



A Comparison of Respondents in Initial and Recommitment Hearings

Charles D. H. Parry; Eric Turkheimer; Paul L. Hundley; Edward Creskoff

Law and Human Behavior, Vol. 15, No. 3. (Jun., 1991), pp. 315-324.

Stable URL:

<http://links.jstor.org/sici?sici=0147-7307%28199106%2915%3A3%3C315%3AACORII%3E2.0.CO%3B2-0>

Law and Human Behavior is currently published by Springer.

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/springer.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

The JSTOR Archive is a trusted digital repository providing for long-term preservation and access to leading academic journals and scholarly literature from around the world. The Archive is supported by libraries, scholarly societies, publishers, and foundations. It is an initiative of JSTOR, a not-for-profit organization with a mission to help the scholarly community take advantage of advances in technology. For more information regarding JSTOR, please contact support@jstor.org.

Research Note

A Comparison of Respondents in Initial and Recommitment Hearings*

Charles D. H. Parry,[†] Eric Turkheimer,[‡]
Paul L. Hundley,[§] and Edward Creskoff[‡]

Legislators and researchers have focused on one aspect of civil commitment: initial commitments. Many patients, however, remain in the hospital after their initial commitment expires and, thus, must be recommitted if they are to remain in involuntary treatment. Demographic, clinical, and treatment data were collected on 374 adults having initial or recommitment hearings during a 3-month period at a large state hospital in Virginia. Respondents in initial commitment hearings were younger and displayed acute symptoms; recommitment respondents were older with symptoms of chronic psychopathology, especially those associated with schizophrenia and organic brain syndrome. The subject of recommitment patients and hearings needs to be a focus of future research efforts to determine whether these differences are reflected in a greater relative gap between the letter and practice of the law in recommitment hearings.

* Reprint requests should be sent to Eric Turkheimer, Department of Psychology, University of Virginia, Charlottesville, Virginia 22903. This research was supported by grant No. R03 MH44065-01 from the National Institute of Mental Health. The financial assistance of the Institute for Research Development of the Human Sciences Research Council is also acknowledged. This article was written while the first author was a postdoctoral fellow in Clinical Services Research, NIMH grant No. 5T32MH17184-06.

[†] Centre for Epidemiological Research, South Africa Medical Research Council.

[‡] Department of Psychology, University of Virginia.

[§] Western State Hospital and Department of Behavioral Medicine & Psychiatry, University of Virginia.

The sociodemographic and clinical characteristics of persons facing involuntary commitment to a mental health facility are of considerable importance to professionals involved in formulating and instituting legal, fiscal, and clinical policies that affect this population. The changes in civil commitment law that have taken place during the last two decades have stimulated much empirical research. This research has provided a detailed description of the civil commitment process and the participants in it.

Respondents in commitment hearings have been found to have inadequate incomes, to be poorly educated, and to have few personal resources. Many are unemployed or have low-level occupations (Ehrenreich, Roddy, & Baxa, 1982; Hiday, 1977, 1982; Hiday & Scheid-Cook, 1987; Mahler & Co, 1984; Warren, 1982; Yesavage, Werner, Becker, & Mills, 1982). There tend to be more males at younger ages and more females at older ages (DeRisi & Vega, 1983; Warren, 1982). Some studies have found no racial differences between respondents in commitment hearings and the general population (Ehrenreich et al., 1982; Warren, 1982), whereas other have found blacks and Hispanics to be overrepresented (DeRisi & Vega, 1983; Hiday & Scheid-Cook, 1987). Respondents tend to be single, and a large percentage have never been married (Ehrenreich et al., 1982; Hiday & Scheid-Cook, 1987; Koch, Mann, & Vogel, 1987; Mahler & Co, 1984; Warren, 1982).

Clinically, most respondents in commitment hearings have chronic conditions, as indicated by the high number of previous hospitalizations (Ehrenreich et al., 1982; Hiday & Scheid-Cook, 1987; Koch et al., 1987; Warren, 1982). The most common diagnoses are schizophrenia, affective disorder, or other forms of psychosis. Other disorders such as substance abuse, personality disorder, and organic brain syndrome are also prevalent (DeRisi & Vega, 1983; LeBuffe, Granger, & Wise, 1979; Hiday, 1988).

