tries to explain how the labeling of mental illness, the reaction to mental illness, and the treatment of mental illness differ by social variables *independent* of psychiatric symptoms. Horwitz (1982) provides several hypotheses which can be tested generally using ECA data. Horwitz (1982) hypothesizes (*italics in original*) the following:

The degree of exclusion of individuals who are labeled mentally ill varies directly with their social marginality (p.109).

The degree of exclusion of individuals who are labeled mentally ill varies directly with their cultural distance from conventional groups (p. 112).

The degree of exclusion of individuals who are labeled mentally ill varies inversely with their power (p. 115)

Males are more likely than females to suffer exclusion if they are labeled mentally ill (p. 117).

The application of psychotherapy varies inversely with the cultural distance between therapists and patients (p. 128).

The application of psychotherapy varies inversely with the social class of the patient (p. 132).

The application of psychotherapy is inversely related to the perceived severity of mental illness (p. 139).

Horwitz (1982) describes a mental health care system in which those who are marginal, of lower social class, male and culturally different receive the strongest reaction, controlling for symptoms.

Ewick (1993) suggests that there now exists a two-tiered system in mental health care. The first is one that is therapeutic and uses talk therapy, while the other is more coercive and custodial (hospitalization, particularly hospitalization in a state hospital/CMHC). The former is for those who are of high social class, are white, are central to society, and are female. The latter is reserved for lower class, non-white, males who are marginal members of society.

Ewick's belief in a two-tiered mental health care system has parallels in other branches of sociology: general medical care, work and occupations, and education. It has

long been recognized that in the general health care system there are those who can afford adequate health care and those who are uninsured and only seek treatment when absolutely necessary (Twaddle and Hessler 1987, p. 332).³

In the study of work and occupations, researchers recognize two distinct tiers. The primary tier includes good paying jobs which require and utilize skills. The second tier pays little, requires few skills, and may be quite dangerous (Bonacich 1972). In the educational system, those who have more economic resources are more likely to pay for private schools; public schools are more likely to be used by those with fewer economic resources (Famighetti 1994, p. 223).

The idea that fields have separate tiers stratified by economic resources may not appear to be very profound. In fact, common sense seems to dictate that this must be the case. However, the idea is somewhat new to field of mental health. Many people, such as labeling theorists, have seen mental health treatment to be a negative experience thrust

³The distinction between the mental health care system and the general medical care system is a somewhat false distinction. As will be seen in this work, many people who suffer from mental health problems use general medical care resources such as physicians who are not psychiatrists and emergency rooms.

upon people who could not resist it. Viewed this way, mental health treatment is something that would be resisted by those with economic resources, not purchased by them.

Combined Theorist Predictions

Combined theorists have expanded the original Gove/Scheff debate. From their additions, some general predictions can be made concerning ECA data. Combined theorists tend to make predictions about which treatment sector people will go to when they seek treatment. Specifically, combined theorists claim that being from the lower class and having a serious disorder are positively correlated with seeking treatment in a state facility. Seeking psychotherapy is positively correlated with having social resources and being white. Combined theorists differ when it comes to gender. Horwitz (1982) claims that men receive the strongest reaction to their behavior, but Ewick (1993) states that women receive a stronger reaction to their behavior.

CHAPTER 5

METHODS

History of the ECA

During the late 1970s, the President's Commission on Mental Health (PCMH) determined that existing data was deficient concerning the rate of mental illness and the characteristics of those who made use of mental health services (Regier et al., 1978). Also, mental illness prevention required data on "subclinical conditions." People have subclinical conditions when they suffer from mental illness symptoms but do not meet the criteria for full-blown mental illness disorders. Understanding subclinical conditions facilitates prevention by allowing caregivers to understand mental illness as it progresses (Robins and Regier 1991). The Epidemiological Catchment Area (ECA) study was an attempt to provide for these deficiencies in mental health data.

ECA Sample Design

The ECA data were collected in five catchment areas: New Haven, CT; Baltimore, MD; St. Louis, MO; Durham, NC; and Los Angeles, CA. In each catchment area, researchers

developed a "design that would yield 3,000 household members and 500 institutional residents" (Robins and Regier 1991, p. 16). ECA designers determined this sample size adequate to examine rare disorders, such as schizophrenia (Robins and Regier 1991, p. 7). Almost every adult who lived in each catchment area had a known greater-than-zero chance of being selected. People were excluded from the sampling frame if they lived in "transient facilities such as hotels, motels, the YMCA, etc." (U.S. Dept. of HHS, NIMH 1994, p. 5).

At particular households, "all the residents ages 18 and over were first enumerated and a list of the residents was made, sorted by sex and age." The "probability of [being chosen] was inversely proportional to the size of the household." This selection bias was statistically controlled for by using a weighting scheme. Also, since some groups were oversampled, everyone did not have an equal chance of selection. This was also controlled for statistically by using a weighting scheme when the data were compiled (Robins and Regier 1991, p. 24). In each sample, efforts were made to oversample some groups. Each catchment area did not oversample the same groups. The following were oversampled in at least one catchment area: elderly people, blacks, and Hispanics (Robins and Regier 1991, p. 19).

The first two weights were multiplied by another that adjusted for selection bias due to failure to complete an interview. Less than 1%, however, failed to complete an interview after initially agreeing to be interviewed (Robins and Regier 1991, p. 12). The response rate for the first wave of community surveys ranged from a low of 68% (Los Angeles) to a high of 79% (St. Louis, Durham) (Robins and Regier 1991, p. 18). However, those who did not respond appear to be a random group as the second "weight had little effect on results" (Robins and Regier 1991, p. 25).

Each person was interviewed face-to-face twice (Wave 1 and Wave 2) with the last interview occurring one year after the first. In addition to these interviews, six months after the first interview, a phone interview (for New Haven this was a face-to-face interview) was conducted for community residents only. Diagnostic measures were taken at the Wave 1 and Wave 2 interviews only. Each person was asked about their use of health services at each interview, face-to-face and phone (Narrow et al. 1993, p. 96).

For institutionalized people to qualify for inclusion in the ECA study, they must have been residents of the institution for more than one year (U.S. Dept. of HHS, NIMH,

p. 6).⁴ Institutionalized people (those in nursing homes, psychiatric care, and jails/prisons) were oversampled in each location (Robins and Regier 1991, p. 16). Interviewing people in an institutional setting was a new experience for psychiatric epidemiology (Robins and Regier 1991, p. 21). The ECA study's sampling methods varied by location due, in part, to problems encountered in catchment areas (Robins and Regier 1991, p. 24). One problem was that the management of some institutions refused to participate. For instance, in New Haven, the management of three nursing homes refused to participate as well as one in Baltimore (Robins and Regier 1991, p. 23). Despite these problems, "each site managed to randomly select catchment area residents who were institutionalized" (Robins and Regier 1991, p. 24).

Community and Institutionalized Sample

In each location, household samples were determined. In St. Louis, Durham, and Los Angeles, household sampling frames were developed by using Census data. These data were

⁴Institutional residents who had been institutionalized in their current institution for less than one year were considered residents of the communities they lived in prior to institutionalization. If that community fell within a catchment area, then their responses were collected and counted as community residents.

not available when the New Haven and Baltimore surveys were undertaken. A household survey frame, instead, was determined from public utility records in New Haven and Department of Planning files in Baltimore (Robins and Regier 1991, pp. 19-20). The number of community and institutional people interviewed in Wave 1 was 20,861. These numbers are listed below by location: New Haven = 5,372 interviews (5,034 community residents; 338 institutional residents); Baltimore = 4,034 (3,481; 553); St. Louis = 3,498 (3,004; 494); Durham = 4,423 (3,921; 502); Los Angeles = 3,534 (3,131; 403) (U.S. Dept. of HHS, NIMH 1994, p. 6).⁵

Six months after the Wave 1 interviews, household residents, but not institutionalized residents, were engaged in a phone interview to probe them about their use of health services. The number of telephone respondents interviewed by location were New Haven (4,081), Baltimore (2,883), St. Louis (2,593), Durham (2,425), and Los Angeles (2,462) (U.S. Dept. of HHS, NIMH 1994, p. 6).

One year after the Wave 1 interviews and six months after the phone interviews, Wave 2 interviews were conducted. The sample size of Wave 2 interviews by location

⁵Tables 5-1 and 5-2 are located in Appendix C. They describe the characteristics of those who participated in the study.

were: New Haven = 3,914 (3,694 institutionalized residents; 220 institutionalized residents); Baltimore = 3,223 (2,768; 455); St. Louis = 3004 (2,574; 430); Durham = 3,474 (3104; 370); Los Angeles = 2,545 (2,364, 181) (U.S. Dept. of HHS, NIMH 1994, p. 6).

Diagnostic and Statistical Manual, third edition (DSM-III)

The *Diagnostic Interview Schedule (DIS)* operationalizes the *DSM-III*. The *DSM-III* was published in 1980 and represented a change in the classification of psychiatric disorders. The *DSM-III* did more than alter diagnoses from the previous edition. The classification logic of the *DSM-III* is different than anything that preceded it. To more fully understand the *DSM-III*, a brief history of the diagnostic manual is presented below.

The first edition of the *DSM* was published in 1952 (American Psychiatric Association 1952). Other psychiatric classification systems existed before the first edition of the *DSM*, but these systems were not widely used. When classification systems were used, they were used in institutionalized settings. In the first half of the twentieth century, the *Statistical Manual for the Use of Institutions for the Insane* was used. First published in

1918 (American Medico-Psychological Association 1918), the *Statistical Manual* would ultimately go through 10 editions, the last one published in 1942 (American Psychiatric Association 1942). As its name implies, this manual was used in asylums. The *Statistical Manual* was not designed to diagnose mental illness in the community, only in institutional settings (Grob 1991, p. 426).

The first seven editions of the *Statistical Manual* were very similar to each other and reflected a belief that mental disorders were somatic in origin. In fact, in the first edition of the *Statistical Manual*, 20 of 22 diagnoses were decidedly biological in nature. This was not surprising considering more than a third of asylum residents from 1922 to 1940 suffered from "psychoses of known somatic origins" (Grob 1991, p. 426). The *Statistical Manual* was soon replaced by the *DSM*.

WWII would serve as a catalyst for change in psychiatric classification. According to Grob (1991, p. 427), "World War II marked a major watershed in the history of the care and treatment of the mentally ill in the United States." From their experiences treating people in war, psychiatrists came to several conclusions about mental illness (Grob 1991, p. 427):

1. neuroses were "a more serious problem than had previously been recognized."
2. combat stress was associated with psychiatric disorder.
3. early treatment in non-hospital settings proved to be effective in treating mental disorder.

These factors would influence post-WWII psychiatric practice and be captured in the classification logic of *DSM-I*. The *DSM-I* utilized the psychosocial model of mental illness which was based on four major assumptions (Wilson 1993, p. 400):

1. Mental illness exists along a continuum of well to sick. Anyone can become mentally ill if subjected to enough trauma or stress.
2. Mental illness exists along a continuum of severity: from neuroses to psychoses.
3. Mental illness is caused by a mixture of environmental factors and personal factors.
4. Mental illnesses are psychologically mediated by the individual.

So concerned were these researchers with the inclusion of environmental factors that they attached the term "reaction" after all functional diagnoses. This was to stress that mental illness were reactions to environmental stressors. Using the *DSM-I*, researchers attempted to uncover the amount of psychiatric disorder that existed in the community (Wilson 1993, p. 401).

The psychosocial model that the *DSM-I* was based on ultimately caused many problems for the psychiatric profession. Psychiatric diagnosis was arbitrary as there was no distinct boundary between being well and being sick. Although the *DSM-II* (American Psychiatric Association 1968) dropped the term "reaction" from the functional diagnoses, those who paid for mental health treatment (i.e., insurance companies and government agencies) were not impressed (Wilson 1993, p. 403). The *DSM-II* did not increase the precision with which psychiatrists made diagnoses. Because of the lack of diagnostic precision, the National Institute of Mental Health (NIMH) funding decreased by 5% a year from 1965 to 1972 (Wilson 1993, p. 403). By the 1970s, insurance companies began placing severe limits on the amount of mental health treatment per person each year. The

construction of the *DSM-III* was important because without it the ability of psychiatry to have its practices funded would have been harmed.

The *DSM-III* was constructed during the 1970s and published in 1980 (American Psychiatric Association 1980). Its approach to classifying mental illnesses was different than the approach used in the previous two editions. In the *DSM-III* and subsequent editions, *DSM-III-R* (American Psychiatric Association 1987) and *DSM-IV* (American Psychiatric Association 1994), there is a "narrowing of the psychiatric gaze" (Wilson 1993, p. 403). The *DSM-I* and *DSM-II* were dominated by psychoanalysts who spent less time observing symptoms and more time constructing theories about the origins of the disorder. Since the advent of the *DSM-III*, etiology is only listed if it is definitely known. Otherwise, etiology is not a part of the diagnosis. Also, the notion of the unconscious is gone. Diagnosticians now focus on the presence of symptoms in a particular period of time; the focus is no longer on life history. Finally, since the creation of the *DSM-III*, social factors have been diminished in importance, and the focus has been more on the individual (Wilson 1993, p. 408).

The *DIS* and *HSQ*

Due to these changes, the data obtained in the ECA study needed to be collected. Although the *DSM-III* provided diagnoses for clinical use, the *DSM-III* still needed to be operationalized so it could be used in a community survey. The *DIS* accomplished this and will be examined below. For the ECA study, the *DIS* was combined with the *Health Service Questionnaire (HSQ)*: the *DIS* was used to determine if people met diagnostic criteria, while the *HSQ* was used to question respondents about health care use.

As stated previously, the *DIS* operationalized the *DSM-III*. The *DIS* was designed so that lay-people could administer it to adults. The average time for each interview was approximately one hour (U.S. Dept. of Health and Human Services, NIMH 1994, p. 3). Interviewers did not have to evaluate the mental health of the individual being surveyed. Interviewers were required to ask questions and record answers only.

During the interview, the interviewer asked questions to see if symptoms were currently present or had been present in the past, and then asked questions to determine if the symptoms were of a clinical significance (Robins and Regier 1991, p. 12). The *DSM-III* contains 122 diagnoses,

but not all are included in the *DIS*. Only diagnoses that could be measured easily in an interview setting were included (Robins and Regier 1991, p. 13). Interviewers used the *DIS* to question respondents as to their symptoms for several psychiatric disorders: cognitive impairment, manic episode, major depressive episode, dysthymia, bipolar disorder, alcohol abuse and dependence, drug abuse and dependence, schizophrenia, schizophreniform, obsessive compulsive disorder, phobia, somatization, panic disorder, agoraphobia without panic, antisocial personality disorder (ASPD), and anorexia (for a description of disorders to be used in this work see Appendix A) (U.S. Dept. of HHS, NIMH 1994).

For each disorder, the interviewer ascertained if the individual met the criteria for a lifetime disorder (i.e., had ever had the disorder) and if the respondent met the criteria for the disorder in the past year. Also, the ECA data provide the ages at which respondents first had disorder symptoms along with the ages when respondents were last symptomatic. In addition, there is a measure of disorder severity. That is, besides knowing whether or not respondents met the diagnostic criteria, it was known how

close respondents were to meeting criteria (if criteria was not met) or how much they exceeded the criteria (if criteria was met) (U.S. Dept. of HHS, NIMH 1994).

During the ECA interview, standard items such as age, race, gender, personal income, household income, education, job, marital status, and number of children were recorded. Respondents were also asked if they were currently receiving unemployment insurance or if they had served in the military. It should also be noted that some questions vary slightly by location and in some locations occasional questions were omitted (U.S. Department of HHS, NIMH 1994).

The ECA interview also used the *HSQ* to question respondents about the health care they had received, both physical and psychiatric. Respondents were queried as to the health care they may have received at a number of facilities: hospitals, clinics, emergency rooms, and healers/readers to name a few. Respondents were also asked if they had talked with a friend. Also, respondents were asked if the visit was mainly due to emotional problems or for some other reason (U.S. Department of HHS, NIMH 1994).

Validity and Reliability of the DSM-III and the DIS

The community sample, large sample size, and sampling procedures make the ECA data superior to other studies which preceded it concerning the topic of mental health care utilization and its correlates. In the ECA study, there were many potential sources of validity and reliability errors. They are discussed here as they limit the findings in this study. It must be noted, however, that the ECA data were the best (i.e., had the fewest validity and reliability problems) available at the time they were collected.

The first validity issue that any study of mental disorder must deal with is the fact that mental disorder is largely a subjective phenomena. Although doctors treat mental disorders as medical problems, objective tests to determine the presence of disorders discussed in the ECA study do not exist.⁶ Mental disorders, then, are diagnosed by someone (presumably trained in psychology or psychiatry) observing the behavior of disordered people and disordered people reporting symptoms. It must be remembered, therefore, that *DSM-III* is a social construction itself (as

⁶Despite the lack of objective tests there is much evidence to support the claim that mental disorders have a genetic basis and that there are physiological differences between those with disorders and those without. For a review of the medical foundation of mental disorder see Winokur and Clayton (1994).

discussed above) and open to criticism. Kirk and Kutchins (1992) claim that the *DSM-III* was developed more for the political power of the American Psychiatric Association than to reflect disorders suffered by patients. I do not wish to give the impression that I believe mental illnesses did not exist before the creation of a classification system, such as the *DSM-III*. Symptoms of mental illness have been documented through history. Even among those who believe in the physiological basis of psychiatry disorders, however, must recognize there are many different ways to classify disorders, any one of which contains potential difficulties which must be recognized. Even Robert Spitzer⁷ states that the *DSM-III* diagnoses are "hypotheses to be tested" (italics in the original; cited in Wilson 1993, p. 408).

Since there are no objective validity tests for the *DIS*, the next best option is to compare a *DIS* evaluation to a psychiatrist's evaluation. This sort of examination has been performed and has shown the *DIS* to be a valid measure of mental disorder. The *DIS* administered by lay people has been compared to "a clinical interview given by a

⁷Spitzer was appointed to be the chair of the Task Force on Nomenclature and Statistics in 1974 and would ultimately oversee the development of the *DSM-III*.

psychiatrist" (Robins and Regier 1991). From these findings, it is safe to assert that the *DIS* as administered by lay people is as good a measure of *DSM-III* disorders as other forms that have been used. Despite this, there are still validity problems in gaining information about psychiatric disorders.

All surveys have particular problems in securing accurate information. The first problem with the ECA data is that of recall. This does not mean, however, that ECA respondents were able to accurately recall information about their disorder or about treatment they received. A good deal of research has been conducted concerning the issue of recall in surveys in general and concerning ECA data specifically. According to Cannell, Oksenberg, and Converse (1979, p. 8), there are positive correlations "between accuracy of reporting and the age, race, and education of the respondent," but these correlations are small and differ between topics⁸.

In a study of hospital data, Cannell, Oksenberg, and Converse (1979, pp. 8-10) have determined there are three

⁸People who have a higher level of education, a higher income, and who are white are more likely to report their hospital visits. The same is true for doctor's visits with the exception that there is not a racial difference (Cannell, Marquis, and Laurent 1977).

particular response validity concerns. The first is "[a]s the time between an event and the interview increases, there is increased underreporting of information about the event" (Cannell, Oksenberg, and Converse (1979, p. 8). Second, Cannell, Oksenberg, and Converse (1979, p. 9) claim that "[e]vents which are important to the individual are reported more completely and accurately than those of less importance." Those people who have a chronic disorder are more likely to report it during a survey than those who do not have a chronic disorder. Finally, Cannell et al. (1979, p. 10) state that "reporting of an event is likely to be distorted in a socially desirable direction." Cobb and Cannell (1966) found that only 25% of people with a known condition of mental illness would report it compared to 71% of those with asthma and 22% of those with a genito-urinary disease.

These validity issues are important for the ECA data. First, ECA respondents were asked about symptoms which they currently have or which they had in the past. It is conceivable that respondents suffered mental illness symptoms several decades before the interview and did not remember them at the time of the interview. Also, a recall bias may exist with regard to treatment received. Having

treatment several years or decades before an interview may lead to its occurrence not being reported during an interview.

Second, the way in which people experience psychiatric symptoms will make a difference in how symptoms are reported during an interview. The more people believe symptoms to be important, the more likely people are to report them. Some people may normalize symptoms that others report. Similarly, when it comes to receiving treatment, certain types of treatment or treatment of a short duration may not be reported as often as other types.

The third validity concern is particularly important to a study of mental disorder. People may not wish to provide responses that cause others to view them negatively. Mental disorder can be stigmatizing (as discussed previously in the section on the labeling perspective), and people who suffer from mental illnesses may have trouble admitting it to others or even themselves. This should be less of a problem, however, in the ECA study than it has been in other studies. ECA respondents were asked about symptoms they had experienced. Since many people who meet diagnostic criteria have never received psychiatric treatment, they presumably

have not developed defensive responses to being asked about symptoms or treatment. For those who have received treatment, the concern of response validity is legitimate.