The major shortcoming of research both on the characteristics of respondents in civil commitment hearings and on the commitment process itself is that only part of the overall process has been examined. Most studies have concentrated on initial commitments, while ignoring *recommitments*. The former initiate a patient's involuntary participation in the mental health system, whereas the latter are necessary to continue involuntary treatment for patients whose initial commitment order has expired, that is, who required continued commitments. When studied at all, recommitment has been included only as an adjunct to research mainly concerned with initial commitments (e.g., Ehrenreich et al., 1982; Hiday, 1983; Hiday & Goodman, 1982).

No published studies of research that has specifically investigated the demographic, clinical, and treatment characteristics of respondents in recommitment hearings are available. However, two unpublished studies, both conducted in Virginia, have addressed this issue. Ehrenreich et al. (1982), in a study of 75 initial and recommitment hearings in four jurisdictions, noted that almost 80% of the respondents above 65 years of age were in recommitment hearings. Koch et al. (1987), in a report by the Virginia Department of Mental Health and Mental Retardation, found that of 607 patients studied at eight adult mental health facil-

ities, over half (57.5%) were male and most (72.8%) had never been married. Ages ranged from 18.2 to 81.5 years with a mean of 42.4 years. Most had multiple prior admissions to inpatient psychiatric facilities ($M = 3.3$ admissions). In some respects (e.g., marital status, prior hospitalization), these results appear to be similar to those reported in studies of respondents in initial commitment hearings, while in others (e.g., gender) there do appear to be differences. It is difficult to draw firm conclusions from the Koch et al. study, however, because no comparison group of initial commitment patients was included, and limited clinical information was recorded about the recommitment patients.

Theory and policy regarding commitment has almost entirely been formed by knowledge of initial commitments, yet recommitment hearings are estimated to account for approximately one third of the more than 500,000 hearings that take place nationally each year (Goldman & Manderscheid, 1987; Rosenstein, Milazzo-Sayre, MacAskill, & Manderscheid, 1987). It therefore seems essential that research be undertaken to assess whether there are any major differences between populations represented in initial and recommitment hearings. This article reports the results of a study designed specifically to assess whether respondents in initial and recommitment hearings differ substantially on demographic, clinical, and treatment variables.

METHOD

Setting

In Virginia, persons involuntarily committed to an inpatient mental health facility may be held for a period not to exceed 180 days (Virginia Code Sections 37.1–67.1 et seq.). If further inpatient treatment is deemed necessary, a recommitment hearing is required. Under the Virginia Code, a person may be involuntarily committed to an inpatient facility if found by a hearing officer to be (a) mentally ill and (b) dangerous to themselves or others or substantially unable to care for themselves, and if (c) there is no less restrictive alternative.

Data were collected at Western State Hospital (WSH), the second largest state hospital in Virginia. This hospital has approximately 630 beds and serves clients from 13 counties in western and northern Virginia, covering a population of over 2 million. This site was chosen because a greater number of recommitment hearings are conducted there than at any other site in Virginia (Koch et al., 1987), because an almost equal number of initial and recommitment hearings are held there each year, and because it serves both urban and rural populations.

Subjects

The sample consisted of all 374 adults who had initial or recommitment hearings during June, July, and August of 1988 at WSH. Sex, age, and race were known for 369 subjects: Males predominated (65.3%); 62.3% were between the

ages of 18 and 44; and 77.8% were white, 20.9% were black, and 1.4% were designated "other." Using a chi-square test of association, the racial composition of the sample was not found to be significantly different from the corresponding population, but there was a higher percentage of males in the sample than would have been expected from state figures $\chi^2(3, N = 369) = 33.97, p < 0.001$. In addition, the 25–44-year age group was overrepresented in the sample, whereas the 18–24-year age group was underrepresented $\chi^2(1, N = 369) = 42.29, p < 0.001$.