Besides recall bias, there are other sources of validity problems with the ECA data. One of those problems is the nonresponse bias. In the ECA study, fewer than one percent of those who agreed to be interviewed initially failed to complete the interview (Robins and Regier 1991, p. 12). Also, the response rate of those initially contacted was between 75% and 80% (VonKorff, Cottler, George, Weaton, Leaf, and Burnam 1985, p. 85) for every catchment area except Los Angeles which had a 68% nonresponse rate (Robins and Regier 1991, p. 18). The response rate is high in comparison to other studies, but there remains a significant portion, 20%-32% per catchment area, of those initially contacted who did not participate. If participation is linked to social status variables, such as gender, education, or income, then that can become a significant source of error for the data. This is particularly true for this work as ECA data will be used to examine the relationship between social status, psychiatric characteristics, and treatment experience.

VonKorff et al. (1985) have specifically addressed nonresponse bias in the ECA study for each site except Los Angeles. The response rate was greater than 76% in each of these sites due to the persistence of interviewers. In some instances, respondents were contacted as many as twenty times (VonKorff et al. 1985, p. 86). In 90%-95% of the cases, initial screeners were completed even when an interview was not. This allowed ECA researchers to estimate the demographic characteristics of those who refused to be interviewed (VonKorff et al. 1985, p. 89). Examining the response rates for Wave I in Baltimore, St. Louis, and Durham reveals some characteristics correlated with response rates: females had higher response rates as did non-whites; age produced conflicting results sometimes being positively correlated with higher refusal rates and at other times being negatively correlated with refusal rates (VonKorff et al. 1985, p. 93).

Another concern about non-respondents is that their lack of participation is positively correlated with psychiatric disorders. According to VonKorff et al. (1985, p. 94), if people with disorders are less likely to respond to interview requests, then there could be an underestimation of certain disorders. One way to deal with

the problem of nonresponse is to assume that the characteristics of nonresponders and difficult-to-reach sponsors are similar. In the Baltimore catchment area, this sort of analysis was conducted. The results showed that those with cognitive impairment and antisocial personality were overrepresented among those who were most difficult to interview (VonKorff et al. 1985, p. 95). In the St. Louis catchment area, major depression, alcohol abuse/dependence, and panic disorder were positively correlated with difficult-to-interview people. Despite these findings, the rate of disorder among non-respondents was not considered to be a significant source of bias in the ECA data (VonKorff et a. 1985, p. 96).

Methods

For this project, ECA data will be used to explore questions raised by the labeling perspective, critics of labeling perspective, and the combined perspective. This work will focus primarily on affective disorders, anxiety disorders, substance abuse problems, and schizophrenia/schizophreniform. Affective disorders include major depressive disorder and bipolar disorder. Anxiety disorders include simple phobia, panic disorder, agoraphobia

without panic attacks, and social phobia. Substance abuse problems include alcohol dependence and abuse as well as drug dependence and abuse (for descriptions see Appendix A). Schizophrenia and schizophreniform are aggregated into one category. Other ECA disorders are not included in this work due to their rarity.

Analytical Procedure

To examine the ECA data, multivariate statistical methods will be used. Specifically, ordinary least squares (OLS) regression and logistic regression will be used. These procedures will be performed using SPSS statistical software.

The first two analyses will examine the relationship between social status and psychiatric treatment. The results will be placed in Chapter 6. The first relationship to be examined will be the correlation between social status and receiving any type of psychiatric treatment in the last year (last six months for outpatient and last twelve months for inpatient). For this relationship and all others, both the zero order correlation and the multivariate logistic regression coefficient will be examined.

The second relationship to be examined will be social status and treatment in the last year by specific treatment aggregate. This relationship is similar to the first, but it divides treatment into categories developed by Narrow et al. (1993) for outpatient care: specialist; medical, non-specialist; human services; friend (not an aggregate but a single variable); and self-help group (also not an aggregate but a single variable).

The first two analyses (Chapter 6) are an attempt to uncover the influence of social characteristics on recent psychiatric treatment. If the labeling perspective is accurate, then the first two analyses should reveal that social characteristics predict receiving psychiatric treatment. However, even if these analyses show a strong relationship between social characteristics and psychiatric treatment, it is possible the relationship will disappear when the presence of a psychiatric disorder is statistically controlled⁹.

⁹Chapter 8 will examine the relationship between social characteristics, psychiatric symptoms, and mental health treatment simultaneously.

The second set of analyses will examine the relationship between psychiatric disorders and treatment. They will be placed in Chapter 7. Disorders will be correlated with aggregated treatment and treatment by specific types.

Chapter 8 will examine the relationship between treatment, social status, and psychiatric variables. These analyses will be similar to those performed in Chapter 6 and 7 except that social status and psychiatric variables will be placed into the same equation. This will allow for a comparison of the relative magnitude of social status and psychiatric variables, controlling for the presence of others. Finally, chapter 9 will include conclusions and a discussion of the relative strength of the labeling perspective and the critics of labeling perspective for describing the ECA data.

CHAPTER 6

SOCIAL CHARACTERISTICS AND RECENT PSYCHIATRIC TREATMENT

Introduction

As stated previously, the focus of this work is to examine the relationships between who one is (social variables), how one feels (symptoms), and psychiatric treatment received. Establishing these relationships is important, because they will impact where resources for mental health treatment flow which will impact on the lives of those with disorders. One difficulty in examining this relationship is the time-ordering of variables. Are symptoms a result of social characteristics (e.g., depression dependent on marital status), or are social characteristics a result of symptoms (e.g., marital status dependent on depression)? While this is not a problem with ascribed social characteristics, such as race and gender, it is a problem with social class variables (education, income, job prestige) and achieved social characteristics such as unemployment status. Even age can be a function of symptoms as people with severe disorders are more likely to die prematurely (Allebeck and Wistedt, 1986).

Since it is impossible to determine the ordering of lifetime disorders and events, such as marriage, in the ECA data, recent psychiatric treatment is used as the dependent variable in the following analyses. For Outpatient treatment, recent treatment means treatment received from six months prior to the Wave I interview through the Wave II interview, an eighteen month period. For Outpatient treatment, this period is extended to one year prior to the Wave I interview through the Wave II interview, a two year period (U.S. Dept. of HHS, NIMH 1994).

Recent Psychiatric Treatment¹⁰

Table 6-1 reveals the relationship between social variables and three treatment aggregates: Any Recent Treatment, Any Recent Outpatient Treatment, and Any Recent Inpatient Treatment. For each analysis, the following independent variables are examined: age, highest grade level, household income, job prestige, current marital status, race, gender, unemployment status, veteran status, and past treatment. Household and job prestige are broken into quartiles, with the lowest quartile (0%-25%) equal to

¹⁰Variables used in this work are discussed in Appendix B. Tables 6-1 through Tables 8-8 are in Appendix C.

the lowest level of household and job prestige. Those in the racial category "other" contain primarily Asian-Americans and Native-Americans.

To analyze the relationships, logistic regression is used. For each analysis, two figures are listed: bivariate, and multivariate. The bivariate analysis was conducted by regressing one set of variables at a time on each dependent variable (e.g., Age on Any Recent Treatment). The multivariate analysis was conducted by examining all variables at once, except past treatment.

Recall from Chapter 3 that the labeling and critics of labeling perspectives make different predictions about the relationship between social characteristics and psychiatric treatment. The labeling perspective claims that the fewer social resources people have, the more likely they are to receive psychiatric treatment. Critics of labeling, conversely, claim the fewer social resources people have, the less likely they are to be treated.

Labeling perspective proponents predict people who have a low grade level, a low level of household income, low job prestige, be non-married (i.e., widowed, divorced, separated, or single), be non-white, and female will be the most likely to be treated. Although age was not

specifically addressed by labeling theorists, a prediction can be extrapolated from their theory: respondents 18-24 years old and respondents 65+ years old should be more likely than those aged 25-64 to have recently been treated for a psychiatric disorder due to their lack of social power.

Age does not support the labeling perspective but does provide a small amount of support for the critics of labeling. For Any and Outpatient treatment sectors, there are no statistical differences among those under 65. For Inpatient treatment, those 25-44 years old are the most likely to have been treated.

Although SES variables (Highest Grade Level, Household Income, and Job Prestige) differentiate those who have recently received treatment from those who have not, the differentiation is not as large as either theoretical perspective predicted.¹¹ An examination of the bivariate rates for Any treatment and Recent treatment reveals that those with a higher SES level are most likely to have been treated. However, when these variables are examined with other variables simultaneously in a regression, the values

¹¹When SES is examined as one combined measure the results are the same: SES and treatment have little correlation.

fall to around 1.00. For both Any treatment and Outpatient treatment, education differentiates between those who have been treated and those who have not in the multivariate analysis. In both sectors, treatment is inversely related to education level. However, in Any treatment, those with a college education are not significantly less likely than those with 0-8 years of education to have been treated.

Inpatient treatment provides more support for the labeling perspective than for the critics of labeling. In general, those people with a lower SES are most likely to have a lower SES. This finding is important for the labeling perspective, because it shows that the harshest treatment (i.e., inpatient treatment) is most likely to be reserved for those with the fewest social resources.

Married people are never more likely than any other marital category to have been recently in treatment. Separated, divorced, and single people have higher treatment odds-ratios than married and widowed people. In most instances, the magnitude of the odds-ratios decrease when past treatment is adjusted for; current treatment is predicted by past treatment. Divorced and separated people are most likely to have had Any treatment or Outpatient treatment, but single people are the most likely to have

been treated recently in the Inpatient sector. The odds-ratios for marital status support the labeling perspective; those who are not married are more likely to have recently sought treatment.

White people are more likely or as likely as any other racial category to have sought treatment recently. The only time that another group approximates whites is in the Inpatient treatment sector. There are no statistically significant differences between whites and blacks. While blacks and Hispanics have similar rates of Any and Outpatient treatment, blacks are five times more likely to have been recently treated in a hospital. This finding supports the critics of labeling; minorities are not more likely to have recently received psychiatric treatment.

Females are more likely than men to have had Any treatment and to have had Outpatient treatment, but there are no gender differences in the Inpatient sector; women are not more likely to recently have been hospitalized for a psychiatric disorder. The labeling perspective is supported for the Outpatient sector but not for the harshest sector of treatment, the Inpatient sector.

There are no treatment differences between those who receive unemployment compensation and those who do not. Veteran status does not produce any statistically significant differences. Finally, past treatment is the single biggest predictor of current treatment with a range of odds-ratios from 8.69 to 11.44. People who have been treated recently are several times more likely to have a history of treatment.

Recent Psychiatric Outpatient Treatment, by Sector

Table 6-2 shows the relationship between social characteristics and Outpatient treatment by sector using a categorization strategy developed by Narrow et al. (1993): specialist; medical, non-specialist; human service agency; friend; self-help group; and other Outpatient treatment. Respondents were considered to have seen a specialist if they recently, as an outpatient, had seen a mental health specialist in a health plan or private practice; received treatment at a mental health center as an outpatient; been an outpatient at a general, psychiatric hospital, or Veterans Administration Hospital; or received outpatient treatment from a drug or alcohol clinic.

The medical, non-specialist category includes visits to medical doctors who do not specialize in psychiatric medicine and visits to emergency rooms. The human services aggregate contains visits to a religious person; visits to a family or social service agency; visits to a crisis center or a call to a hotline; or visits to a natural healer such as a spiritualist, herbalist, or reader. The categories of friend and self-help group are not aggregates but are single categories for the analysis. Finally, the other category captures any other outpatient visits that respondents made. The ECA codebook (U.S. Dept. of HHS, NIMH 1994) reveals that the other outpatient treatment category include visits to a chiropractor for mental health reasons.

Age tends to support the critics of labeling across all six categories of Outpatient treatment; those in the youngest and oldest age categories are typically less likely than those in both middle age categories to have recently sought treatment. Although respondents 18-24 years old have the highest odds-ratios in the Human Services and Friend sectors, the value is not significantly higher than the value for those aged 25-44.

Although the bivariate values suggest that those with a higher SES are more likely to have recently been treated in these sectors, the relationship disappears when other variables are controlled for. In the regression, SES does not differentiate those treated from those not treated with a few exceptions. Respondents with the lowest education are the most likely to have recently seen a medical, non-specialist. Those with a college education are the most likely to have talked with a friend. The SES variables offer weak support for both theoretical perspectives. The most surprising finding concerning SES is that it has little impact on recent treatment.

Respondents who are currently married or widowed are generally less likely than those separated, divorced, or single to have received recent treatment. The one exception to this is in the medical, non-specialist category where there are no significant differences in the multivariate regression. Whites are never less likely than people in other racial categories to have been treated in any Outpatient sector. Blacks always have significantly lower odds-ratios than whites. Females are never less likely than males to have received treatment in any sector; females are not significantly more likely than males to have sought

treatment in the self-help and other sectors. Again, recent psychiatric treatment in any Outpatient sector is best predicted by past treatment.

Table 6-2 provides mixed supports for both the labeling and critics of labeling perspectives. Age and Race support the critics of labeling, while Current Marital Status and Gender support the labeling perspectives. The SES variables offer weak mixed support for both perspectives. The fact that SES does not offer more support is an interesting finding in itself. Table 6-3 examines sector choice, controlling for the tendency to seek treatment in the first place. By examining sector choice, more support might be found for the competing perspectives.

Outpatient Treatment Sector Choice

In Table 6-2, those treated recently are compared to those not treated recently. Table 6-3 examines only those who have been treated recently. In Table 6-3, those treated in a particular sector recently are compared to those treated recently but not in that particular sector. Table 6-3 describes which sector people receive mental health treatment from, controlling for their differences in rates of seeking treatment.

Young respondents (18-24 years old) are most likely to have recently talked to a friend concerning mental health problems. The elderly (65+ years old) are most likely to have talked with a medical doctor/gone to an emergency room for mental health treatment. The specialist sector is the most popular sector choice for those aged 25-64. The sector choice for those with little education is the medical, non-specialist sector, and the sector choice for those with education is the friend and other sectors. Other SES variables predict little.

Marital status shows some clear patterns. Married and widowed people are more likely than separated or divorced people to use the medical, non-specialist sector. Separated people are the most likely to use the human services sector. Single people are most likely to talk with friends, and divorced people are most likely to go to a self-help group. Past treatment has an approximate value of 1.00 in the medical, non-specialist and other sectors; those in past treatment are no more likely to make use of the sector than those who did not received treatment in the past. Talking with a friend is negatively correlated with past treatment. It is possible that talking with a friend about mental health problems is a first step in receiving other forms of

mental health treatment. While whites are typically more likely to receive treatment in any sector, this is not true when controlling for tendency to seek treatment. Minorities (except blacks) are more likely to have talked recently with a friend. Hispanics are more likely than those in other racial categories to have recently talked with a friend.

While males are less likely than females to receive treatment overall, when they do seek treatment men are more likely than women to go to a specialist or to a self-help group. There are no significant gender differences in the medical, non-specialist and other sectors.

Table 6-3 examines sector choice for those who have been in recent psychiatric Outpatient treatment. The labeling perspective predicts those most likely to receive treatment in the specialist sector (a harsh form of treatment) are those with the least social power. Table 6-3 does not support this finding. Labeling is supported by marital status. The critics of labeling, however, are supported by age, and the fact that men are more likely than women to choose this sector when they are treated. While the outpatient perspective provides mixed support for the labeling and critics of labeling perspectives, labeling

claimed that inpatient treatment, the harshest form of treatment, would be reserved for those with the least social power. This is examined next.

Inpatient Treatment and Inpatient Treatment Sector Choice

Respondents were asked if they had been an inpatient in the following facilities: state hospital, private hospital, community mental health center (CMHC), Veterans Administration hospital, general hospital, alcohol treatment unit, drug treatment unit, nursing home, other facility (see Table 6-4), or drug and alcohol unit (Yale only). For this analysis, some of the Inpatient categories are aggregated: state hospital and CMHC constitute one category; alcohol treatment unit, drug treatment unit, and drug and alcohol unit (Yale only) are aggregated; nursing home and other are combined into other inpatient treatment. Due to the small number of people who have recently been hospitalized, it is difficult to obtain significant results when hospitalization is examined by category. However, some significant findings have been discovered.

Recent hospitalization in a private hospital is positively correlated with age, while most other sectors are populated by younger people. Education is negatively

correlated with being treated in a general hospital, state hospital/CMHC, VA hospital, or other inpatient facility. There is no significant correlation between education and recent treatment in the Private sector. Marital status also differentiates people by sector. The greatest difference between married and non-married people comes in the state hospital/CMHC sector. In this sector, non-married people are 7-30 times more likely than married people to have been treated.

The labeling perspective is supported, in part, by the odds-ratios of the VA hospital, state hospital/CMHC, and general hospital. The recent residents of these facilities are least likely to have education. In the state hospital/CMHC sector, residents are very unlikely to be currently married. The residents tend to be white and tend not to be in a disempowered age group (under 25 or over 64).

Table 6-5 does not provide many significant findings due to the small sample size. People in the oldest age category, however, are 25 times more likely than those in the youngest category to have gone recently to a private hospital. Blacks are 6 times less likely than whites to have gone to a general hospital. The odds-ratio for being single and choosing a state hospital/CMHC is 24.21.

This supports the labeling contention that those who are not married are most likely to be treated in the harshest facility, state hospital/CMHC.

Other hypotheses

Tables 6-1 through 6-5 address the general relationship between social characteristics and psychiatric treatment. The following tables examine other hypotheses. Table 6-6 examines particular hypotheses addressed in previous chapters: the relationship between being a parent and treatment. Table 6-7 examines the correlation between personal income/household income and treatment.

The Impact of Children on Treatment

Labeling predicts that those with fewer socioeconomic resources are most likely to be treated in a psychiatric facility; those without children should be most likely to be treated. The critics of labeling predict the opposite: those with children are more likely to be treated.

Parents are less likely to have been treated recently (bivariate), but that relationship disappears when all social variables are examined simultaneously (multivariate). The greatest difference between parents and non-parents

occurs in the Inpatient sector (bivariate), but again the relationship disappears in regression analyses. From this, it appears that the labeling perspective is not supported: not having children does not increase people's chances of being treated. The critics of labeling are also not supported because the regression analyses showed no significant difference between being a parent and being a non-parent when it comes to recently having received treatment.

The Effect of Personal Income/Household Income on Treatment

Table 6-7 provides evidence that those who make a greater share of their household's income, are less likely to have been treated recently. This finding supports the labeling theory. Those people who have the least economic importance are most likely to be treated.

Discussion

The analyses in Chapter 6 provide support for both the labeling and critics of labeling perspective. Generally, the age and race variables support the critics of labeling; people aged 25-64 and white people were most likely to have

recently been treated. The marital status and gender variables support the labeling perspective; non-married people and women were most likely to have recently been treated. The income and job prestige components of social class had a noticeably absent impact on outpatient care. However, those who had recently been hospitalized for psychiatric reasons were somewhat more likely to come from a lower social class.

Psychotherapy is a little more difficult to measure in the ECA data. There is no way to be sure in which settings psychotherapy is taking place. Mentioning to one's pastor that one is feeling depressed is not an instance of psychotherapy but this cannot be distinguished in the ECA data from a psychotherapy session with one's pastor. Therefore, any statements made here concerning psychotherapy must be accepted with some caution. If psychotherapy is defined as outpatient treatment and the opposite is inpatient treatment, then Horwitz's hypotheses are supported. The higher the social class, the more likely people are to use outpatient treatment. Also, whites are more likely to use outpatient treatment than non-whites. Whites are not significantly more likely than blacks to have been hospitalized recently.

It is safe to claim that visits to the specialist Outpatient sector include psychotherapy. If this definition of psychotherapy is used to test Horwitz's claims, then Horwitz's claims are not supported. Whites are not more likely than blacks to use the specialty sector, and there are no significant class differences.

Conclusion

Chapter 6 has provided mixed support for both the labeling and critics of labeling perspectives. Age and race provide support for the critics of labeling, while marital status and gender support the labeling perspective. There are few social class differences between treated and untreated people, although those who have been in recent inpatient care are less likely to be from the upper and upper-middle classes. While Chapter 6 has resolved little, psychiatric symptoms have not yet been explored. Chapter 7 will examine the relationship between psychiatric disorder/symptoms and treatment.

CHAPTER 7

PSYCHIATRIC SYMPTOMS AND RECENT PSYCHIATRIC TREATMENT

Chapter 7 explores the relationship between psychiatric disorders/symptoms and mental health treatment overall and by sectors. Although it varies by diagnosis and sector, the general relationship between treatment and disorders/symptoms is a positive one of statistical significance. In fact, there is never an instance in which people without a disorder are significantly more likely to have been treated than people with a disorder.

Any Recent Treatment

Table 7-1 lists Any, Outpatient, and Inpatient treatment. People who have met the criteria for a lifetime disorder are significantly more likely than those without a disorder to have been treated recently. Even controlling for past treatment and other diagnoses, there still remains a significant positive correlation between each diagnostic category and treatment.

Schizophrenia/Schizophreniform and affective disorders, arguably the most serious disorders, have the largest odds-ratios of any diagnostic category listed. Outpatient

treatment closely resembles overall treatment. Inpatient treatment has the largest odds-ratio difference between diagnostic categories. Moving from Outpatient treatment to Inpatient treatment, the odds-ratio for schizophrenia/schizophreniform increases to 5.58 (multivariate), while the odds-ratio for anxiety disorders and ASPD decreases to that of people with no disorder. The magnitude of the odds-ratios for alcohol/drug abuse/dependence and affective disorders remain modestly high. Clearly, the labeling perspective is not supported by this evidence.

Recent Outpatient Treatment

Table 7-2 divides Outpatient treatment into the same six sectors used in Chapter 6: specialist; medical, non-specialist; human services; friend; self-help group; and other Outpatient treatment. In the specialist; medical, non-specialist; and human services sectors, those with schizophrenia/schizophreniform have the highest odds-ratios followed by those with affective disorders. With regard to talking to a friend, affective disorders are first followed by those with schizophrenia/schizophreniform.

Respondents meeting any diagnostic category tend to have elevated rates of treatment in each sector with a few exceptions. Those with ASPD and alcohol/drug dependence/abuse are not more likely to have recently been to the medical, non-specialist sector, human services sector, or to have talked with a friend recently.

Table 7-3 examines which sector people are most likely to use when they meet the *DSM-III* diagnostic criteria. Since people may utilize more than one sector and may meet the diagnostic criteria for more than one disorder, categorical placements are not mutually exclusive. Table 7-3 does not provide much information in addition to Table 7-2; Table 7-3 generally provides additional support to the findings in Table 7-2.

Respondents with affective or schizophrenia/schizophreniform are more likely than others to have recently used the specialist; medical, non-specialist; and human services sector when they have been treated. People with anxiety disorder do not have a particular sector which they are more likely to use. Those with alcohol/drug disorders and ASPD are more likely than

others to have gone recently to a self-help group. People with no disorder are as likely as others to have recently used the friend and other sectors.

Those with disorders are more likely than others to seek treatment. People with the most serious disorders are the most likely to seek treatment. Those who have sought treatment recently are most likely to have used the specialist sector and self-help sector when they have sought treatment. An analysis of inpatient treatment will provide more information. While outpatient treatment reflects an attempt to seek help, inpatient treatment is a more severe form of treatment. It is possible that inpatient treatment, like outpatient treatment, is partially determined by psychiatric diagnosis. It is also possible that only certain disorders are positively correlated with treatment.

Recent Inpatient Treatment

An examination of inpatient treatment by sector (Table 7-4) reveals that while disorders are positively correlated with treatment, there is large variance in the odds-ratios. Odds-ratios for inpatient treatment range from less than 1.00 (not statistically significant) to odds-ratios nearly 25.00. Those with schizophrenia/schizophreniform have the

highest odds-ratios for the general hospital, state hospital/CMHC, Veterans hospital, and nursing home and other inpatient treatment sectors. From this, it appears that the most severe form of treatment, inpatient, and the most severe sector, state hospital/CMHC, have been reserved for those with the most severe disorder, schizophrenia/schizophreniform. Those with schizophrenia/schizophreniform, also have high rates of recent treatment in a Veterans Administration hospital (odds-ratio = 15.85). Those with alcohol/drug disorders have high odds-ratios for having recently been hospitalized in a alcohol and drug facility or a Veterans Administration hospital.

An interesting finding is that those with ASPD are not significantly more likely than those without a disorder to have been an inpatient in any particular sector recently. This is perplexing, because respondents with ASPD are more likely than people without a disorder to have been in inpatient treatment overall. However, when Inpatient treatment is divided into sectors, sample sizes are not large enough to provide statistical significance.

Table 7-5 compares people who go to one sector to people who go to other sectors. This analysis shows that people with alcohol/drug disorders are most likely to have recently gone to alcohol and drug facilities and Veterans Administration hospitals, whereas people with affective disorders are most likely to have recently been hospitalized in a general hospital. People with schizophrenia/schizophreniform and anxiety disorders are most likely to have been in the state hospital/CMHC sector.

Psychiatric Treatment and Non-Disordered Respondents

It is apparent that having a disorder makes people more likely to have been in treatment, outpatient or inpatient, recently. There are still people, however, who do not have a disorder and are treated. Why does this occur? Are labeling theorists correct when they assume that people without disorders are treated because they lack social power? How do critics of labeling explain non-disordered people being treated?

In order for people to be considered disordered, they must have a certain number of symptoms. It is possible for people to have one or more psychiatric symptoms but never meet diagnostic criteria. Recall that one of the initial

reasons in undertaking the ECA project was to determine the number of people with sub-clinical conditions. Among people who do not meet full diagnostic criteria, the presence of psychiatric symptoms may still be positively correlated with psychiatric treatment. To examine this, the total number of symptoms each respondent had ever experienced are added together. Then, among those who had never met the diagnostic criteria for a disorder, the number of symptoms are regressed on treatment: Any, Inpatient, and Outpatient. The results from this analysis are listed in Table 7-6.

In previous regressions, all variables, dependent and independent, have been dichotomous. In Table 7-6, the symptoms variable is continuous. The values given in Table 7-6 can be interpreted as a 1 unit increase in the independent variable makes people 1.09 times (in the case of any treatment) to have been in any recent treatment. With regard to Inpatient treatment, each additional symptom makes people 1.19 times more likely to have recently been a patient. The greater number of symptoms people have, the greater the likelihood of having been in treatment recently, Inpatient or Outpatient. This finding runs counter to labeling arguments that people treated who have no disorder are oppressed because of social status. Instead, it is

possible that people with subclinical conditions are being treated possibly to prevent full-blown cases or to relieve the stress that symptoms may cause.

Discussion of Treatment and Psychiatric Symptoms

It is apparent from Tables 7-1 through 7-6 that disorders/symptoms are an important factor in having received treatment recently. Although there is some variation by sector, those people who have met psychiatric diagnostic criteria are more likely than those who have not to have received treatment recently. This is even true when past treatment is controlled for. This means that it is not simply people's past treatment determining recent treatment; symptoms play a role as well.

Those with the most severe disorder, schizophrenia/schizophreniform, are the most likely to have received treatment recently, and they are the most likely to have been hospitalized recently in a state hospital/CMHC. Among those who did not meet a diagnostic criteria, the more symptoms people have, the more likely they are to have been

treated recently. It appears, therefore, that the critics of labeling are correct in stressing the importance of disorders/symptoms in determining recent treatment. Despite this evidence, there are still criticisms which may be launched by labeling theorists: 1) the relative importance of symptoms, controlling for social characteristics, are not known and 2) the effects of treatment on future life chances is not known. These issues will be addressed in Chapter 8.

CHAPTER 8

SOCIAL CHARACTERISTICS, PSYCHIATRIC SYMPTOMS AND TREATMENT

Chapter 6 explored the relationship between social characteristics and psychiatric treatment. Chapter 7 described the relationship between psychiatric symptoms and psychiatric treatment. Chapter 8 places social characteristics and psychiatric symptoms together to see the magnitudes of their independent effects. Chapter 8 examines the basic question asked in this work: what is the relationship between social characteristics, psychiatric characteristics, and mental health treatment? Tables 8-1 through 8-5 are identical in format to the first five tables in the preceding two chapters: Table 8-1 describes the correlates of Any recent treatment, recent Outpatient treatment, and recent Inpatient treatment. Tables 8-2 and 8-3 look at recent Outpatient treatment by sector, and Tables 8-4 and 8-5 describe recent Inpatient treatment by sector. Table 8-6 examines treatment for those who have suffered from symptoms of disorders in the two years before Wave 1. Table 8-7, 8-8, and 8-9 explore the correlation of treatment with other items: having children, the ratio of

personal income to household income, and the presence of subclinical conditions. Finally, Table 8-10 shows the personal income of those treated in the past.

Any Recent Treatment

Those who are most likely to have been in any Outpatient treatment recently are people younger than 65, people who are married/widowed/single, whites, females, those treated in the past, and those who have met the criteria for a psychiatric diagnosis (most likely schizophrenia/schizophreniform or an affective disorder). These findings provide support for the critics of labeling. Having a psychiatric disorder makes one more likely to have been in treatment recently, controlling for social characteristics, supports the critics of labeling. Also, the fact that whites are significantly more likely than non-whites to have recently received treatment provides support for the critics of labeling.

Labeling theory is supported in some cases. Women are almost twice as likely as men to have been treated, even when other characteristics are controlled for, social and psychiatric. It could be that women are less able to resist a label of mental illness. It could also be the case that

women are more likely to use milder forms of treatment, such as talking with a friend but no more likely to use severe forms of treatment such as hospitalization. The latter scenario suggests that women are no more likely to be forced into treatment, only more likely to seek treatment when disordered. An examination of treatment by sectors may provide more evidence for this.

Another piece of evidence which supports the labeling perspective is the fact that separated and divorced people are more likely than others to have been treated recently, even when other characteristics are controlled for. This supports the labeling perspective's contention that those who are not married are less able than married people to resist the label of mental illness. Labeling is only partially supported here, because widowed and single people are not significantly more likely than married people to have been treated recently. The most surprising finding is similar to one in Chapter 6: social class has little impact on recent psychiatric treatment. Social characteristics, such as marital status, race, and gender have higher odds-ratios.

Outpatient treatment comprises much of the Any treatment sector. It is not surprising, therefore, that the social and psychiatric characteristics are similar in both categories of treatment. For any recent inpatient treatment, the odds-ratios vary between 1.01 (for those with ASPD) and 4.87 (for those with schizophrenia/schizophreniform). The odds-ratio for schizophrenia/schizophreniform increases in magnitude between Any recent treatment and any recent Inpatient treatment. Between Any recent treatment and any recent Inpatient treatment, the odds-ratio for those with an anxiety disorder or antisocial personality disorder drop to statistical insignificance. Respondents with affective disorders and alcohol/drug disorders decrease somewhat but remain statistically significant. This finding supports the critics of labeling, but there is more variation than previously found in the Any treatment or any Inpatient sectors.

Another difference between any recent treatment and any recent Inpatient treatment is the absence of a gender difference. Whereas females are nearly twice as likely to have received Any recent treatment and any recent Outpatient treatment, females are only 0.98 times as likely as males to

have recently received Inpatient treatment. Marital status changes also. Separated people are more likely to have received inpatient treatment recently, but single people are three times more likely than married people to have been hospitalized recently. The odds-ratio of being divorced falls to a level which is statistically insignificant from married and widowed people.

The lack of a gender difference appears to support neither the labeling nor the critics of labeling. When men do seek treatment, however, they are more likely than women to be an inpatient. This may be because men appear to be more dangerous or because men wait until their mental conditions deteriorate to a level where hospitalization is necessary. This finding supports the critics of labeling more than labeling, because the most severe form of treatment is reserved for those with the most social power, males. Even if this line of reasoning is not accepted, there is no evidence from the inpatient treatment data that suggests that the gender with the least social power is the most likely to be treated. Labeling is not supported by the evidence on gender.

Social status finally begins to appear significant in recent inpatient treatment; those from a lower social class are more likely to have been hospitalized recently, controlling for psychiatric diagnosis and other social characteristics. This is particularly true for education. Those people who have had some college education or who have completed a college degree are less likely than those with less education to have been hospitalized recently. While Table 8-1 has revealed some important differences between those treated recently in the Inpatient and Outpatient sectors, further analysis by individual sector may show more results.

Recent Outpatient Treatment

Table 8-2 describes recent Outpatient treatment by sector. In this table, people who have been treated in a particular sector recently are compared to those who have not been treated recently. In Table 8-3, people who have been treated in a particular sector recently are compared to people who have been treated recently but not in that sector. It is possible for people to have been treated in more than one sector, so categorical placement is not mutually exclusive.

Table 8-1 shows that those who received Outpatient mental health treatment recently are most likely to be white, to be separated or divorced, to be female, to be a veteran, to have met diagnostic criteria, and to have been treated in the past. While there are not any significant differences between those treated in the Outpatient sector, in general, there were significant age differences by Outpatient sectors. Younger people are more likely to have been to a specialist, human service agency, or talked with a friend recently. The older people are, the more likely they are to have sought treatment in the medical, non-specialist sector recently. Older people are more likely to have been recently to a self-help group, but the odds-ratio is not significant. From these findings, it is hard to claim that labeling or the critics of labeling are supported. People aged 25-64 are more likely to have used the specialist sector than those aged 18-24 or those 65+. This provides more support for the critics of labeling than the labeling perspective, but a strong claim cannot be made.

Again, social class has little impact in determining who seeks treatment and who does not; however, there are a few exceptions. The primary exception is the inverse relationship between education level and recent treatment in

the medical, non-specialist sector. The less education people have, the more likely they are to seek treatment from a physician or emergency room. Another exception is the positive correlation between having a college degree and talking with a friend about mental health concerns. These exceptions show that when social class is important, it is education, not household income or job prestige, that is positively correlated with receiving psychiatric treatment.

While non-married people are typically more likely to seek treatment than married and widowed people, analysis of individual sectors shows a different pattern. There is no significant difference between marital categories and treatment in the medical, non-specialist and friend sectors. This finding offers support for the labeling perspective as those who are not married are more likely to use the specialist sector than they are to talk with a friend or family physician.

Race and gender produce consistent results across most categories. With the exception of the other Outpatient treatment sector, there are never any instances in which whites are less likely than non-whites to have recently received treatment. This clearly supports the critics of labeling. Concerning gender, in all Outpatient treatment

sectors women are between 1.52 and 2.55 times more likely (all significant at the 0.05 level of significance or greater) than men to have sought treatment recently. This figure controls for past treatment, so these findings are not the result of past treatment causing present treatment. The fact that women seek treatment more than men clearly supports the labeling perspective because, controlling for disorder, the least socially powerful gender is most likely to have been treated. When they do receive treatment, women are not any more likely than men to choose the specialist sector.

Having recently received treatment is heavily determined by past treatment. People who have been treated in the past are between 4 (friend sector) and 19 times (self-help group sector) more likely than those who have not been treated in the past to have been treated recently.

Having met diagnostic criteria also increases people's chances of having received psychiatric treatment recently. While there are variations across sectors, those with schizophrenia/schizophreniform and affective disorders are more likely in general than those with other disorders to have been treated recently. The major exception to this is

in the self-help group sector where those with alcohol/drug disorders are more likely to have been treated than any other diagnostic category group.

Table 8-3 compares those who have recently been treated in a particular sector to those who have recently been treated in other sectors. This analysis attempts to answer the following question: when people are treated for a disorder as an outpatient, which sector are they most likely to choose? Due to the fact that people go to more than one sector complicates matters somewhat but still makes the analysis useful.

An analysis of the specialist sector in Table 8-3 provides support for the critics of labeling. Among people who seek treatment, the specialist sector is most likely to be used by those aged 25-64, who have a college education, are male, are white or black, and have the most serious disorder, schizophrenia/schizophreniform. In other words, among those who are treated, the specialist sector is most likely to be used by those who have the most social power and those who have the most serious disorder. The other sectors appear to produce mixed results for both the critics of labeling and labeling perspectives.

The medical, non-specialist and friend sectors are different from the other sectors in some ways. Among those who have sought treatment recently, neither the medical, non-specialist nor the friend sector is preferred by those who have been treated in the past. It appears that people treated more than once in their lives graduate to another sector of treatment. Also, in the medical, non-specialist and friend sectors there is less of a difference between those with disorders and those without than there is in other sectors. The medical, non-specialist and friend sectors are more likely or as likely as other to be used by people who have not been treated in the past and less likely to be used by people who have serious disorders.

The roles of the medical, non-specialist and friend sectors are different than the roles of other sectors. The medical, non-specialist sector is most utilized by those who are older and less educated, while the friend sector is used by those who are younger and more educated. It is possible that each of these sectors serves as a place where people can be treated for their minor disorder. Why older, uneducated people talk with their physicians/use emergency rooms and younger, educated people talk with their friends is an important question to answer. Is this a cohort effect

or an age effect? Will the people who are young now make use of the medical, non-specialist sector when become older? It could be the case that there has been a change in American attitudes in the last few decades which has made it more acceptable to talk with friends about mental health problems. In either case, the medical, non-specialist and friend sectors are serving different functions than the specialist, human service, self-help group, and other sectors.

Recent Inpatient Treatment

Tables 8-4 and 8-5 examine the relationship between social characteristics, psychiatric symptoms, and treatment by Inpatient sector. Table 8-1 shows that people who had been in recent Inpatient treatment were more likely to be from a lower social class, to be single or separated, to be white or black, to have been treated in the past, and to met the diagnostic criteria for a disorder (particularly schizophrenia/schizophreniform or an affective disorder). Those in recent Inpatient treatment differed from those in recent Outpatient treatment in that the former were more likely to be from a lower SES level, while the latter were twice as likely to be female.

When Inpatient treatment is investigated by sectors, certain patterns emerge. Due to the relatively few cases of inpatient treatment, statistical significance is not always achieved even in instances where odds-ratios are relatively high (i.e., odds-ratio > 3.00). Concerning inpatient treatment overall, there is no significant age differences; there is no age group that is significantly more likely than another group to have recently been in inpatient treatment. This is not the case, however, when sectors are examined individually. People who have been in a private psychiatric hospital recently are more than 5.39 times more likely to be 25+ years old than 18-24 years old. Respondents who have recently been in drug and alcohol treatment are more likely to be young, even though the relationships are not statistically significant.

People who have recently been in treatment in a general hospital or a state hospital/CMHC are less likely to be educated. These are the only instances in which SES influences recent hospitalization. It appears that the harshest inpatient treatment is reserved for those with less education. This supports the labeling perspective, however slightly.

Single people are more likely than others to have been in a private hospital, general hospital, state hospital/CMHC, and nursing home/other inpatient treatment facility recently. Single people are 20.66 times more likely than married people to have been in state hospitals/CMHCs recently. This finding, as well as other marital status categories, support the labeling perspective. Non-married people, particularly single people, are more likely than married people to have recently been treated. Those people with fewer marital resources are more likely to have been treated in an inpatient facility.

There are no significant sector differences based on gender. However, there are some insignificant differences which do differentiate the genders by sector. Men are more likely to have been in a state hospital/CMHC or a Veterans Administration hospital recently, while females are more likely to have recently been in a drug and alcohol facility or private hospital.

Past treatment and having met diagnostic criteria for a disorder, particularly an affective disorder or schizophrenia/schizophreniform, is positively correlated with recent inpatient treatment in each sector. Those in Veterans Administration hospitals are more likely than

others to have been treated in the past. In each Inpatient sector except alcohol/drug treatment, someone with an affective disorder or schizophrenia/schizophreniform is the most likely to have recently received treatment. Those with an alcohol/drug problem were the most likely to have used the alcohol/drug treatment sector recently. Table 8-5 examines sector choice among those who have been inpatients recently; this table does not provide much information in addition to what Table 8-4 provided. Among those treated recently, those treated in private hospitals are most likely to be those with less social power: the elderly, Asian-Americans and Native Americans, those of low-mid social class. Also, those who are treated in the private sector are less likely to be disordered than people in other sectors, except for the nursing home/other Inpatient treatment sector. The fact that people with low social status and those with few psychiatric disorders are hospitalized in private hospitals supports the labeling position. However, it does not support the combined position, because these disempowered people are being hospitalized in a private facility. According to combined theorists such as Ewick, the private hospital should be reserved for those with social power.

State hospital/CMHC hospitalization is negatively correlated with being from a lower social class, being non-married, and having an anxiety disorder or schizophrenia/schizophreniform. These findings support the labeling perspective as the harshest form of hospitalization is reserved for those with the least amount of social power. Having met the criteria for a disorder, however, also increases people's chances of being in a state hospital/CMHC. This supports the critics of labeling. According to this finding, it could be that both Goffman and Gove were correct: those with less social power are more likely to be hospitalized (Goffman 1961), and those with disorders are more likely to be hospitalized (Gove and Howell 1974). It does appear that having being non-married or being from the lowest social class plays a larger role than having one diagnosis when it comes to having recently been hospitalized in a state hospital/CMHC.