Just over half (190/374) of the sample consisted of respondents having initial commitment hearings. For the purpose of the study, such persons were termed *Initials*. Most of these were brought to the hospital under either a Temporary Detention Order ($n = 170$) or a Criminal Detention Order ($n = 17$). Three had been admitted voluntarily and the hospital was seeking a change of status to "involuntary." One third of Initials were brought to the state hospital after a self-destructive act or threat. Inability to care for self, public annoyance or disorientation, withdrawal or agitation at home, assaultive threats or acts, and substance abuse were also frequently cited events precipitating hospitalization. Almost two thirds of respondents in initial commitment hearings were living independently or with their families prior to hospitalization, but more than 10% had no fixed address. Over 50% were unemployed, and an additional 6.5% were not in the work force because of retirement or disability. Of the 72 patients who were working, two thirds were engaged in semiskilled, domestic, or unskilled labor.

Of the 184 respondents observed in recommitment hearings (termed *Recommitments*), 181 had been detained involuntarily for the commitment period specified at their last hearing, typically 180 days. The remaining three were long-term patients on voluntary status for whom staff were seeking a change of status to "involuntary." The average duration of their most recent admission to WSH was 7.8 years ($SD = 11.1$ years, range 0–56 years).

Procedure

Within one week following an initial or recommitment hearing, hospital records were systematically searched for demographic, clinical, and treatment information on each subject. For Initials, most data were obtained from preadmission screening forms and hospital admission records. For Recommitments, the major source of information was the 180-day case review and recent nursing and physician notes.

Measure

A checklist was constructed to facilitate the recording of information on subject characteristics. Thirty-one items were included to permit a comparison of demographic, clinical, and treatment characteristics for respondents in initial and recommitment hearings. Because all the items on the checklist involved merely

transcribing information from relevant sections of the subjects' medical records, no attempt was made to assess the interrater reliability of the coding.

RESULTS

Initials and Recommitments were compared using chi-square tests of association or *t* tests for independent samples on 31 variables (Table 1). Because of the

Table 1. Comparison of Initials and Recommitments on Demographic, Clinical, and Treatment Variables

	Initials		Recommitments		Total		Probability
	<i>n</i>	Percent	<i>n</i>	Percent	<i>n</i>	Percent	
<i>Demographic</i>							
Age GE 45 ^a	46	24.5	93	51.4	139	(37.7)	.000
Male	134	70.5	109	59.2	243	(65.0)	.022
White	152	80.0	140	76.1	292	(78.1)	.197
Married	26	35.3	18	20.6	44	(11.9)	.001
LT high-school graduate ^b	101	58.7	111	62.0	212	(60.4)	.805
<i>Clinical</i>							
Paranoia	77	40.5	49	26.6	126	(33.7)	.004
Delusions	63	33.2	76	41.3	139	(37.2)	.103
Disoriented	57	30.0	54	29.3	111	(29.7)	.890
Agitated	122	64.2	131	71.2	253	(67.7)	.149
Grandiose	23	12.1	20	10.9	43	(11.5)	.708
Poor self care	103	54.2	108	58.7	211	(56.4)	.382
Hallucinations	71	37.4	56	30.4	127	(34.0)	.157
Impaired impulse control	118	62.1	125	67.9	243	(65.0)	.237
Bizarre behavior	79	41.6	39	21.2	118	(31.6)	.000
Loose associations	49	25.8	47	25.5	96	(25.7)	.957
Appetite disturbance	78	41.0	23	12.5	101	(27.0)	.000
Sleep disturbance	96	50.5	19	10.3	115	(30.8)	.000
Withdrawn	30	15.8	41	22.3	71	(19.0)	.109
Depressed	80	42.1	19	10.3	99	(26.5)	.000
Anxious	71	37.4	30	16.3	101	(27.0)	.000
Suicidal	85	44.7	10	5.4	95	(25.4)	.000
Homicidal	44	23.2	5	2.7	49	(13.1)	.000
DSM-III Axis II diagnosis	37	80.5	34	81.5	71	(19.0)	.806
Severe medical problem	56	30.1	109	59.9	165	(44.8)	.000
Substance abuse in last 6 months	107	57.2	28	15.6	135	(36.8)	.000
DSM-III Axis I diagnosis (clinical syndromes)							.000
No diagnosis	3	1.6	4	2.2	7	(1.9)	
Schizophrenic disorder	30	15.9	74	40.4	104	(28.0)	
Organic disorder	15	7.9	55	30.1	70	(18.8)	
Affective disorder	35	18.5	19	10.4	54	(14.5)	
Substance use disorder	44	23.3	1	0.6	45	(12.1)	
Other psychotic	24	12.7	20	10.9	44	(11.8)	
Adjustment disorder	26	13.8	3	1.6	29	(7.8)	
Other disorder	12	6.4	7	3.8	19	(5.1)	
<i>Treatment</i>							
On psychotropic medications	122	64.2	174	94.6	296	(79.1)	.000
Prior psychiatric treatment	165	86.8	165	89.7	330	(88.2)	.395
LT 2 prior psychiatric hospitalizations	88	46.8	55	29.9	143	(38.5)	.008
Prior outpatient treatment	125	69.8	86	55.1	211	(63.0)	.005

^a GE = Greater than or equal to.