Alcohol/drug inpatient treatment provides the most support for the critics of labeling. Those with alcohol/drug disorders are more than 34 times more likely than those without a disorder to use this treatment sector, when they are treated. Also, those from a higher social class are more likely to be treated in this sector.

Additional Analyses

Recent Disorders and Treatment¹²

Table 8-6 is similar to Table 8-1 with one exception. In Table 8-1, lifetime disorders were examined. In Table 8-6, the correlation between a diagnosis 1-2 years between the present period and recent treatment are examined, controlling for a lifetime disorder. The findings in Table 8-6 are similar to those in Table 8-1. The main difference is that the correlation between psychiatric symptoms and treatment are greater in Table 8-6. These finding provides more support for the critics of labeling: those who have had recent disorders and have more financial resources are most likely to have recently been treated in an outpatient setting only.

Children, Personal Income/Household Income, Subclinical Symptoms, and Treatment

Table 8-7 reveals that children appear to have little impact on having received past treatment, when examined with

¹²The remaining tables in Chapter 8 control for social and psychiatric variables. However, only the variables of interest are listed in the tables.

other social and psychiatric characteristics. Table 8-8, reveals that, as the ratio of personal income/household income increase, the chance of having been treated recently decreases slightly. Again, there is some support for the labeling perspective. Also, Table 8-9 reveals that having subclinical symptoms is positively correlated with treatment which supports the critics of labeling perspective.

Effect of Treatment on Personal Income

What is the effect of treatment on future life chances such as personal income? Is the effect of treatment on future life chances positive as critics of labeling claim or is it negative as the labeling theorists maintain? To test this, the analyses in this chapter compare those who have met diagnostic criteria and have been treated with those who have met diagnostic criteria and have not been treated. Table 8-11 examines the effects of treatment on personal income.

The way that the effects of treatment are measured in this work are crude at best. Time-ordering of past events make accurate reporting difficult. In any event, some findings were made. Those who have suffered from alcohol/drug abuse/dependence and have sought treatment have

a significantly lower personal income (-\$1303.71).

According to these data, treatment does not impact greatly on future chances. The time-ordering of events, however, requires that this finding be accepted with caution.

Discussion

Chapter 8 brings together the social and psychiatric characteristics together. Both social and psychiatric traits play a role in having recently received psychiatric treatment. Generally, age, race, and psychiatric disorders/symptoms support the critics of labeling perspective. Marital status and gender support the labeling perspective. Social class variables do not differentiate among those who have recently sought outpatient treatment. However, social class is inversely related to inpatient treatment; this supports labeling as the most severe form of treatment is reserved for those with the least power. The same is true for marital status. Those who are separated or single are more likely to have recently received treatment than those who are married; this gap is larger than in the outpatient regression.

People who meet a diagnostic criteria are significantly more likely to have recently been treated. Those with schizophrenia/schizophreniform and affective disorders are more likely to have recently been inpatients. Those with lesser disorders are no more likely than those without disorders to have recently been inpatients although they are more likely to have recently been treated as outpatients.

Finally, Chapter 8 reveals that treatment is neither as damaging as labeling theorists claim nor as efficacious as critics of labeling claim. These findings should be accepted with some caution since methodological difficulties make these data somewhat suspect. The major finding, however, remains that treatment is not as the damaging as it has been considered in the past by labeling theorists.

CHAPTER 9

CONCLUSION

Chapter 9 returns to the general question of this work: what are the relationships between social characteristics, psychiatric symptoms, and mental health treatment? Understanding the relationships between social characteristics, psychiatric symptoms, and psychiatric treatment will better enable funding agencies, such as the government and insurance companies, to place resources where they will do the most good. If labeling theory is correct, then funding agencies should sharply decrease the treatment of mental illness. If critics of labeling are correct, then the government and insurance companies should develop more efficient ways of matching treatment to those people who have symptoms/disorders.

The ECA data analyzed in this work provide strong evidence for the critics of labeling perspective. People who seek treatment are significantly more likely than untreated people to have met diagnostic criteria or to have suffered from symptoms of mental illness. Those treated for psychiatric disorders are not less likely to have lower incomes. Also, whites are more likely, or as likely as non-

whites, to be treated. There is no clear evidence that those with less social power are more likely to be reacted to more strongly although there are a few exceptions.

The ECA data provide some support for the labeling perspective. Being female, having a high school education or less, and being non-married are all positively correlated with recent treatment. Although women are more likely than men to have been treated recently, they are not more likely to have been an inpatient and when men do seek treatment they are more likely than women to be treated in the specialist sector. This finding is in opposition to what labeling theorists predict. The strongest evidence for labeling comes from the fact that those who are separated, single, or who have not been to college are more likely to be inpatients.

The ECA data indicate that people seek treatment because they have met diagnostic criteria or have had symptoms of psychiatric disorders. The ECA data do not indicate the people are treated primarily because of their social characteristics. Where there is variation in treatment by social characteristics, the odds-ratios typically are not as large as for the psychiatric disorders.

Combined theorists such as Horwitz (1982) have combined psychiatric and social characteristics in one theory. Horwitz claimed that, controlling for the level of psychiatric symptoms, people would be treated in different sectors based on their social status: generally those with more social resources would be more likely to receive psychotherapy while those with fewer resources would be more likely to be hospitalized. The exception to this was that men would be more likely to be hospitalized, controlling for symptoms, due to the perceived dangerousness of males.

Horwitz's hypotheses were partially supported. In this work, whites and those from a higher social class were more likely to be treated in psychotherapy (if defined as treatment in the Outpatient sector). Future research in the sociology of mental illness should take a direction similar to Horwitz: specifying the course of treatment by social characteristics, controlling for psychiatric symptoms.

While this analysis shows the relative importance of labeling theorists and their critics, it also has implications for funding agencies such as the government and insurance companies. Mental health treatment should not be curtailed due to a belief that treatment primarily serves to oppress people. The results from the ECA study show that

people who have disorders are more likely than people without disorders to be treated. While this work does not discuss the efficacy of treatment, recent research has shown mental health treatment to be efficacious (Winokur and Clayton 1994).

The fact that having a disorder is positively correlated with treatment across treatment sectors does not mean that social characteristics should be disregarded. Social characteristics play a role in treatment: uneducated people are more likely to use the medical, non-specialist sector, blacks are less likely to use self-help groups, educated people are more likely to talk with friends. Funding agencies and treatment facilities should take social characteristics into consideration when providing treatment. Funding agencies and treatment facilities should determine whether people seek treatment in certain sectors because they find the treatment to be the most efficacious or because there are barriers to treatment in other sectors.

Concluding Comments

Although I recognize that the labeling, critics of labeling, and combined perspective have something to add to the discussion of mental health treatment, I believe that

the critics of labeling perspective provides a better explanation of the mental health treatment phenomena. For too long, sociologists have focused on the problems with mental health diagnosis and mental health treatment. If Goffman's (1961) and Scheff's (1966) works are correct, then psychiatric symptoms have little to do with people being treated. This is simply not the case. Meeting diagnostic criteria is more highly correlated with treatment than having certain social characteristics.

Labeling theorists have served a useful function by being critical of the mental health system, its faults, and the subjectiveness of the diagnostic process. During the period in which labeling theorists made their statements (1950s and 1960s), there was less research available concerning the etiology of mental health treatment. Medications to treat mental illnesses were new. Conditions in mental hospitals were worse. Most psychiatric hospitalization was involuntary (Cockerham 1992). Today, mental health treatment is much different. There is compelling research on the physiological origins of severe mental disorders, such as schizophrenia/schizophreniform and affective disorders (Winokur and Clayton 1994). The length of hospital stays is shorter, and there are more voluntary

admissions. The use of effective medication has allowed many people to return to productive lives (Cockerham 1992).

I believe it is still important for sociologists to be critical of the mental health field. There are many problems in this field, and sociologists can serve a useful role by investigating those problems and developing solutions. Instead of focusing questioning whether mental illness exists, sociologists could critique disorders for which there is less physiological evidence, such as conduct disorder. For those critical of mental health treatment, another area of interest may be the hospitalization of juveniles. Considerable attention has been paid to the number of juveniles now being hospitalized for "minor" diagnoses (e.g., Chesney-Lind and Shelden 1992, Schwartz 1989, Staples and Warren 1988).

Sociologists have been instrumental in furthering a better understanding of mental illness. They have provided explanations of mental illness and numerous important critiques of the mental health field. But sociologists need to refocus their critical efforts on the physiological components of mental illness. In this way sociologists can continue to play a central role in understanding the way social factors impact on people receiving treatment.

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APPENDIX A
GENERAL DESCRIPTIONS OF MENTAL ILLNESSES IN THIS WORK

Below are general descriptions of disorders explored in this work. For a more complete description see *DSM-III* (APA 1980).

A. Affective (mood) Disorders - Pertaining to prolonged depression (Major Depressive Disorder or Dysthymia) or elation (Mania).

1. Major Depressive Disorder - Feeling sad, blue, depressed, or losing interest and pleasure in things previously cared about or enjoyed for a period of 2 or more weeks. Respondents in the ECA study were queried concerning the following: appetite, weight, sleep patterns, sexual interest, fatigue, concentration, thoughts of death, suicide thoughts, and suicide attempts.

2. Mania - People who suffer from mania have hyperactive and hypersexual symptoms. ECA respondents were queried about the following: feeling pressure to speak, having racing thoughts, believing that they possess special powers or gifts, reduced need for sleep, distractibility, and going on spending sprees.

3. Dysthymia - similar to Major Depressive Disorder but respondent must be chronically depressed for most of the time during a two year period.

B. Anxiety/Phobias - Having a fear of something/ some situation which does not pose a real threat. Typically, the individual attempts to avoid the perceived threat to the point where it is socially crippling. Anxieties/phobias may also include the experience of a panic attack (see panic disorder below).

1. Simple phobia - Having a fear of a specific thing such as particular animals, water, or bridges.

2. Panic Disorder (Attack) - Experiencing symptoms such as a pounding heart, light-headedness, shortness of breath, choking/ smothering feeling, sweating, trembling, and hot/cold flashes. NOTE: These symptoms can occur in other anxieties/phobias.

3. Agoraphobia (without panic) - Fear of leaving one's house or being trapped in a group of people.

4. Social Phobia - Fear of public embarrassment in situations such as being outside, speaking in front of people, and eating in public.

C. Schizophrenia/Schizophreniform - Schizophrenia is a disorder that is characterized by disorganized behavior, hallucinations, and delusions among other symptoms. The difference between schizophrenia and schizophreniform is one of duration of symptoms and social impairment. The diagnosis of schizophreniform may be used instead of schizophrenia when disorganized symptoms have not been present for 6 months and when the duration of social impairment is not as long.

D. Substance Abuse/Dependence

1. Abuse - Includes excessive drinking/drugging which causes social impairment.

2. Dependence - A pattern (12+ months) of pathological drinking/drugging accompanied by tolerance, and/or withdrawal symptoms, and/or ingesting more than one intended, and/or desire to decrease ingestion, and/or spending a good deal of time obtaining the substance.

E. Antisocial Personality Disorder (ASPD) - A pattern of social impairments resulting in impaired relationships.

APPENDIX B VARIABLE OPERATIONALIZATION

Each social characteristic variable is listed below followed by a description of its operationalization. Each category (e.g. Age) is divided into subcategories (e.g., 18-24, 25-44, 45-64, 65+ for Age). One subcategory is chosen as the comparison subcategory (e.g., 18-24 for Age). For all subcategories other than the comparison subcategory (e.g., 25-44, 45-64, 65+ for Age) a variable is created (e.g., AGE25 for those aged 25-44, AGE45 for those aged 45-64) and AGE65 for those aged 65 or older). A variable is also created for those whose age was not reported (AGEM). Each subcategory is mutually exclusive. Respondents receive a code of 1 for the subcategory in which their characteristic is located and a code of 0 for all other categories. Those in the comparison group receive a 0 for all categories.

AGE

Question DIS002:

"How old were you on your last birthday?"

- Respondents reported their ages in years. Age was aggregated into five categories: 18-24, 25-44, 45-64, 65+, and a category for missing values. Four variables were then created: AGE25 for those aged 25-44, AGE45 for those aged 45-64, AGE65 for those aged 65 or older, AGEM for those whose age was missing. If respondents reported they were between 18 and 24 years old then AGE25, AGE45, AGE65, and AGEMS were all coded 0. If respondents reported they were 25 to 44 then AGE25 was coded 1, AGE45 was coded 0, AGE65 was coded 0, and AGEMS was coded 0. Respondents who reported their ages to be between 45 and 64 had AGE25 coded 0, AGE45 coded 1, AGE65 coded 0, and AGEM coded 0. Respondents 65 years old or older had AGE25 coded 0, AGE45 coded 0, AGE 65 coded 1, and AGEM coded 0. If age was not reported then AGE25, AGE45, and AGE65 were all coded 0 while AGEM was coded 1 (see below).

Age Aggregate Variables

		AGE25	AGE45	AGE65	AGEM
Respondents' Reported Ages	18-24	0	0	0	0
	25-44	1	0	0	0
	45-64	0	1	0	0
	65+	0	0	1	0
	AGEM	0	0	0	1

AGE25, AGE45, and AGE65, and AGEM are analyzed using logistic regression. Logistic regression returns an odds-ratio for AGE25, AGE45, and AGE65. The comparison group is assigned an odds-ratio of 1.00 and all other odds-ratios are expressed in terms of the comparison group. In Table 6-1, those aged 25 to 44 are 1.13 times more likely than those aged 18-24 to have been in treatment recently.

Highest Grade Level Completed (GRADE)

"What is the highest grade in school or year of college that you completed"

- Values ranged from 0-17 years. The value of 17 represented all those who had one year of graduate education or higher. Highest Grade Level Completed was divided into 6 subcategories: junior high school or below (GRADE=0-8 years), some high school (GRADE=9-11 years), high school graduate (GRADE=12), some college (GRADE=13-15), college graduate or higher (GRADE=16+), and missing [GRADE=(missing)]. Five variables were created: G11 (GRADE=9-11 years), G12 (GRADE=12 years), G15 (GRADE=13-15 years), G16 (GRADE=16+), and GMS [GRADE=(missing)].

Highest Grade Level Attained Variables

		G11	G12	G15	G16	GMS
Respondents' Reported Highest Grade Level Attained	0-8	0	0	0	0	0
	9-11	1	0	0	0	0
	12	0	1	0	0	0
	13-15	0	0	1	0	0
	16	0	0	0	1	0
	GMS	0	0	0	0	1

G11, G12, G15, G16, and GMS are analyzed using logistic regression. Logistic regression returns the odds-ratios for G11, G12, G15, G16, and GMS. Respondents with 0-8 years of education serve as the comparison group and have an odds-ratio of 1.00.

HOUSEHOLD INCOME (HSEINC)

QUESTION:

"Would you please look at this card and tell me which letter represents your household's total income before taxes for the past year, including salaries, wages, social security, welfare, and any other income?"

Item not asked at Washington University

At Yale \$0-\$1,000; other sites, no income	=	0
At Yale \$1,001-\$1,999; other sites, \$0-\$1,999	=	1
\$2,000-\$2,999	=	2
\$3,000-\$3,999	=	3
\$4,000-\$4,999	=	4
\$5,000-\$5,999	=	5
\$6,000-\$6,999	=	6
\$7,000-\$7,999	=	7

\$8,000-\$8,999	=	8
\$9,000-\$9,999	=	9
\$10,000-\$10,999	=	10
\$11,000-\$12,499	=	11
\$12,500-\$14,999	=	12
\$15,000-\$17,499	=	13
\$17,500-\$19,999	=	14
\$20,000-\$24,999	=	15
\$25,000-\$34,999	=	16
\$35,000-\$49,999	=	17
\$50,00+	=	18
Missing	=	".."

Household income was then broken into quartiles.

PERSONAL INCOME (PERSINC)

"About how much of this total household income was earned or brought in by you personally considering all sources?"

Item not asked at Washington University

At Yale \$0-\$1,000; other sites, no income	=	0
At Yale \$1,001-\$1,999; other sites, \$0-\$1,999	=	1
\$2,000-\$2,999	=	2
\$3,000-\$3,999	=	3
\$4,000-\$4,999	=	4
\$5,000-\$5,999	=	5
\$6,000-\$6,999	=	6
\$7,000-\$7,999	=	7
\$8,000-\$8,999	=	8
\$9,000-\$9,999	=	9
\$10,000-\$10,999	=	10
\$11,000-\$12,499	=	11
\$12,500-\$14,999	=	12
\$15,000-\$17,499	=	13
\$17,500-\$19,999	=	14
\$20,000-\$24,999	=	15
\$25,000-\$34,999	=	16
\$35,000-\$49,999	=	17
\$50,00+	=	18
Missing	=	".."

Personal income was then broken into quartiles.

JOB PRESTIGE - Based on Census Bureau Classification. Job prestige was broken into quartiles.

CURRENT MARITAL STATUS (MAR) -

Question DIS004:

"Are you presently married or are you widowed, separated, divorced, or have you never been married?"

Original Coding:

- 1 = Married
- 2 = Widowed
- 3 = Separated
- 4 = Divorced
- 5 = Never married
- "." = Missing

Recoding: Five dummy variables were created (WIDOWED, SEPARATE, DIVORCED, NEVERMAR, MISMAR). Respondents received a score of 1 for whichever category they fell into. Respondents received a 0 for all other categories. Married people serve as the comparison group and receive a 0 for all categories. Accordingly, the treatment odds-ratio for married respondents is set at 1.00.

RACE

Question:

"Would you please look at this card and give me the letter of the group that best describes your racial background?"

Answers:

- A = American Indian = 0
- B = Alaskan Native = 1
- C = Asian = 2
- D = Pacific Islander = 3

E = Black-Not Hispanic	= 4
F = Hispanic	= 5
G = White-Not Hispanic	= 6
Other	= 7
."	= Missing

Recoding: Four dummy variables were created (BLACK, HISPANIC, OTHER, and RASMIS). Respondents received a 1 for BLACK if RACE = 4, a 1 for HISPANIC if RACE = 5, a 1 for OTHER if RACE = 0, 1, 2, or 3; and a 1 for RASMIS if RACE = Missing. Respondents received a 0 for all race categories. Whites served as the comparison group. Accordingly, whites received a 0 for all race groups and their odds-ratio was set at 1.00.

GENDER

Question DIS002:

SEX RECORDED AS OBSERVED.

- GENDER was coded 2 for female and 1 for male. GENDER was recoded: 1 for female and 0 for male. Another variable, GENMIS, was created for those whose gender was not reported. The gender of only 1 person was unknown. That person received a 1 for GENMIS. All other received a 0 for GENMIS.

UNEMPLOYMENT COMPENSATION

QUESTION UNEMPLY:

"Are you now receiving any unemployment compensation?"

ANSWER:

1 = No	
2 = Yes	
."	= Missing

RECODING:

UNEMPLY was recoded 1 = Yes and 0 = No. A dummy variable, UNEMPMIS, was coded 1 if UNEMPLY = Missing.

VETERAN

QUESTION VETERAN:

"Did you ever serve (Yale - on active duty) in the armed forces of the United States?"

1 = No

2 = Yes

"." = Missing

RECODING:

VETERAN was recoded 1 = Yes and 0 = No. A dummy variable was created, MISVET. MISVET was coded 1 if VETERAN = Missing.

PAST TREATMENT - Past treatment was coded 1 if respondents received treatment more than 1 year prior to the interview (see below for a description of treatment facilities); otherwise past treatment was coded 0.

CHILDREN - All community respondents were asked about their outpatient treatment on 3 occasions: Wave 1 (time 0), a telephone interview (6 months after Wave 1), and Wave 2 (1 year after Wave 1). Respondents who answered yes at any one of these points had that respective category coded 1.

Respondents who had at least one child were coded 1. Respondents who had no children were coded 0. Respondents who did not respond were coded ".".

Disorders - Each of the following disorder aggregates were used in this analysis:

Affective - Affective disorder was coded 1 if respondent met the criteria for one or more of the following: mania, major depressive episode, or dysthymia. If respondents did not meet the diagnostic criteria for mania, major depressive episode, and dysthymia, affective disorder was coded 0. Affective disorder was coded "." if major depressive episode, dysthymia, and affective disorder was missing.

Anxiety - Anxiety was coded 1 if respondents met diagnostic criteria for one or more of the following: panic, social phobia, simple phobia, or agoraphobia. If panic, social phobia, simple phobia, and agoraphobia are all coded 0, anxiety is coded 0. If panic, social phobia, simple phobia, and agoraphobia are all missing, anxiety is coded ".".

Alcohol/Drug - Alcohol/drug was coded 1 if respondents met criteria for alcohol/drug abuse or alcohol/drug dependence; otherwise alcohol/drug was coded 0. Alcohol/drug was coded "." if alcohol/drug abuse and dependence was missing.

Antisocial Personality Disorder (ASPD) - If respondents met the criteria for ASPD, ASPD was coded 1. If respondents did not meet ASPD criteria, ASPD was coded 0. If ASPD diagnostic criteria was missing, ASPD was coded ".".

Schizophrenia/Schizophreniform - Schizophrenia/schizophreniform was coded 1 if respondents met the criteria for schizophrenia or schizophreniform. If respondents did not meet the diagnostic criteria for schizophrenia/schizophreniform, the category was coded 0. Schizophrenia/schizophreniform was coded "." if missing.

Psychosis - Psychosis is coded 1 if mania or schizophrenia/schizophreniform is coded 1. Psychosis is coded 0 if mania or schizophrenia/schizophreniform is coded 0. Psychosis is coded "." if mania and schizophrenia/schizophreniform are coded ".".

Dependent Variables Outpatient Treatment

Respondents were queried about their past treatment. Respondents were specifically asked whether they had received treatment in each of 17 different outpatient settings. Each question listed below was coded yes = 2, no = 1, and "." = missing. These questions were recoded yes = 1 and no = 0. All community respondents were asked about their outpatient treatment on 3 occasions: Wave 1 (time 0), a telephone interview (6 months after Wave 1), and Wave 2 (1 year after Wave 1). Respondents who answered yes at any one of these points had that respective category coded 1.

"Now I'm going to read you a list of different kinds of places and people where someone might get help for problems with emotions, nerves, drugs, alcohol, or their mental health: Have you ever gone to:

... A friend or relative for help with any of these problems? (FRIEND)

... A minister, priest or rabbi for help with any of these problems? (RELIG)

... A psychiatrist or other mental health specialist at a health plan or family clinic for help with any of these problems? (SPEC PUB)

Did you ever go to a psychiatrist, psychologist, social worker or counselor in private practice for help with problems with your emotions, nerves, drugs, alcohol, or your mental health? (SPEC PRI)

Have you ever talked to a medical doctor in private practice (except for a psychiatrist) or to any medical person at a health plan or at a primary care clinic about problems like that? (MED DOC)

Have you ever gone to a mental health center? (MHCENTR)

... A psychiatric outpatient clinic at a general or a university hospital? (HOSPCLN)

... An outpatient clinic in a psychiatric hospital? (PSYCCLN)

... An outpatient clinic in a Veterans Administration Hospital, for problems with emotions, nerves, alcohol, or mental health? (OUTVA)

... A drug clinic? (DRUGCLN)

... An alcohol clinic? (ALCCLN)

Have you ever gone to a hospital emergency room for problems with emotions, nerves, drugs, alcohol, or your mental health? (EMERG)

... A family service, child counseling, or social service agency? (SOCSER)

... Someone at a self-help group like Alcoholics Anonymous, etc.? (SELFHLP)

... A community program like a crisis center or hotline? (HOTLINE)

... A spiritualist, herbalist, natural therapist or reader for problems with emotions, nerves, drugs, alcohol, or mental health? (NATURAL)

... Anyone else? (OTHER)

Respondents were then asked to name the outpatient treatment facilities they had been to in the last 6 months: CAREP1, CAREP2, and CAREP3.

CAREP1, CAREP2, CAREP3:

"You mentioned that you went to (NAME TYPES OF PLACE VISITED) for problems with emotions, mental health, drugs, or alcohol. Have you been to (this/any of these) place(s) in the last six months? What was the name of the place you went?

Friend	= 1
Religious Person	= 2
Mental Health Specialist Health Plan or Clinic	= 3
Mental Health Specialist Private Practice	= 4
Medical Doctor	= 5
Mental Health Center	= 6
Psychiatric Outpatient in General Hospital	= 7
Outpatient Clinic in Psychiatric Hospital	= 8
Outpatient Clinic VA Hospital	= 9
Drug Clinic	= 10
Alcohol Clinic	= 11
Hospital Emergency Room	= 12
Family or Social Service	= 13
Self-help Group	= 14
Crisis Center	= 15
Natural Therapist	= 16
Other	= 17
Missing	= "."

From this I created three aggregates: specialist (SPEC); medical, non-specialist (MED); and human services (HUMS). SPEC was coded 1 if CAREP1, CAREP2, or CAREP3 were coded 3, 4, 6, 7, 8, 9, 10, or 11. MED was coded 1 if CAREP1, CAREP2, or CAREP3 were coded 5 or 12. HUMS was coded 1 if CAREP1, CAREP2, or CAREP3 were coded 2, 13, 15, or 16. SPEC, MED, and HUMS were coded 0 if CAREP1 = ".". SPEC, MED, and HUMS were coded "." if all questions in the respective aggregate were missing.

Inpatient Treatment

Respondents were asked the following questions on two different times (Wave 1 and Wave 2). If respondents received treatment in one or more of these time periods, they were considered to have received treatment. Respondents were first asked a screener question before being asked about specific Inpatient treatment sectors:

PSYHOSP:

"Have you ever been admitted to a hospital or other treatment program where you stayed overnight because of family or personal problems, a mental or emotional problem, trouble with your nerves, or a problem with drugs or alcohol?"

No = 1
Yes = 2
Missing = "."

If PSYHOSP = 2, then the following questions were asked:

How many times have you ever been admitted to a state psychiatric hospital? (STATEH)

How many times have you ever been admitted to a private psychiatric hospital? (PRIHOSP)

How many times have you ever been admitted to a community mental health center? (INCMHC)

How many times have you ever been admitted to a VA hospital because of family or personal problems, a mental or emotional problem, trouble with your nerves, or a problem with drugs or alcohol? (VAHOSP)

How many times have you ever been admitted to a general hospital because of family or personal problems, a mental or emotional problem, trouble with your nerves, or a problem with drugs or alcohol? (GENHOSP)

How many times have you ever stayed overnight or longer in an alcohol treatment unit? (INALC - not asked at Yale site)

How many times have you ever stayed overnight or longer in a drug treatment unit? (INDRUG - not asked at Yale site)

How many times have you stayed overnight or longer in an alcohol or drug treatment unit? (INSUBST - asked at Yale site only)

Have you ever stayed overnight or longer any place else because of family or personal problems, a mental or emotional problem, trouble with your nerves, or a problem with drugs or alcohol? If Yes: How many times? (Washington site includes nursing homes).

PHOSP1, PHOSP2, and PHOSP3:

You have told me that you were admitted to (TYPES OF PLACES). Were you admitted to any of these places in the past year? What was the name of the place you were admitted to most recently?

State psychiatric hospital	= 1
Private psychiatric hospital	= 2
Community mental health center	= 3
VA hospital	= 4
General hospital	= 5
Alcohol treatment unit	= 6
Drug treatment unit	= 7
Nursing home	= 8
Other	= 9
Drug or alcohol unit (Yale site only)	= 10
Missing	= "."

If PHOSP1, PHOSP2, or PHOSP3 = 1 or 3 then HSTATE = 1.

If PHOSP1, PHOSP2, or PHOSP3 = 2 then HPRIV = 1.

If PHOSP1, PHOSP2, or PHOSP3 = 4 then HVA = 1.

If PHOSP1, PHOSP2, or PHOSP3 = 5 then HGEN = 1.

If PHOSP1, PHOSP2, or PHOSP3 = 6, 7, or 10 then HALDRUG = 1.

If PHOSP1, PHOSP2, or PHOSP3 = 8 or 9 then HOTHER = 1.

Otherwise PHOSP1, PHOSP2, or PHOSP3 = 0.

Any Treatment - Any Treatment was coded 1 if Outpatient Treatment (see below) was coded 1 or if Inpatient Treatment (see below) was coded 1. Any Treatment was coded 0 if Outpatient Treatment and Inpatient Treatment were coded 0.

In all other regressions, those who have been treated in a aggregate are coded 1, those who have not been treated in that setting are coded 0, and those for whom there is no data are coded "." for missing. Tables 6-3, 6-4, 8-3, and 8-4 use the same outpatient and Inpatient aggregates as discussed above. The coding of these variables, however, is changed. In tables 6-3, 6-4, 8-3, and 8-4 those who have never been treated are coded ".". Those who have been treated in a particular sector are coded 1 and those who have not been treated in that sector, but have been treated in another sector, are coded 0. The idea in doing this is to see which sector people go to, controlling for differential rates to seek treatment.

**Appendix C, TABLE 5-1
SAMPLE SIZES**

		Unweighted N	Unweighted %	Weighted N	Weighted %
Age	18-24	2617	12.54	3714	17.80
	25-44	7068	33.88	8115	38.90
	45-64	4395	21.07	5763	27.63
	65+	6753	32.37	3259	15.62
	Missing	28	0.13	3	0.01
Highest Grade Level Completed	0-8	5097	24.43	3636	17.43
	9-11	4039	19.36	3691	17.69
	12	5012	24.03	5952	28.53
	13-15	3139	15.05	3844	18.43
	16+	2876	13.79	3472	16.64
	Missing	698	3.35	259	1.24
Household Income	0%-25%	5317	25.49	3496	16.76
	26%-50%	3187	15.28	3288	15.76
	51%-75%	2952	14.15	3829	18.35
	76%-100%	1666	7.99	2399	11.50
	Missing	7739	37.10	7842	37.59
Job Prestige	0%-25%	3904	18.71	4636	22.22
	26%-50%	4601	22.06	4977	23.86
	51%-75%	4996	23.95	4611	22.10
	76%-100%	5044	24.18	4989	23.92
	Missing	2316	11.10	1641	7.87
Current Marital Status	Married	8941	42.86	11563	55.43
	Widowed	3869	18.55	1818	8.71
	Separated	1108	5.31	814	3.90
	Divorced	2000	9.59	1570	7.53
	Single	4605	22.07	4985	23.90
	Missing	338	1.62	104	0.50
Race	White	13481	64.62	14134	67.75
	Black	4962	23.79	3900	18.70
	Hispanic	1620	7.77	1922	9.21
	Other	499	2.39	637	3.05
	Missing	299	1.43	261	1.25
Gender	Male	8889	42.61	9719	46.59
	Female	11971	57.38	11135	53.38
	Missing	1	0.00	0	0.00
Unemployment Comp.	No	19257	92.31	19783	94.83
	Yes	428	2.05	498	2.39
	Missing	1176	5.64	573	2.75
Veteran	No	17020	81.59	16686	79.99
	Yes	2893	13.87	3464	16.61
	Missing	948	4.54	704	3.37
Past Treatment	No	14437	69.21	14517	69.59
	Yes	5590	26.80	5516	26.44
	Missing	834	4.00	821	3.94

* = p < .05

** = p < .01

*** = p < .001

**Appendix C, Table 5-2
Number and Percentage of People Attending Treatment Facilities and People with Disorders**

		Unweighted N	(Weighted N)	Unweighted %	(Weighted %)	
Treatment	Any	3921	(3589)	18.8%	(17.2%)	
	Outpatient	Any	3636	(3542)	17.4%	(17.0%)
		Specialist	1356	(1266)	6.5%	(6.1%)
		Medical, non-specialist	1628	(1578)	7.8%	(7.6%)
	Human Services	Friend	572	(563)	2.7%	(2.7%)
		Self-help Group	1020	(1180)	5.7%	(5.7%)
		Other	223	(187)	1.1%	(0.9%)
		Other	295	(242)	1.4%	(1.2%)
	Inpatient	Any	699	(301)	3.4%	(1.4%)
		Private	58	(38)	0.3%	(0.2%)
		Alcohol/Drug	67	(17)	0.3%	(<0.1%)
		General	137	(141)	0.7%	(0.7%)
		State/CMHC	286	(73)	1.4%	(0.4%)
		Veterans Administration	50	(18)	0.2%	(<0.1%)
		Other	210	(77)	1.0%	(0.4%)
Disorder	Any	6351	(6222)	30.4%	(29.8%)	
	Affective	1343	(1314)	6.4%	(6.3%)	
	Anxiety	3332	(3016)	16.0%	(14.5%)	
	Alcohol/Drug	2881	(2939)	13.8%	(14.1%)	
	ASPD	1237	(1154)	5.9%	(5.5%)	
	Schizophrenia/Shizophreniform	324	(292)	1.6%	(1.4%)	

**APPENDIX C, TABLE 6-1
ODDS-RATIOS FOR RECENT PSYCHIATRIC TREATMENT**

		Any Recent Treatment		Any Recent Outpatient Treatment		Any Recent Inpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.13*	1.08	1.14**	1.12	0.75	1.52*
	45-64	0.80***	0.85	0.81***	0.90	0.64**	1.21
	65+	0.53***	0.67***	0.52***	0.69**	0.64*	1.16
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.14*	0.80*	1.12	0.80**	1.00	0.71
	12	1.08	0.77**	1.08	0.74***	0.93	0.80
	13-15	1.34***	0.81*	1.36***	0.78**	0.40***	0.25***
	16+	1.57***	0.93	1.60***	0.80*	0.30***	0.17***
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.87*	0.93	0.87*	0.92	0.45***	0.58*
	51%-75%	0.96	1.08	0.96	1.06	0.36***	0.52*
	76%-100%	1.07	1.03	1.07	1.01	0.49***	0.77
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.07	0.96	1.07	0.96	0.87	0.81
	51%-75%	1.33***	0.89	1.33***	0.87	0.60**	0.68*
	76%-100%	1.42***	1.06	1.44***	1.01	0.45***	0.89
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.97	1.11	0.94	1.06	1.81**	1.45
	Separated	1.92***	1.49***	1.92***	1.49***	2.99***	2.01**
	Divorced	2.24***	1.47***	2.24***	1.48***	2.36***	1.34
	Single	1.41***	1.15*	1.38***	1.14	3.08***	3.35***
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.75***	0.75***	0.73***	0.72***	1.18	0.81
	Hispanic	0.85*	0.78**	0.85*	0.77***	0.18***	0.16***
	Other	0.64***	0.53***	0.64**	0.52***	0.33	0.41
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.76***	1.81***	1.78***	1.79***	1.03	0.96
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.12	1.22	0.65	1.26	1.60	1.35
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.66	1.15	0.65	1.16	0.98	1.46
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	9.90***	8.69***	10.02***	9.69***	9.94***	11.44***

* = p < .05
 ** = p < .01
 *** = p < .001

**Appendix C, TABLE 6-2
ODDS-RATIOS FOR RECENT PSYCHIATRIC OUTPATIENT TREATMENT, BY SECTOR**

		Specialist		Medical, non-specialist		Human Services	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.75***	1.68***	1.34***	1.31*	1.14	0.89
	45-64	0.98	1.09	1.45***	1.51**	0.66**	0.55**
	65+	0.34***	0.45***	1.10	1.18	0.45***	0.46**
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.29*	0.71*	0.95	0.75**	1.48*	0.96
	12	1.40***	0.82	0.78***	0.68***	1.46*	0.87
	13-15	1.70***	0.75*	0.78**	0.61***	1.84***	1.13
	16+	2.52***	0.88	0.77**	0.51***	2.08***	1.31
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.78*	0.75*	0.77**	0.97	0.73*	0.69*
	51%-75%	0.98	0.89	0.80***	1.13	0.90	0.93
	76%-100%	1.31**	0.95	0.70***	0.90	0.96	0.92
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.29**	1.10	0.95	0.98	1.18	0.85
	51%-75%	1.45***	0.87	1.02	0.73**	1.68***	0.72*
	76%-100%	1.86***	1.06	1.00	1.11	1.34*	0.72
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.67***	1.16	1.29**	1.06	0.96	1.09
	Separated	2.27***	1.65***	1.63***	1.29	4.05***	2.81***
	Divorced	2.93***	1.62***	1.80***	1.18	2.40***	1.34
	Single	1.52***	1.44***	0.98	1.09	1.19	0.72*
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.74***	0.74**	0.78***	0.71***	0.79*	0.75*
	Hispanic	0.56***	0.64**	0.59***	0.59***	0.86	0.72
	Other	0.29***	0.41**	0.43***	0.41**	0.15**	0.19*
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.49***	1.61***	1.95***	1.89***	2.66***	2.37***
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.40*	1.42	0.95	1.18	1.66*	1.53
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.88	1.37**	0.64***	0.94	0.37***	0.76
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	20.46***	17.10***	9.62***	9.23***	15.28***	12.10***

* = p < .05
 ** = p < .01
 *** = p < .001

Appendix C, TABLE 6-2 - Continued
ODDS-RATIOS FOR RECENT PSYCHIATRIC OUTPATIENT TREATMENT, BY SECTOR

		Friend		Self-help Group		Other Outpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	0.86*	0.82	1.93**	2.14*	1.44*	1.65*
	45-64	0.35***	0.44***	1.27	1.72	0.58*	1.19
	65+	0.18***	0.32***	0.47*	1.15	0.28***	0.82
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.53**	0.95	1.17	0.58	1.60	1.13
	12	1.77***	1.01	1.68	0.97	2.14**	1.45
	13-15	3.05***	1.30	2.46***	1.20	3.77***	1.86
	16+	3.97***	1.60**	1.95*	0.69	5.21***	1.68
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.05	1.08	1.46	1.04	0.95	0.78
	51%-75%	1.17	1.15	1.45	1.19	1.29	1.26
	76%-100%	1.56***	1.13	1.86*	1.06	1.98***	1.11
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.03	0.73*	1.10	1.01	1.19	1.33
	51%-75%	1.80***	0.74*	1.55*	0.89	1.78**	1.12
	76%-100%	2.20***	0.91	1.21	0.76	3.16***	2.19*
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.56***	1.13	0.54	1.03	0.59	1.07
	Separated	1.79***	1.20	1.86	2.10*	3.11***	3.39***
	Divorced	2.14***	1.45**	3.76***	2.29***	3.71***	2.57***
	Single	2.10***	1.21	1.02	1.03	2.43***	2.16***
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.61***	0.66***	0.19***	0.19***	0.36***	0.40**
	Hispanic	1.10	0.91	0.69	0.69	1.60**	2.51***
	Other	1.14	0.74	0.44	0.39	0.93	0.50
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	2.34***	2.36***	0.94	0.81	1.50**	1.39
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.87	1.02	1.02	1.19	1.47	1.33
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.29***	0.69*	1.44*	1.59*	0.49**	0.69
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	8.79***	6.60***	39.70***	34.99***	10.81***	7.92***

* = p < .05
 ** = p < .01
 *** = p < .001

**Appendix C, TABLE 6-3
ODDS-RATIOS OF THE TREATMENT SECTOR CHOICE FOR THOSE IN
RECENT PSYCHIATRIC OUTPATIENT TREATMENT**

		Specialist		Medical, non-specialist		Human Services	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.93***	2.00***	1.28*	1.35**	1.00	0.76
	45-64	1.34**	1.44*	2.89***	2.51***	0.79	0.67*
	65+	0.57***	0.70	4.45***	2.97***	0.82	0.79
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	0.00	1.00
	9-11	1.23	1.07	0.67***	0.90	1.39	1.36
	12	1.46**	1.19	0.48***	0.69**	1.42	1.37
	13-15	1.38**	0.97	0.33***	0.55***	1.43	1.43
	16+	2.04***	1.32	0.25***	0.36***	1.37	1.63*
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.86	0.74*	0.81	1.02	0.81	0.82
	51%-75%	1.03	0.82	0.72**	0.96	0.92	1.00
	76%-100%	1.38**	1.20	0.50	0.73*	0.87	1.01
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.33	1.22	0.78	0.92	1.11	1.02
	51%-75%	1.22	1.09	0.59***	0.79*	1.31*	1.10
	76%-100%	1.52**	1.09	0.51***	1.04	0.93	0.71
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.62**	1.04	2.13***	0.94	1.02	1.11
	Separated	1.30	1.06	0.74	0.68*	2.64***	2.56***
	Divorced	1.56***	1.33*	0.68***	0.67***	1.08	1.00
	Single	1.15	1.35**	0.55***	0.80*	0.83	0.67**
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	1.03	1.13	1.14	0.98	1.10	1.07
	Hispanic	0.55***	0.69*	0.55***	0.45***	1.02	1.08
	Other	0.34***	0.35**	0.52	0.57*	0.20**	0.21*
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	0.76***	0.82*	1.18*	1.10	1.60***	1.29*
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.47	1.38	0.76	0.80	1.65*	1.74*
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.65***	1.54**	0.96	0.76*	0.53***	0.66*
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	2.90***	2.81***	0.92	1.08	1.64	1.58***

* = p < .05

** = p < .01

*** = p < .001

Appendix C, TABLE 6-3 - Continued
ODDS-RATIOS OF THE TREATMENT SECTOR CHOICE FOR THOSE IN
RECENT PSYCHIATRIC OUTPATIENT TREATMENT