^b LT = Less than.

number of tests involved, only associations with p values less than 0.01 will be reported as significant.

Demographic Variables

Recommitments were older than Initials. The average age for Recommitments was 48.6 ($SD = 18.8$) as compared with 37.2 ($SD = 13.9$) for Initials. Over one quarter of Recommitments were older than 65 years, whereas under 5% of Initials were above 65. Recommitments were less likely than Initials to have ever been married. No differences between the two groups were found for gender, race, or education.

Clinical Variables

Recommitments were less paranoid, depressed, anxious, suicidal, or homicidal; they displayed less bizarre behavior; they had lower rates of sleep or appetite disturbances; and they were less likely than Initials to have engaged in substance abuse during the past 6 months. No significant differences between the two groups were indicated on the following variables: evidence of delusions, disorientation, agitation, grandiosity, poor self-care, hallucinations, impaired impulse control, loose associations, or withdrawal.

Differences between Initials and Recommitments were found on DSM-III Axis I diagnoses taken from hospital records (American Psychiatric Association, 1987). Recommitments were more likely to have a diagnosis of schizophrenia or organic brain disorder, whereas Initials were more likely to be diagnosed as having a substance abuse or affective or adjustment disorder. Subjects in the two groups were equally likely to have been given an Axis II diagnosis of personality/developmental disorder. Recommitments had more severe medical problems, with hypertension or heart problems (21 respondents), diabetes (16), seizure disorder (14), self-induced water intoxication (16), tardive dyskinesia (15), epilepsy (9), hypothyroidism (8), and Parkinson's Disease (6) being frequently reported. For Initials, common medical problems included drug withdrawal (12), seizure disorder (10), hypertension or heart problem (9), and diabetes (7).

Treatment Variables

Recommitments were more likely than Initials to be taking psychotropic medications and to have had more than one previous psychiatric hospitalization, but were less likely to have had previous outpatient care. Recommitments were also much more likely to be on antipsychotic or antidepressant medications at the time of the hearing, whereas Initials were more likely to be taking benzodiazepines and anxiolytics.

Multivariate Relationships

An assessment of multivariate relations among demographic, clinical, and treatment variables and hearing type was performed using discriminant analysis

(Klecka, 1980; Tabachnick & Fidell, 1983). Variables that showed a significant chi-square association with hearing type were selected for multivariate analysis. Discrete variables were recoded into 0/1 dummy variables. A stepwise discriminant analysis was performed to select the most useful subset of the 16 variables for discriminating between Initials and Recommitments (Klecka, 1980). Only two thirds of the observations were used, with the remaining third held for the cross-validation study described below. In order of entry in the stepwise analysis, the 13 variables were sleep disturbance, diagnosis of adjustment or substance use disorder, severe medical problem, bizarre behavior, diagnosis of schizophrenic or organic disorder, suicidal ideation, substance abuse during the past 6 months, single, anxiety, multiple prior psychiatric hospitalizations, previous outpatient treatment, age, and homicidal ideation.

A direct discriminant function analysis was then performed using this subset of variables as predictors of initial or recommitment status with the within-group covariance matrices used as the basis of the measure of generalized squared distance (Tabachnick & Fidell, 1983). One discriminant function was calculated, with $F(13,232) = 25.57$, $p < 0.0001$. This function accounted for 59% of the between-group variability. When the same cases were classified that were used to set up the original classification function, 86% of cases were found to be correctly classified. A cross-validation analysis was performed by applying the discriminant function to the remaining third of the sample ($n = 123$). Seventy-seven percent of the cross-validation sample was classified correctly by the discriminant function.