		Friend		Self-Help Group		Other Outpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	0.61***	0.59***	1.73*	1.52	1.29	1.56*
	45-64	0.28***	0.36***	1.61	1.36	0.71	1.27
	65+	0.20***	0.31***	0.89	1.42	0.51	1.23
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.49***	1.10	1.05	1.10	1.45	1.47
	12	1.91***	1.27	1.59	1.43	2.04	2.05*
	13-15	3.14***	1.71**	1.88*	1.52	2.94***	2.26*
	16+	3.78***	2.15***	1.24	1.14	3.53***	2.33*
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.35**	1.14	1.72*	1.63	1.10	0.92
	51%-75%	1.36**	1.08	1.54	1.36	1.37	1.12
	76%-100%	1.92***	1.36*	1.79***	1.81	1.96**	1.51
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.94	0.73*	1.02	1.03	1.12	1.03
	51%-75%	1.54*	0.88	1.16	1.14	1.35	1.00
	76%-100%	1.93***	0.93	0.84	0.62	2.36***	1.52
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.50***	0.96	0.56	0.89	0.61	1.18
	Separated	0.91	1.06	0.97	1.09	1.68	2.05*
	Divorced	0.93	0.92	1.75**	1.74**	1.72**	1.85**
	Single	1.95***	1.45***	0.73	0.84	1.83***	1.91***
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.77*	0.91	0.24***	0.29***	0.47**	0.56*
	Hispanic	1.50**	1.39*	0.80	1.03	2.00***	2.42***
	Other	2.81***	2.65***	0.67	0.70	1.49	1.34
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.49***	1.49*	0.51***	0.48***	0.83	0.83
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.70	0.83	0.92	0.85	1.36	1.51
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.34***	0.54***	2.35***	1.42	0.74	0.71
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.81*	0.68***	4.17***	4.21***	1.08	0.90

* = p < .05

** = p < .01

*** = p < .001

**Appendix C, TABLE 6-4
ODDS-RATIOS FOR RECENT INPATIENT PSYCHIATRIC TREATMENT, BY SECTOR**

		Private Hospital		Alcohol and Drug Hospital		General Hospital	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.36	5.51**	1.13	0.28	0.64*	1.84*
	45-64	0.91	6.93*	0.46	0.11*	0.49**	1.27
	65+	1.48	15.15***	0.41	0.15	0.41**	0.96
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.79	1.70	3.12	1.66	0.86	0.60
	12	1.06	1.32	0.51	0.30	1.31	0.54
	13-15	0.75	0.54	1.18	0.42	0.48*	0.18***
	16+	0.37	0.70	1.50	0.35	0.31**	0.09***
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.17	1.81	0.11	0.10	0.28*	0.33*
	51%-75%	0.28	0.64	0.27	0.38	0.62	0.56
	76%-100%	0.19	0.51	0.89	1.09	1.09	1.46
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	4.49**	4.19**	1.44	1.36	0.41***	0.54*
	51%-75%	1.82	2.08	0.08	0.09	0.56*	0.57
	76%-100%	0.19	0.28	1.31	2.02	0.45**	0.97
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	1.16	0.47	0.85	2.28	1.09	1.15
	Separated	0.70	0.37	3.18	1.49	3.21*	3.12**
	Divorced	2.42	1.48	2.58	1.57	1.62	1.09
	Single	2.76**	3.95**	0.71	0.22	2.98***	3.36***
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	2.14*	1.67	2.33	2.13	0.38***	0.25***
	Hispanic	>0.01	>0.01	0.27	0.44	0.15**	0.18**
	Other	1.55	2.48	0.09	0.09	0.25	0.36
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.42	1.14	0.49	0.61	1.24	1.01
Unemployment Status	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	3.73*	4.34*	1.56	1.27	1.00	0.72
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.96	1.61	3.14*	3.33	0.53*	0.90
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	17.28***	20.06***	21,273.14	19341.27	19.24***	21.13***

* = p < .05

** = p < .01

*** = p < .001

Appendix C, TABLE 6-4 - Continued
ODDS-RATIOS FOR RECENT INPATIENT PSYCHIATRIC TREATMENT, BY SECTOR

		State Hospital and CMHC		Veterans Administration Hospital		Nursing Homes and Other	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.18	4.03***	39.86	9.23	0.34***	0.65
	45-64	0.52	1.34	39.94	2.25	0.44***	0.56
	65+	0.41	0.34	23.12	2.27	0.52	0.52
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	0.70	0.40*	0.33	0.06*	1.11	0.67
	12	0.65	0.40*	0.93	0.21	0.84	0.34*
	13-15	0.31**	0.17***	0.16	0.01**	0.28*	0.14**
	16+	0.11**	0.07***	0.24	0.01**	0.29*	0.14**
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.41*	0.60	0.05	0.04	0.40	0.53
	51%-75%	0.18***	0.36	0.11	0.04*	0.35*	0.87
	76%-100%	0.02	0.04	0.02	0.01	0.40	0.99
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.78	0.70	0.34	0.31	1.16	1.71
	51%-75%	0.46*	0.56	0.51	1.46	0.71	1.43
	76%-100%	0.17**	0.38	1.18	5.05	0.56	2.67
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	8.88***	9.24***	1.11	2.96	4.49***	2.86*
	Separated	9.83***	7.10**	2.56	3.27	8.06***	4.42**
	Divorced	13.44***	9.98***	5.61**	3.06	5.50***	3.71**
	Single	23.12***	29.91***	0.18	0.46	5.11***	2.95*
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	1.44	0.50*	0.62	0.68	1.42	1.12
	Hispanic	0.13	0.04**	0.04	0.08	0.32	0.36
	Other	0.11	0.10	>0.01	0.02	0.64	0.92
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.25	1.23	0.17**	1.01	1.37	2.35*
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.10	0.07	1.46	0.76	2.06	3.11
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.38*	0.74	74.09***	236.64***	0.77	2.40
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	22.52***	29.28***	73.93***	140.03***	9.59***	11.20***

* = p < .05
 ** = p < .01
 *** = p < .001

**Appendix C, TABLE 6-5
ODDS-RATIOS OF THE TREATMENT SECTOR CHOICE FOR THOSE IN
RECENT INPATIENT TREATMENT**

		Private Hospital		Alcohol and Drug Hospital		General Hospital	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.86	3.74	1.49	0.27	0.66	0.45
	45-64	1.53	4.90	0.74	0.11	0.63	0.62
	65+	3.07	25.12**	0.71	0.33	0.53	0.27
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.86	2.75	3.22	3.42	0.72	0.58
	12	1.13	2.10	0.53	0.60	1.91*	0.81
	13-15	1.94	6.04	2.95	1.84	1.23	0.56
	16+	1.14	4.20	5.30	2.68	0.91	0.37
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	3.48*	6.90*	0.23	0.34	0.53	0.50
	51%-75%	0.76	0.78	0.73	3.71	2.61	2.08
	76%-100%	0.35	1.64	1.94	1.90	4.81**	6.53*
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	6.23***	10.05***	1.69	1.57	0.91	0.28**
	51%-75%	3.28*	2.19	0.12	0.03	0.78	0.60
	76%-100%	0.39	0.25	3.08	2.04	0.26***	1.10
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.63	0.20	0.47	0.88	0.45	0.70
	Separated	0.18	0.11	0.93	1.73	0.89	0.60
	Divorced	0.83	1.00	0.90	1.74	0.38*	0.44
	Single	0.83	1.64	0.20*	0.14	0.85	0.60
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	2.15*	2.37	2.22	2.13	0.18***	0.17***
	Hispanic	0.03	0.02	1.54	11.54	0.71	1.09
	Other	9.12	14.98	0.26	0.53	0.61	0.46
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.31	1.41	0.42	0.84	1.21	1.17
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	2.74	3.95	0.93	0.80	0.42	0.17
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.04	0.65	3.78*	2.61	0.41*	0.33*
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.09	0.70	2,397.52	2899.75	1.37	0.74

* = p < .05

** = p < .01

*** = p < .001

Appendix C, TABLE 6-5 - Continued
ODDS-RATIOS OF THE TREATMENT SECTOR CHOICE
FOR THOSE IN RECENT INPATIENT TREATMENT

		State Hospital and CMHC		Veterans Administration Hospital		Nursing Homes and Other	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.76	5.54***	54.46	4.16	0.33**	0.20**
	45-64	0.80	2.21	64.59	31.81	0.61	0.23*
	65+	0.68	1.02	43.20	53.69	0.88	0.30
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	0.58	0.54	0.30	1.04	1.08	0.90
	12	0.59	0.75	0.98	4.90	0.85	0.64
	13-15	0.63	0.52	0.35	0.58	0.57	0.40
	16+	0.24	0.26	0.73	0.09	0.84	1.13
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.89	1.01	0.09	0.02	0.89	0.78
	51%-75%	0.39	0.44	0.28	0.25	0.97	1.42
	76%-100%	0.03*	0.03	0.03	>0.01	0.75	0.49
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.85	1.05	2.79	0.36	1.44	1.34
	51%-75%	0.65	0.65	0.80	5.18	1.18	1.75
	76%-100%	0.29*	0.16*	0.37	58.34*	1.26	2.96
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	6.72**	7.30*	0.62	1.56	3.74**	4.01*
	Separated	3.25	2.03	0.74	12.38	3.24*	7.32**
	Divorced	6.02**	4.23*	2.18	5.03	2.36	3.79*
	Single	11.12***	24.21***	0.05*	0.10	1.78	1.19
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	1.42	0.86	0.54	4.79	1.39	1.38
	Hispanic	0.67	0.79	0.22	1.67	2.31	3.00
	Other	0.29	0.34	>0.01	0.03	2.93	4.29
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.15	1.51	0.13**	0.21	1.30	1.38
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.04	0.02	0.87	0.12	1.33	0.91
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.34*	0.41	119.90***	315.11***	0.78	1.30
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.54	2.18	4.89	3.80	0.49*	0.70

* = p < .05

** = p < .01

*** = p < .001

**Appendix C, TABLE 6-6
ODDS-RATIOS FOR RESPONDENTS WITH CHILDREN IN RECENT PSYCHIATRIC TREATMENT**

		Any Recent Treatment		Any Recent Outpatient Treatment		Any Recent Inpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.13*	1.09	1.14**	1.13	0.75	1.53*
	45-64	0.80***	0.86	0.81***	0.91	0.64**	1.22
	65+	0.53***	0.68***	0.52***	0.70**	0.64*	1.16
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.14*	0.80*	1.12	0.79**	1.00	0.71
	12	1.08	0.76***	1.08	0.72***	0.93	0.80
	13-15	1.34***	0.78**	1.36***	0.76**	0.40***	0.26***
	16+	1.57***	0.79*	1.60***	0.76**	0.30***	0.17***
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.87*	0.94	0.87*	0.93	0.45***	0.58*
	51%-75%	0.96	1.09	0.96	1.07	0.36***	0.52*
	76%-100%	1.07	1.02	1.07	1.01	0.49***	0.77
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.07	0.97	1.07	0.97	0.87	0.81
	51%-75%	1.33***	0.89	1.33***	0.87	0.60**	0.70*
	76%-100%	1.42***	1.05	1.44***	1.01	0.45***	0.89
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.97	1.11	0.94	1.06	1.81**	1.44
	Separated	1.92***	1.50***	1.92***	1.51***	2.99***	1.99**
	Divorced	2.24***	1.47***	2.24***	1.49***	2.36***	1.32
	Single	1.41***	1.13	1.38***	1.11	3.08***	3.18***
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.75***	0.77***	0.73***	0.74***	1.18	0.81
	Hispanic	0.85*	0.76***	0.85*	0.74***	0.18***	0.16***
	Other	0.64***	0.53***	0.64**	0.53***	0.33	0.41
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.76***	1.69***	1.78***	1.68***	1.03	0.99
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.12	1.24	0.65	1.27	1.60	1.34
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.66	1.18*	0.65	1.19	0.98	1.46
Have Children	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.79***	0.94	0.79***	0.93	0.61***	0.92
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	9.90***	8.73***	10.02***	9.73***	9.94***	11.44***

* = p < .05

** = p < .01

*** = p < .001

Appendix C, TABLE 6-7
ODDS-RATIOS FOR THE PERSONAL INCOME/HOUSEHOLD INCOME RATIO

		Any Recent Treatment		Any Recent Outpatient Treatment		Any Recent Inpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.13*	1.10	1.14**	1.15	0.75	1.60*
	45-64	0.80***	0.87	0.81***	0.92	0.64**	1.29
	65+	0.53***	0.68***	0.52***	0.71**	0.64*	1.28
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.14*	0.82*	1.12	0.81*	1.00	0.70
	12	1.08	0.79**	1.08	0.75***	0.93	0.77
	13-15	1.34***	0.83*	1.36***	0.80*	0.40***	0.25***
	16+	1.57***	0.87	1.60***	0.83	0.30***	0.16***
Personal Income/ Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.94	1.05	0.94	1.04	0.64	0.66
	51%-75%	0.59***	0.74***	0.57***	0.72***	0.38***	0.48*
	76%-100%	0.82***	0.94	0.81***	0.91	0.74	0.71
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.07	0.96	1.07	0.96	0.87	0.81
	51%-75%	1.33***	0.89	1.33***	0.87	0.60**	0.67*
	76%-100%	1.42***	1.07	1.44***	1.02	0.45***	0.89
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.97	1.12	0.94	1.08	1.81**	1.56
	Separated	1.92***	1.48***	1.92***	1.50***	2.99***	2.19**
	Divorced	2.24***	1.46***	2.24***	1.50***	2.36***	1.44
	Single	1.41***	1.13	1.38***	1.12	3.08***	3.53***
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.75***	0.76***	0.73***	0.73***	1.18	0.84
	Hispanic	0.85*	0.78***	0.85*	0.77***	0.18***	0.17***
	Other	0.64***	0.53***	0.64**	0.52***	0.33	0.43
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.76***	1.73***	1.78***	1.70***	1.03	0.95
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.12	1.22	0.65	1.26	1.60	1.36
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.66	1.16	0.65	1.17*	0.98	1.47
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	9.90***	8.69***	10.02***	9.71***	9.94***	11.43***

* = p < .05
 ** = p < .01
 *** = p < .001

**Appendix C, TABLE 7-1
ODDS-RATIOS FOR RECENT PSYCHIATRIC TREATMENT**

		Any Recent Treatment		Any Recent Outpatient Treatment		Any Recent Inpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Disorder Group (Lifetime)	No Disorder	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	6.14***	2.50***	7.06***	2.80***	5.34***	1.78***
	Anxiety	2.85***	1.48***	2.96***	1.51***	2.60***	1.10
	Alcohol/Drug	2.04***	1.14*	2.18***	1.24***	2.98***	1.61***
	ASPD	2.08***	1.19*	2.18***	1.24*	2.58***	1.05
	Schizophrenia	7.31***	2.71***	8.70***	3.15***	15.16***	5.58***
	Past Treatment	No	1.00	1.00	1.00	1.00	1.00
	Yes	9.90***	7.26***	10.02***	8.06***	9.94***	6.60***

* = p < .05

** = p < .01

*** = p < .001

**Appendix C, TABLE 7-2
ODDS-RATIOS FOR RECENT PSYCHIATRIC TREATMENT, BY SECTOR**

		Specialist		Medical, non-specialist		Human Services	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Disorder Group	No Disorder	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	8.90***	2.66***	6.24***	2.82***	6.12***	2.17***
	Anxiety	3.84***	1.45***	3.03***	1.57***	2.69***	1.27*
	Alcohol/Drug	2.81***	1.51***	1.73***	1.00	1.55***	0.80
	ASPD	2.50***	1.00	1.64***	0.95	2.38***	1.23
	Schizophrenia	13.38***	3.66***	8.69***	3.40***	10.30***	3.96***
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	20.46***	13.99***	9.62***	6.86***	15.28***	11.89***

* = p < .05

** = p < .01

*** = p < .001

Appendix C, TABLE 7-2 - Continued
ODDS-RATIOS FOR RECENT PSYCHIATRIC TREATMENT, BY SECTOR

	Friend		Self-help		Other		
	Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate	
Disorder Group	No Disorder	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	6.20***	2.62***	9.32***	2.48***	7.50***	2.66***
	Anxiety	2.77***	1.49***	3.11***	1.20	3.33***	1.49*
	Alcohol/Drug	1.87***	1.01	12.39***	5.85***	2.63***	1.67**
	ASPD	1.93***	1.10	8.67***	2.13***	2.10***	0.86
	Schizophrenia	5.33***	2.06***	5.54***	0.59	9.06***	2.89**
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	8.79***	6.64***	39.70***	21.50***	10.81***	7.29***

* = p < .05
 ** = p < .01
 *** = p < .001

**Appendix C, TABLE 7-3
ODDS-RATIOS OF THE TREATMENT SECTOR CHOICE FOR THOSE
IN RECENT PSYCHIATRIC TREATMENT**

		Specialist		Medical, non-specialist		Human Services	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Disorder Group	No Disorder	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	1.85***	1.27*	1.02	1.12	0.99	0.84
	Anxiety	1.36***	1.04	1.10	1.12	0.93	0.86
	Alcohol/Drug	1.67***	1.39***	0.74***	0.78**	0.72**	0.60***
	ASPD	1.39***	0.93	0.69**	0.81	1.20	1.32
	Schizophrenia	3.17***	2.17***	1.38*	1.57**	1.51*	1.51*
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	2.90***	2.44***	0.92	0.89	1.64	1.77***

* = p < .05

** = p < .01

*** = p < .001

Appendix C, TABLE 7-3 - Continued
ODDS-RATIOS OF THE TREATMENT SECTOR CHOICE FOR THOSE
IN RECENT PSYCHIATRIC TREATMENT

		Friend		Self-help Group		Other	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Disorder Group	No Disorder	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	1.01	1.05	1.55*	1.12	1.24	1.22
	Anxiety	0.95	1.01	1.09	0.87	1.17	1.10
	Alcohol/Drug	0.87	0.90	6.91***	5.27***	1.30	1.29
	ASPD	0.92	0.98	4.90***	2.12***	1.03	0.90
	Schizophrenia	0.63*	0.64*	0.74	0.37*	1.25	1.13
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.81*	0.82*	4.17***	2.81***	1.08	0.93

* = p < .05

** = p < .01

*** = p < .001

**Appendix C, TABLE 7-4
ODDS-RATIOS FOR RECENT INPATIENT PSYCHIATRIC TREATMENT, BY SECTOR**

		Private		Alcohol and Drug Hospital		General Hospital	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Disorder Group	No Disorder	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	9.66***	3.53**	11.41***	1.94	15.54***	5.13***
	Anxiety	2.18*	1.11	4.32**	2.79	2.99***	1.01
	Alcohol/Drug	2.75**	1.80	35.64***	18.68***	2.58***	1.35
	ASPD	3.65**	1.64	12.78***	2.25	3.10***	1.26
	Schizophrenia	6.72*	0.77	2.24	0.16	17.64***	6.12***
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	17.28***	12.62***	****	****	19.24***	10.91***

* = p < .05

** = p < .01

*** = p < .001

**** = Low Precision

Appendix C, TABLE 7-4 - Continued
ODDS-RATIOS FOR RECENT INPATIENT PSYCHIATRIC TREATMENT, BY SECTOR

		State Hospital and CMHC		Veterans Administration Hospital		Nursing Home and Other	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Disorder Group	No Disorder	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	10.87***	1.60	21.31***	2.42	8.07***	3.33***
	Anxiety	5.51***	2.26*	7.94***	1.45	2.49***	1.45
	Alcohol/Drug	2.50***	1.17	19.86***	9.44***	2.47***	1.48
	ASPD	3.47***	1.50	3.66	0.54	2.35*	1.11
	Schizophrenia	76.42***	24.85***	116.19***	15.85***	21.79***	7.59***
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	22.52***	13.86***	73.93***	29.70***	9.59***	5.79***

* = p < .05
 ** = p < .01
 *** = p < .001

**Appendix C, TABLE 7-5
ODDS-RATIOS OF THE TREATMENT SECTOR CHOICE FOR THOSE
IN RECENT INPATIENT TREATMENT**

		Private		Alcohol and Drug Hospital		General Hospital	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Disorder Group	No Disorder	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	0.92	1.16	1.11	0.49	2.31**	3.89***
	Anxiety	0.60	0.62	1.29	1.44	0.79	0.53
	Alcohol/Drug	0.73	0.73	11.29**	7.78**	0.54*	0.46*
	ASPD	1.16	1.23	4.58**	1.43	0.94	1.14
	Schizophrenia	0.19	0.18	0.07	0.04	0.39**	0.36**
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.09	1.76	2397.52	851.88	1.37	1.68

* = p < .05

** = p < .01

*** = p < .001

Appendix C, TABLE 7-5 - Continued
ODDS-RATIOS OF THE TREATMENT SECTOR CHOICE FOR THOSE
IN RECENT INPATIENT TREATMENT

		State Hospital and CMHC		Veterans Administration Hospital		Nursing Home and Other	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Disorder Group	No Disorder	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	1.06	0.58	2.16	1.51	1.24	1.08
	Anxiety	1.93*	2.94**	2.47	0.91	1.17	0.81
	Alcohol/Drug	0.61	0.29**	6.11***	4.84*	1.30	0.87
	ASPD	1.11	1.82	1.15	0.65	1.03	0.97
	Schizophrenia	3.76***	5.87***	4.17**	2.31	1.25	0.77
	Past Treatment	No	1.00	1.00	1.00	1.00	1.00
	Yes	1.54	1.17	4.89	1.76	0.49*	0.55

* = p < .05

** = p < .01

*** = p < .001

**Appendix C, TABLE 7-6
ODDS-RATIOS OF THOSE WITH SYMPTOMS OF MENTAL ILLNESS
BUT NO DISORDER IN RECENT PSYCHIATRIC TREATMENT**

		Any Recent Treatment		Any Recent Outpatient Treatment		Any Recent Inpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
# of subclinical symptoms		1.17***	1.09***	1.18***	1.09***	1.24***	1.19***
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	9.90***	6.12***	10.02***	6.52***	9.94***	2.88***

* = p < .05

** = p < .01

*** = p < .001

**Appendix C, TABLE 8-1
ODDS-RATIOS FOR RECENT PSYCHIATRIC TREATMENT**

		Any Recent Treatment		Any Recent Outpatient Treatment		Any Recent Inpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.13*	0.98	1.14**	1.00	0.75	1.23
	45-64	0.80***	0.86	0.81***	0.91	0.64**	1.21
	65+	0.53***	0.77*	0.52***	0.81	0.64**	1.44
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.14*	0.81*	1.12	0.81*	1.00	0.82
	12	1.08	0.82*	1.08	0.78**	0.93	0.97
	13-15	1.34***	0.87	1.36***	0.86	0.40***	0.31***
	16+	1.57***	0.98	1.60***	0.95	0.30***	0.25***
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.87*	0.98	0.87*	0.97	0.45***	0.64
	51%-75%	0.96	1.16	0.96	1.15	0.36***	0.61
	76%-100%	1.07	1.12	1.07	1.10	0.49***	0.89
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.07	0.92	1.07	0.92	0.87	0.76
	51%-75%	1.33***	0.87	1.33***	0.86	0.60**	0.68*
	76%-100%	1.42***	1.06	1.44***	1.02	0.45***	0.83
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.97	1.03	0.94	0.97	1.81**	1.31
	Separated	1.92***	1.36**	1.92***	1.35**	2.99***	1.81*
	Divorced	2.24***	1.29**	2.24***	1.27**	2.36***	1.14
	Single	1.41***	1.11	1.38***	1.10	3.08***	3.03***
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.75***	0.76***	0.73***	0.73***	1.18	0.84
	Hispanic	0.85*	0.77**	0.85*	0.74**	0.18***	0.17***
	Other	0.64***	0.54***	0.64**	0.53***	0.33	0.47
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.76***	1.97***	1.78***	1.98***	1.03	0.98
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.12	1.19	0.65	1.22	1.60	1.42
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.66	1.17	0.65	1.18*	0.98	1.39
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	9.90***	6.37***	10.02***	6.98***	9.94***	7.67***
Disorder Group	None	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	6.14***	2.36***	7.06***	2.64***	5.34***	2.19***
	Anxiety	2.85***	1.44***	2.96***	1.46***	2.60***	1.06
	Aich./Drug	2.04***	1.45***	2.18***	1.58***	2.98***	1.50**
	ASPD	2.08***	1.34***	2.18***	1.39***	2.58***	1.01
	Schiz.	7.31***	2.68***	8.70***	3.09***	15.16***	4.87***

* = p < .05
 ** = p < .01
 *** = p < .001

Appendix C, TABLE 8-2
ODDS-RATIOS FOR RECENT PSYCHIATRIC OUTPATIENT TREATMENT, BY SECTOR

		Specialist		Medical, non-specialist		Human Services	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.75***	1.41**	1.34***	1.16	1.14	0.81
	45-64	0.98	1.07	1.45***	1.52**	0.66**	0.55**
	65+	0.34***	0.52**	1.10	1.39*	0.45***	0.51*
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.29*	0.71*	0.95	0.76*	1.48*	0.96
	12	1.40***	0.89	0.78***	0.71**	1.46*	0.90
	13-15	1.70***	0.86	0.78**	0.65***	1.84***	1.17
	16+	2.52***	1.14	0.77**	0.60***	2.08***	1.51
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.78*	0.80	0.77**	1.00	0.73*	0.67*
	51%-75%	0.98	1.01	0.80***	1.23	0.90	0.93
	76%-100%	1.31**	1.12	0.70***	0.98	0.96	0.96
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.29**	1.07	0.95	0.93	1.18	0.79
	51%-75%	1.45***	0.88	1.02	0.71***	1.68***	0.73
	76%-100%	1.86***	1.08	1.00	1.12	1.34*	0.76
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.67***	1.03	1.29**	1.00	0.96	1.02
	Separated	2.27***	1.52**	1.63***	1.11	4.05***	2.49***
	Divorced	2.93***	1.39**	1.80***	1.02	2.40***	1.19
	Single	1.52***	1.32**	0.98	1.07	1.19	0.69*
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.74***	0.74**	0.78***	0.71***	0.79*	0.72*
	Hispanic	0.56***	0.64**	0.59***	0.60***	0.86	0.75
	Other	0.29***	0.43*	0.43***	0.42**	0.15**	0.21*
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.49***	1.78***	1.95***	1.92***	2.66***	2.55***
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.40*	1.38	0.95	1.13	1.66*	1.53
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.88	1.43**	0.64***	0.98	0.37***	0.84
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	20.46***	11.86***	9.62***	6.57***	15.28***	9.54***
Disorder Group	None	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	8.90***	2.46***	6.24***	2.75***	6.12***	1.93***
	Anxiety	3.84***	1.47***	3.03***	1.46***	2.69***	1.18
	Alch./Drug	2.81***	1.75***	1.73***	1.29*	1.55***	1.14
	ASPD	2.50***	1.09	1.64***	1.13	2.38***	1.39
	Schiz.	13.38***	3.72***	8.69***	3.28***	10.30***	4.10***

* = p < .05

** = p < .01

*** = p < .001

Appendix C, TABLE 8-2 - Continued
ODDS-RATIOS FOR RECENT PSYCHIATRIC OUTPATIENT TREATMENT, BY SECTOR

		Friend		Self-help Group		Other Outpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	0.86*	0.74**	1.93**	1.68	1.44*	1.50
	45-64	0.35***	0.45***	1.27	1.97	0.58*	1.19
	65+	0.18***	0.37***	0.47*	1.90	0.28***	0.96
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.53**	0.95	1.17	0.62	1.60	1.04
	12	1.77***	1.04	1.68	1.21	2.14**	1.40
	13-15	3.05***	1.35	2.46***	1.39	3.77***	1.88
	16+	3.97***	1.83***	1.95*	0.98	5.21***	1.85
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.05	1.12	1.46	1.03	0.95	0.81
	51%-75%	1.17	1.24	1.45	1.21	1.29	1.38
	76%-100%	1.56***	1.21	1.86*	1.23	1.98***	1.32
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.03	0.65**	1.10	0.98	1.19	1.21
	51%-75%	1.80***	0.71**	1.55*	1.00	1.78**	1.11
	76%-100%	2.20***	0.90	1.21	1.00	3.16***	2.21**
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.56***	1.05	0.54	0.89	0.59	1.08
	Separated	1.79***	1.08	1.86	1.46	3.11***	2.91***
	Divorced	2.14***	1.27	3.76***	1.55	3.71***	2.25***
	Single	2.10***	1.18	1.02	0.81	2.43***	2.16***
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.61***	0.65***	0.19***	0.23***	0.36***	0.39**
	Hispanic	1.10	0.88	0.69	0.63	1.60**	2.60***
	Other	1.14	0.79	0.44	0.30	0.93	0.56
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	2.34***	2.55***	0.94	1.80*	1.50**	1.52*
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.87	0.95	1.02	0.84	1.47	1.16
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.29***	0.70*	1.44*	1.45	0.49**	0.75
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	8.79***	4.84***	39.70***	18.68***	10.81***	5.52***
Disorder Group	None	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	6.20***	2.47***	9.32***	2.31***	4.64***	2.14***
	Anxiety	2.77***	1.53***	3.11***	1.18	2.02***	1.75**
	Alcohol/Drug	1.87***	1.45***	12.39***	6.51***	1.94***	1.96**
	ASPD	1.93***	1.40*	8.67***	2.41***	0.96	0.91
	Schizophrenia	5.33***	2.13***	5.54***	0.63	3.12***	3.49***

* = p < .05
 ** = p < .01
 *** = p < .001

**Appendix C, TABLE 8-3
ODDS-RATIOS OF THE SECTOR CHOICE FOR THOSE
IN RECENT PSYCHIATRIC OUTPATIENT TREATMENT**

		Specialist		Medical, non-specialist		Human Services	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.93***	1.93***	1.28*	1.34*	1.00	0.77
	45-64	1.34**	1.47**	2.89***	2.51***	0.79	0.68*
	65+	0.57***	0.74	4.45***	3.01***	0.82	0.78
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	0.00	1.00
	9-11	1.23	1.17	0.67***	0.91	1.39	1.41
	12	1.46**	1.32	0.48***	0.70**	1.42	1.42
	13-15	1.38**	1.12	0.33***	0.56***	1.43	1.46
	16+	2.04***	1.60**	0.25***	0.37***	1.37	1.69*
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.86	0.81	0.81	1.04	0.81	0.83
	51%-75%	1.03	0.89	0.72**	0.98	0.92	1.00
	76%-100%	1.38**	1.31	0.50	0.76	0.87	1.00
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.33	1.20	0.78	0.92	1.11	1.04
	51%-75%	1.22	1.09	0.59***	0.78	1.31*	1.12
	76%-100%	1.52**	1.09	0.51***	1.02	0.93	0.71
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.62**	1.01	2.13***	0.94	1.02	1.16
	Separated	1.30	1.07	0.74	0.66*	2.64***	2.59***
	Divorced	1.56***	1.28*	0.68***	0.67***	1.08	1.01
	Single	1.15	1.28*	0.55***	0.79*	0.83	0.66**
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	1.03	1.14	1.14	1.00	1.10	1.08
	Hispanic	0.55***	0.71*	0.55***	0.46***	1.02	1.12
	Other	0.34***	0.36**	0.52	0.59	0.20**	0.22*
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	0.76***	0.82*	1.18*	1.03	1.60***	1.25
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.47	1.42	0.76	0.82	1.65*	1.63
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.65***	1.50**	0.96	0.80	0.53***	0.69
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	2.90***	2.42***	0.92	1.04	1.64	1.70***
Disorder Group	None	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	1.85***	1.24*	1.04	1.17	0.99	0.81
	Anxiety	1.36***	1.08	1.11	1.03	0.93	0.82
	Alcohol/Drug	1.67***	1.26*	0.78**	0.78*	0.72**	0.70**
	ASPD	1.39***	0.86	0.76*	0.94	1.20	1.27
	Schizophrenia	3.17***	2.21***	1.48*	1.46*	1.51*	1.72**

* = p < .05
 ** = p < .01
 *** = p < .001

Appendix C, TABLE 8-3 - Continued
ODDS-RATIOS OF THE SECTOR CHOICE FOR THOSE IN
RECENT PSYCHIATRIC OUTPATIENT TREATMENT, BY SECTOR

		Friend		Self-help Group		Other Outpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	0.61***	0.58***	1.73*	1.60	1.29	1.51
	45-64	0.28***	0.36***	1.61	2.02*	0.71	1.26
	65+	0.20***	0.30***	0.89	2.39	0.51	1.31
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.49***	1.14	1.05	1.10	1.45	1.52
	12	1.91***	1.31	1.59	1.43	2.04	2.15*
	13-15	3.14***	1.79***	1.88*	1.53	2.94***	2.45**
	16+	3.78***	2.20***	1.24	1.46	3.53***	2.45**
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.35**	1.15	1.72*	1.74	1.10	0.97
	51%-75%	1.36**	1.09	1.54	1.51	1.37	1.18
	76%-100%	1.92***	1.37*	1.79***	2.00*	1.96**	1.60
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.94	0.71*	1.02	0.99	1.12	1.01
	51%-75%	1.54*	0.80	1.16	1.27	1.35	1.00
	76%-100%	1.93***	0.94	0.84	0.80	2.36***	1.54
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.50***	0.94	0.56	0.81	0.61	1.18
	Separated	0.91	1.07	0.97	1.12	1.68	2.07*
	Divorced	0.93	0.92	1.75**	1.46	1.72**	1.77**
	Single	1.95***	1.46***	0.73	0.82	1.83***	1.84**
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.77*	0.90	0.24***	0.29***	0.47**	0.56*
	Hispanic	1.50**	1.37*	0.80	0.87	2.00***	2.46***
	Other	2.81***	2.63***	0.67	0.73	1.49	1.37
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.49***	1.51***	0.51***	1.02	0.83	0.85
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.70	0.82	0.92	0.97	1.36	1.58
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.34***	0.54***	2.35***	1.22	0.74	0.68
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.81*	0.64***	4.17***	2.81***	1.08	0.79
Disorder Group	None	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	1.01	1.01	1.55*	1.02	1.24	1.14
	Anxiety	0.95	1.08	1.09	0.92	1.17	1.29
	Alcohol/Drug	0.87	1.11	6.91***	5.72***	1.30	1.28
	ASPD	0.92	0.96	4.90***	2.32***	1.03	0.83
	Schizophrenia	0.63*	0.66*	0.74	0.44	1.25	1.38

* = p < .05

** = p < .01

*** = p < .001

**Appendix C, TABLE 8-4
ODDS-RATIOS FOR RECENT INPATIENT PSYCHIATRIC TREATMENT**

		Private Hospital		Inpatient, Alcohol and Drug		General Hospital	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.36	5.39*	1.13	0.68	0.64*	1.16
	45-64	0.91	7.80*	0.46	0.28	0.49**	1.25
	65+	1.48	17.15***	0.41	0.93	0.41**	1.34
Highest Grade Level	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.79	2.04	3.12	2.00	0.86	0.87
	12	1.06	1.27	0.51	0.25	1.31	0.80
	13-15	0.75	0.56	1.18	0.37	0.48*	0.33**
	16+	0.37	0.83	1.50	0.29	0.31**	0.20**
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.17	1.70	0.11	0.07	0.28*	0.34*
	51%-75%	0.28	0.69	0.27	0.37	0.62	0.58
	76%-100%	0.19	0.58	0.89	3.11	1.09	1.99
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	4.49**	4.29**	1.44	0.90	0.41***	0.53*
	51%-75%	1.82	2.11	0.08	0.14	0.56*	0.50*
	76%-100%	0.19	0.28	1.31	3.40	0.45**	0.75
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	1.16	0.51	0.85	3.55	1.09	1.04
	Separated	0.70	0.31	3.18	1.82	3.21*	2.99**
	Divorced	2.42	1.38	2.58	1.41	1.62	0.75
	Single	2.76**	4.05**	0.71	0.46	2.98***	2.95***
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	2.14*	1.72	2.33	1.82	0.38***	0.23***
	Hispanic	>0.01	0.01	0.27	0.21	0.15**	0.21*
	Other	1.55	2.57	0.09	0.16	0.25	0.48
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.42	1.16	0.49	1.14	1.24	1.02
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	3.73*	3.81	1.56	1.14	1.00	0.61
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.96	1.65	3.14*	4.20	0.53*	0.99
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	17.28***	14.06***	****	****	19.24***	11.79***
Disorder Group	None	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	9.66***	3.97**	11.41***	3.05	15.54***	5.85***
	Anxiety	2.18*	1.04	4.32**	3.18	2.99***	1.11
	Alcohol/Drug	2.75**	1.58	35.64***	26.37***	2.58***	1.29
	ASPD	3.65**	1.54	12.78***	1.20	3.10***	1.29
	Schizophrenia	6.72*	0.83	2.24	0.21	17.64***	7.56***

* = p < .05

** = p < .01

*** = p < .001

**** Low Precision

Appendix C, TABLE 8-4 - Continued
ODDS-RATIOS FOR THOSE IN RECENT INPATIENT PSYCHIATRIC TREATMENT

		State Hospital and CMHC		Veterans Administration Hospital		Nursing Homes and Other	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.18	3.06*	39.86	3.85	0.34***	0.53
	45-64	0.52	2.79	39.94	3.38	0.44***	0.65
	65+	0.41	1.15	23.12	4.71	0.52	0.73
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	0.70	0.57	0.33	0.11*	1.11	0.67
	12	0.65	0.54	0.93	0.16	0.84	0.33*
	13-15	0.31**	0.15**	0.16	0.04	0.28*	0.14**
	16+	0.11**	0.21	0.24	0.05	0.29*	0.20*
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.41*	0.72	0.05	0.05	0.40	0.51
	51%-75%	0.18***	0.15*	0.11	0.12	0.35*	0.90
	76%-100%	0.02	0.05	0.02	0.02	0.40	1.02
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.78	0.72	0.34	0.36	1.16	1.98
	51%-75%	0.46*	0.76	0.51	0.87	0.71	1.94
	76%-100%	0.17**	0.20	1.18	1.63	0.56	3.23*
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	8.88***	6.28**	1.11	3.24	4.49***	2.37
	Separated	9.83***	3.77	2.56	3.65	8.06***	2.90
	Divorced	13.44***	4.18*	5.61**	2.49	5.50***	2.79*
	Single	23.12***	20.66***	0.18	0.43	5.11***	2.71*
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	1.44	0.64	0.62	0.33	1.42	1.10
	Hispanic	0.13	0.14	0.04	0.08	0.32	0.37
	Other	0.11	0.14	>0.01	0.01	0.64	0.96
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.25	0.61	0.17**	0.52	1.37	2.37*
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.10	0.08	1.46	1.99	2.06	3.34
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.38*	0.75	74.09***	92.08**	0.77	2.56
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	22.52***	17.30***	73.93***	79.13***	9.59***	7.13***
Disorder Group	None	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	10.87***	2.99**	21.31***	1.42	8.07***	3.67***
	Anxiety	5.51***	2.25*	7.94***	1.06	2.49***	1.29
	Alcohol/Drug	2.50***	0.63	19.86***	3.60	2.47***	1.80
	ASPD	3.47***	2.92*	3.66	1.00	2.35*	1.37
	Schizophrenia	76.42***	24.29***	116.19***	33.89*	21.79***	8.02***

* = p < .05
 ** = p < .01
 *** = p < .001

**Appendix C, TABLE 8-5
ODDS-RATIOS OF THE TREATMENT SECTOR CHOICE FOR THOSE
IN RECENT INPATIENT TREATMENT**

		Private Hospital		Inpatient, Alcohol and Drug		General Hospital	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.86	4.60	1.49	0.15	0.66	0.84
	45-64	1.53	4.82	0.74	0.11	0.63	0.72
	65+	3.07	20.17**	0.71	0.09	0.53	0.37
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.86	2.12	3.22	9.51	0.72	0.47
	12	1.13	2.24	0.53	4.85	1.91*	0.70
	13-15	1.94	6.86	2.95	3.19	1.23	0.55
	16+	1.14	1.95	5.30	2.93	0.91	0.21
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	3.48*	4.72	0.23	0.19	0.53	0.45
	51%-75%	0.76	0.73	0.73	1.98	2.61	2.31
	76%-100%	0.35	2.29	1.94	17.34	4.81**	8.34*
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	6.23***	10.24***	1.69	4.40	0.91	0.20***
	51%-75%	3.28*	2.11	0.12	0.05	0.78	0.43
	76%-100%	0.39	0.28	3.08	26.60	0.26***	0.75
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.63	0.29	0.47	0.72	0.45	0.77
	Separated	0.18	0.07	0.93	1.00	0.89	0.98
	Divorced	0.83	1.94	0.90	1.47	0.38*	0.37
	Single	0.83	2.88	0.20*	0.06	0.85	0.88
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	2.15*	2.84	2.22	1.34	0.18***	0.17***
	Hispanic	0.03	0.03	1.54	13.06	0.71	1.61
	Other	9.12	21.86	0.26	1.32	0.61	0.26
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.31	1.60	0.42	2.04	1.21	1.39
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	2.74	4.82	0.93	0.19	0.42	0.16
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.04	0.77	3.78*	4.75	0.41*	0.30*
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.09	1.56	2,397.52	1390.41	1.37	0.64
Disorder Group	None	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	0.92	0.63	1.11	0.22	2.31**	3.60**
	Anxiety	0.60	0.49	1.29	1.60	0.79	0.49
	Alcohol/Drug	0.73	0.36	11.29**	34.64*	0.54*	1.37
	ASPD	1.16	2.11	4.58**	3.24	0.94	0.80
	Schizophrenia	0.19	0.09	0.07	0.01	0.39**	0.19**

* = p < .05

** = p < .01

*** = p < .001

Appendix C, TABLE 8-5 - Continued
ODDS-RATIOS OF THE TREATMENT SECTOR CHOICE FOR THOSE
IN RECENT INPATIENT TREATMENT

		State Hospital and CMHC		Veterans Administration Hospital		Nursing Homes and Other	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.76	3.38*	54.46	175.66	0.33**	1.51
	45-64	0.80	1.31	64.59	1251.23	0.61	1.26
	65+	0.68	0.56	43.20	1510.55	0.88	1.31
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	0.58	0.62	0.30	1.69	1.08	1.52
	12	0.59	0.89	0.98	3.43	0.85	2.15**
	13-15	0.63	0.73	0.35	0.13	0.57	2.45**
	16+	0.24	0.35	0.73	0.11	0.84	2.45**
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.89	1.44	0.09	0.01	0.89	0.97
	51%-75%	0.39	0.37	0.28	0.46	0.97	1.18
	76%-100%	0.03*	0.04	0.03	0.01	0.75	1.60
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.85	1.33	2.79	0.75	1.44	1.01
	51%-75%	0.65	0.62	0.80	7.68	1.18	0.99
	76%-100%	0.29*	0.10	0.37	64.23	1.26	1.54
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	6.72**	5.06	0.62	2.25	3.74**	1.18
	Separated	3.25	3.38	0.74	17.40	3.24*	2.07*
	Divorced	6.02**	3.73	2.18	6.65	2.36	1.77**
	Single	11.12***	16.30***	0.05*	0.32	1.78	1.84**
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	1.42	0.82	0.54	3.31	1.39	0.56*
	Hispanic	0.67	0.90	0.22	2.14	2.31	2.46***
	Other	0.29	0.35	>0.01	0.11	2.93	1.37
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.15	1.11	0.13**	0.24	1.30	0.85
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.04	0.07	0.87	0.02	1.33	1.58
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.34*	0.60	119.90***	567.50**	0.78	0.68
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.54	2.35	4.89	6.49	0.49*	0.79
Disorder Group	None	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	1.06	0.93	2.16	0.19	1.24	1.14
	Anxiety	1.93*	3.19*	2.47	0.29	1.17	1.29
	Alch./Drug	0.61	0.18**	6.11***	1.32	1.30	1.28
	ASPD	1.11	1.77	1.15	0.27	1.03	0.83
	Schiz.	3.76***	3.97**	4.17**	12.50	1.25	1.38

* = p < .05

** = p < .01

*** = p < .001

TABLE 8-6
ODDS-RATIOS FOR RECENT PSYCHIATRIC TREATMENT, FOR THOSE MEETING
DIAGNOSTIC CRITERIA 1-2 YEARS BEFORE RECENT PERIOD

		Any Recent Treatment		Any Recent Outpatient Treatment		Any Recent Inpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.03	1.03	1.04	1.09	0.47***	1.15
	45-64	0.72***	0.90	0.72***	0.95	0.51**	1.67
	65+	0.51***	0.75*	0.50***	0.80	0.49**	1.20
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.29**	0.86	1.30**	0.88	1.02	0.67
	12	1.18*	0.80*	1.18*	0.76*	1.44	1.25
	13-15	1.36***	0.77*	1.37***	0.76*	0.41**	0.33*
	16+	1.87***	0.99	1.90***	0.97	0.27	0.25*
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.02	1.28*	1.01	1.23	0.55	0.71
	51%-75%	1.06	1.46***	1.05	1.42**	0.41**	0.72
	76%-100%	1.25**	1.41**	1.24**	1.40**	0.62	0.87
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.11	0.96	1.11	0.98	1.03	0.92
	51%-75%	1.34***	0.86	1.35***	0.84	0.64	0.67
	76%-100%	1.50***	0.98	1.50***	0.95	0.39***	0.53
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	1.03	1.17	0.99	1.11	2.30**	1.90
	Separated	2.40***	1.80***	2.40***	1.73***	5.29***	3.71***
	Divorced	2.31***	1.59***	2.35***	1.59***	1.98*	1.02
	Single	1.49***	1.11	1.46***	1.10	3.81***	3.20***
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.75***	0.78**	0.73***	0.76**	0.96	0.58*
	Hispanic	0.89	0.73*	0.89	0.72**	0.28**	0.21**
	Other	0.74	0.49**	0.74	0.50**	0.29	0.43
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.82***	1.96***	1.84***	1.99***	0.86	0.69
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.30	1.77**	1.27	1.72***	3.48***	3.22**
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.59***	1.09	0.59***	1.13	0.74	0.73
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	8.80***	6.27***	9.74***	6.76***	7.16***	6.78***
Disorder Group	None	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	4.08***	2.53***	5.05***	3.03***	1.65	1.90
	Anxiety	2.61***	2.10***	2.61***	2.04***	2.22**	2.50**
	Alch./Drug	1.88***	1.48*	1.88***	1.48*	4.29***	2.52**
	ASPD	1.01	0.94	1.30	1.40	0.60	0.55
	Schiz.	4.24***	3.09***	5.38***	3.94***	5.63***	5.34**

* = p < .05
 ** = p < .01
 *** = p < .001

**Appendix C, TABLE 8-7
ODDS-RATIOS FOR RESPONDENTS WITH CHILDREN IN RECENT PSYCHIATRIC TREATMENT**

		Any Recent Treatment		Any Recent Outpatient Treatment		Any Recent Inpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.13*	0.97	1.14**	1.00	0.75	1.24
	45-64	0.80***	0.85	0.81***	0.90	0.64**	1.23
	65+	0.53***	0.77*	0.52***	0.80	0.64*	1.44
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.14*	0.81*	1.12	0.81*	1.00	0.83
	12	1.08	0.82*	1.08	0.78**	0.93	0.97
	13-15	1.34***	0.87	1.36***	0.86	0.40***	0.31***
	16+	1.57***	0.99	1.60***	0.95	0.30***	0.25***
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.87*	0.98	0.87*	0.97	0.45***	0.63
	51%-75%	0.96	1.17	0.96	1.15	0.36***	0.60
	76%-100%	1.07	1.12	1.07	1.11	0.49***	0.88
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.07	0.92	1.07	0.92	0.87	0.77
	51%-75%	1.33***	0.88	1.33***	0.86	0.60**	0.68*
	76%-100%	1.42***	1.05	1.44***	1.02	0.45***	0.84
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.97	1.04	0.94	0.98	1.81**	1.30
	Separated	1.92***	1.36**	1.92***	1.35**	2.99***	1.78*
	Divorced	2.24***	1.29**	2.24***	1.28**	2.36***	1.12
	Single	1.41***	1.13	1.38***	1.12	3.08***	2.77***
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.75***	0.76***	0.73***	0.72***	1.18	0.86
	Hispanic	0.85*	0.76**	0.85*	0.74**	0.18***	0.17***
	Other	0.64***	0.54***	0.64**	0.53***	0.33	0.47
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.76***	1.95***	1.78***	1.97***	1.03	1.01
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.12	1.19	0.65	1.22	1.60	1.40
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.66	1.17	0.65	1.18*	0.98	1.40
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	9.90***	6.40***	10.02***	6.99***	9.94***	7.76***
Disorder Group	None	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	4.30***	2.35***	4.93***	2.64***	2.95***	2.20***
	Anxiety	1.96***	1.44***	2.01***	1.46***	1.40*	1.06
	Alch./Drug	1.59***	1.46***	1.69***	1.58***	2.06***	1.50**
	ASPD	1.26***	1.33**	1.32***	1.39***	1.14	1.02
	Schiz.	3.39***	2.68***	3.98***	3.09***	7.04***	4.86***
Children	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.79***	1.04	0.79***	1.04	0.61***	0.86

* = p < .05
 ** = p < .01
 *** = p < .001

TABLE 8-8
ODDS-RATIOS FOR THE PERSONAL INCOME/HOUSEHOLD INCOME RATIO

		Any Recent Treatment		Any Recent Outpatient Treatment		Any Recent Inpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.13*	1.00	1.14**	1.03	0.75	1.27
	45-64	0.80***	0.87	0.81***	0.93	0.64**	1.27
	65+	0.53***	0.77*	0.52***	0.81	0.64*	1.56
Highest Grade Level	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.14*	0.81*	1.12	0.82*	1.00	0.83
	12	1.08	0.84*	1.08	0.80**	0.93	0.95
	13-15	1.34***	0.90	1.36***	0.88	0.40***	0.31***
	16+	1.57***	1.03	1.60***	0.99	0.30***	0.25***
Personal Income/ Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.94	1.02	0.94	1.01	0.64	0.64
	51%-75%	0.59***	0.72***	0.57***	0.71***	0.38***	0.50*
	76%-100%	0.82***	0.92	0.81***	0.89	0.74	0.75
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.07	0.91	1.07	0.91	0.87	0.75
	51%-75%	1.33***	0.88	1.33***	0.87	0.60**	0.67*
	76%-100%	1.42***	1.07	1.44***	1.04	0.45***	0.84
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.97	1.03	0.94	0.98	1.81**	1.39
	Separated	1.92***	1.34**	1.92***	1.34**	2.99***	1.92*
	Divorced	2.24***	1.27*	2.24***	1.27**	2.36***	1.21
	Single	1.41***	1.08	1.38***	1.07	3.08***	3.17***
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.75***	0.76***	0.73***	0.72***	1.18	0.87
	Hispanic	0.85*	0.77**	0.85*	0.74**	0.18***	0.17***
	Other	0.64***	0.54***	0.64**	0.53***	0.33	0.48
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.76***	1.88***	1.78***	1.88***	1.03	0.96
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.12	1.19	0.65	1.22	1.60	1.44
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.66	1.18	0.65	1.20*	0.98	1.41
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	9.90***	6.38***	10.02***	6.99***	9.94***	7.67***
Disorder Group	None	1.00	1.00	1.00	1.00	1.00	1.00
	Affective	4.30***	2.35***	4.93***	2.63***	2.95***	2.21***
	Anxiety	1.96***	1.43***	2.01***	1.45***	1.40*	1.06
	Alcohol/Drug	1.59***	1.44***	1.69***	1.57***	2.06***	1.49*
	ASPD	1.26**	1.34**	1.32***	1.40***	1.14	1.03
	Schizophrenia	3.39***	2.66***	3.65***	3.07***	7.04***	4.75***

* = p < .05
 ** = p < .01
 *** = p < .001

**Appendix C, TABLE 8-9
ODDS-RATIOS FOR THOSE WITH SUBCLINICAL CONDITIONS
IN RECENT OUTPATIENT TREATMENT**

		Any Recent Treatment		Any Recent Outpatient Treatment		Any Recent Inpatient Treatment	
		Bivariate	Multivariate	Bivariate	Multivariate	Bivariate	Multivariate
Age	18-24	1.00	1.00	1.00	1.00	1.00	1.00
	25-44	1.13*	1.09	1.14**	1.13	0.75	0.46*
	45-64	0.80***	0.99	0.81***	1.05	0.64**	0.85
	65+	0.53***	0.84	0.52***	0.90	0.64**	0.62
Highest Grade Level Completed	0-8	1.00	1.00	1.00	1.00	1.00	1.00
	9-11	1.14*	0.82	1.12	0.81	1.00	0.78
	12	1.08	0.76*	1.08	0.74*	0.93	2.14
	13-15	1.34***	0.80	1.36***	0.78	0.40***	0.45
	16+	1.57***	1.01	1.60***	1.01	0.30***	0.50
Household Income	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	0.87*	1.32*	0.87*	1.32*	0.45***	1.20
	51%-75%	0.96	1.42**	0.96	1.40**	0.36***	0.45
	76%-100%	1.07	1.36*	1.07	1.33*	0.49***	0.71
Job Prestige	0%-25%	1.00	1.00	1.00	1.00	1.00	1.00
	26%-50%	1.07	0.83	1.07	0.83	0.87	0.81
	51%-75%	1.33***	0.85	1.33***	0.85	0.60**	0.59
	76%-100%	1.42***	0.95	1.44***	0.93	0.45***	0.45
Current Marital Status	Married	1.00	1.00	1.00	1.00	1.00	1.00
	Widowed	0.97	1.07	0.94	1.05	1.81**	1.25
	Separated	1.92***	1.88***	1.92***	1.84***	2.99***	9.58***
	Divorced	2.24***	1.67***	2.24***	1.73***	2.36***	0.42
	Single	1.41***	1.04	1.38***	1.04	3.08***	2.67**
Race	White	1.00	1.00	1.00	1.00	1.00	1.00
	Black	0.75***	0.75**	0.73***	0.73	1.18	0.38*
	Hispanic	0.85*	0.76	0.85*	0.76	0.18***	0.10*
	Other	0.64***	0.51*	0.64**	0.52*	0.33	0.01
Gender	Male	1.00	1.00	1.00	1.00	1.00	1.00
	Female	1.76***	2.13***	1.78***	2.16***	1.03	1.02
Unemployment Compensation	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	1.12	1.72**	0.65	1.58*	1.60	3.85**
Veteran	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	0.66	1.09	0.65	1.13	0.98	1.00
Past Treatment	No	1.00	1.00	1.00	1.00	1.00	1.00
	Yes	9.90***	4.96***	10.02***	5.26***	9.94***	3.11***
Subclinical Symptoms		1.17***	1.10***	1.18***	1.11***	1.24***	1.14***

* = $p < .05$
 ** = $p < .01$
 *** = $p < .001$

Appendix, C, Table 8-10
THE EFFECT OF PAST TREATMENT ON CURRENT PERSONAL INCOME

		Personal Income (in dollars)	
		Bivariate	Multivariate
Disorder	Affective	-123.90	-520.68
	Anxiety	-3464.02**	-749.83**
	Alch./Drug	-727.97	-142.44
	ASPD	2074.53**	982.38
	Schizophrenia	-3547.55*	-332.70
Past Medical Treatment		642.76*	-268.43
Disorder * Past Medical Treatment	Affective	1486.36	424.51
	Anxiety	1421.54*	474.63
	Alch./Drug	-2532.28***	-1303.71*
	ASPD	-1450.51	-1499.32
	Schizophrenia	-1771.32	-2519.66

adj. R-square = 0.37***

* = p < .05

** = p < .01

*** = p < .001

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EDUCATION:

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Sociology, Virginia Polytechnic Institute and State
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Specialization: Mental Illness/Criminology/Deviance

Major Professors: William E. Snizek and Michael D.
Hughes

Dissertation: Mental Illness, Social Status and Health
Care Utilization: An Test of Societal Reaction Theory

M.S., October, 1994

Sociology, Virginia Polytechnic Institute and State
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Specialization: Criminology/Deviance

Major Professor: William E. Snizek

Thesis: Tattooed College Students: An Exploratory
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B.S., May, 1992

Economics, Sociology, James Madison University,
Harrisonburg, Virginia. Cum Laude.

TEACHING INTERESTS:

Sociology of Mental Illness
Criminology/Criminal Justice
Deviant Behavior
Medical Sociology
Juvenile Delinquency
Introductory Sociology
Methods
Work and Occupations
Dating, Marriage & Divorce

RESEARCH INTERESTS:

Mental Illness and the Criminal Justice System
Crime and Delinquency
Stigma Management
Work and Occupations

CURRENT POSITION:

Graduate Instructor, Department of Sociology, Virginia
Polytechnic Institute and State University, Blacksburg,
Virginia
July, 1994 - Present

PAST POSITION:

Graduate Assistant, Department of Sociology, Virginia
Polytechnic Institute and State University, Blacksburg,
Virginia
August, 1992 - May, 1994

RESEARCH EXPERIENCE:

Served as research assistant and performed a content analysis of newspapers from farming communities in an attempt to determine public attitudes toward agriculture and water issues in two separate communities, Summer 1993.

Engaged in participant-observation at tattoo parlors while gathering data for master's thesis. This research required gaining contacts in the subculture of tattooing and engaging in extensive interviewing, 1993-1994.

Have constructed and analyzed surveys on a variety of topics such as attitudes toward tattooing and illicit alcohol procurement strategies, 1993-1996.

Participated in interdisciplinary research with members of the Department of Economics in an attempt to examine the impact of social status on micro-economic decision making. The research involved conducting experiments with Introductory Economics students, January 1995.

Currently engaging in multivariate regression analysis to examine the Epidemiologic Catchment Area Survey data for dissertation.

TEACHING EXPERIENCE:

Criminology, Virginia Polytechnic Institute and State University. Currently serving as sole Instructor (Fall, 1996) for an undergraduate course of 50+ students.

Deviant Behavior, Virginia Polytechnic Institute and State University. Have served as sole Instructor for 4 undergraduate courses ranging in size from 29 to 150 students. Student evaluations for these courses have ranged from a 3.5 to a 3.8 (on a 4.0 scale).

Juvenile Delinquency, Virginia Polytechnic Institute and State University. Have served as sole Instructor for a class of 19 students. Student evaluations equaled a 3.8 (on a 4.0 scale).

Dating, Marriage, & Divorce, Virginia Polytechnic Institute and State University. Have served as sole Instructor for a class of 18 students. Student valuations equaled a 3.4 (on a 4.0 scale).

Introductory Sociology, Virginia Polytechnic Institute and State University. Have served as Teaching Assistant on 4 occasions in courses ranging in size from 400-600 students.

PUBLICATIONS:

Phillips, III, Daniel W., Chris Lanier, Deborah Dallas, and C. Douglas Smith. 1992. "Constitution of Sociology Club of JMU," In Stephen F. Steele and Joan Albert. eds. *Sociology Club Tool Kit: Some Ideas for Starting and Sustaining a Sociology Club or Organization on Your Campus*. 1st ed. American Sociological Association: Washington, D.C.

Durkin, Keith F., Timothy W. Wolfe, and Daniel W. Phillips, III. 1996. "College Students' Use of Fraudulent Identification to Obtain Alcohol: An Exploratory Analysis," *Journal of Alcohol and Drug Education* 41:2.

PROFESSIONAL PRESENTATIONS:

Phillips, III, Daniel W. "Psychiatric Coercion and Religion." Paper presented in roundtable session at the annual meeting of the American Sociological Association in Pittsburgh, Pennsylvania, August, 1992.

Phillips, III, Daniel W. "College Students and Tattooing: Pathology or Healthy Self-Expression?" Paper presented at the annual meeting of the Southern Sociological Society in Raleigh, North Carolina, April, 1994.

Phillips, III, Daniel W. "Mental Health Counselors for Deinstitutionalized Schizophrenics: Locating Their Place in the Field of Social Control." Paper presented at the annual meeting of the Virginia Tech Graduate Student Symposium, Blacksburg, Virginia, April, 1995.

Bryant, Clifton D. and Daniel W. Phillips, III. "Manufacture of Manhood: Social Change, Adolescent Values, and the Evolution of the Boyscout Merit Badge Program." Paper presented at the annual meeting of the Mid-South Sociological Association in Mobile, Alabama, October, 1995.

Phillips, III, Daniel W. "The Current Status of Labeling Theory and Mental Illness: Beyond the Gove/Scheff Debate." Paper presented at the annual meeting of the Virginia Tech Graduate Student Symposium, Blacksburg, Virginia, April, 1996.

OTHER PROFESSIONAL ACTIVITY:

Participated in the American Sociological Association Honors Program, August, 1992.

Participated in the Mid-South Sociological Association meetings in Montgomery, Alabama, October, 1993.

Participated in the development of a 2,750 item multiple choice and true/false Test Manual to accompany *Sociology* (6ed.) by Light, Keller and Calhoun, McGraw-Hill, 1993.

Served as Panelist in the section "Being a GTA," for the Graduate Teaching Assistant (GTA) Workshop at Virginia Polytechnic Institute and State University, August, 1994.

Selected and served as judge for the Science Exhibition at the Governors' School for Science and Technology, Roanoke, Virginia, January, 1995.

PROFESSIONAL MEMBERSHIP:

American Sociological Association
Mid-South Sociological Association

HONORS/AWARDS:

Alpha Kappa Delta, the International Sociology Honor Society.

Nominated for the 1996 Thompson Award for the Organization, Occupation, and Work section of the American Sociological Association for the paper: "HMOs and Mental Health Care Delivery."

Selected as a member of the American Sociological Association Honors Program Association, 1992.

Sociology Student of the Year, James Madison University, 1992.

Cum Laude, James Madison University.

Daniel W. Phillips III

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