The matrix of correlations between predictor variables and the discriminant function indicates that the primary demographic, clinical, and treatment variables distinguishing initial and recommitment samples are sleep disturbance ($r = .68$), suicidal ideation ($r = .58$), diagnosis of adjustment or substance use disorder ($r = .57$), substance abuse within the past 6 months ($r = .56$), diagnosis of schizophrenia or organic brain disorder ($r = -.57$), increasing age ($r = -.48$), and severe medical problems ($r = -.49$). In contrast to Initials, most Recommitments are older, have severe medical problems, and have diagnoses of schizophrenia or organic brain disorder. Initials, on the other hand, have symptoms of sleep disturbance, suicidal ideation and/or substance abuse and have less chronic diagnoses, such as adjustment or substance use disorder.

DISCUSSION

The finding that respondents in initial and recommitment hearings represent distinct populations varying on demographic, clinical, and treatment variables has not been documented before. Respondents in initial commitment hearings display symptoms of acute psychopathology that probably contributed to their detention. They are also much more likely than Recommitments to show the kinds of symptoms that indicate that commitment might be appropriate under the states' police power authority (i.e., by showing suicidal or homicidal ideation).

Recommitments, in contrast, evidence lower rates of acute psychiatric symptomatology, probably owing in part to the effects of the psychotropic medications

that almost 95% of them were receiving. They also show symptoms of chronic psychopathology, especially those associated with schizophrenia and organic syndromes. They are older and tend to be single, both signs of a chronic, deteriorating course of psychopathology. Only 5% were considered suicidal, and only 3% were considered homicidal, but 60% had severe medical conditions. It is therefore more likely that this group of respondents would be committed under the state's *parens patriae* authority. However, further research is needed before any judgment can be made on differences in the bases of commitment of respondents in initial and recommitment hearings.

Despite the clear differences between Initials and Recommitments, it is worthy of note that no differences were found for several important variables. Women, ethnic minorities, and poorly educated respondents were not overrepresented in recommitment hearings. Some important psychiatric symptoms, including delusions, hallucinations, and impaired impulse control, were also equally likely to be observed in the two kinds of respondents.

The data suggest that the recommitment process may serve to single out the elderly for long-term involuntary treatment in inpatient facilities. Although this may be a reasonable social response to a deteriorating mental condition that affects many of the elderly (Kiesler & Sibulkin, 1987), it may also reflect potentially modifiable factors, such as a shortage of alternative community placements. The lack of appropriate community mental health services for the elderly has been highlighted (Roybal, 1988), and, in addition, attention has been directed to the shortage of long-term nursing facilities to provide affordable, less restrictive psychiatric care for this population (Kiesler & Sibulkin, 1987; Jones, Parlour, & Badger, 1982).

A considerable gap between the letter and practice of the law has been well documented for initial commitment hearings (Grouse, Avellar, & Biskin, 1982; Lipsitt & Lelos, 1981; Peters, Miller, Schmidt, & Miller, 1987; Wexler, 1981). Given the demographic, clinical, and treatment differences between respondents in initial and recommitment hearings, it will be important to assess whether this gap is even greater in recommitment hearings and whether the common practice of devising a single statute to regulate both the commitment and recommitment process is appropriate (Van Duizend, McGraw, & Keilitz, 1984). It will also be important to assess whether respondents in recommitment hearings are genuinely in need of involuntary hospitalization.

Two possible biases in the results should be mentioned. First, since subjects were selected for inclusion in the study because of residence in a state hospital, it is possible that different results would have occurred if subjects had been selected from respondents in commitment hearings held in community courts and other settings. It is, however, likely that the differences would have been even greater, because very few recommitment hearings are held in settings other than state hospitals. Second, the most important limitation of the present study is that it involves a single hospital in a single state. It will therefore be important to replicate the findings in other localities. Despite these qualifications, the results of the study serve to establish the subject of recommitment patients and hearings as an important, and previously neglected, focus of future research efforts in the area of civil commitment.

REFERENCES

- American Psychiatric Association (1987). *Diagnostic and statistical manual of mental disorders* (rev. 3rd ed.). Washington, DC: Author.
- Appelbaum, P. S. (1987, May). Crazy in the streets. *Commentary*, 34–39.
- Bachrach, L. L. (1979). Planning mental health services for chronic patients. *Hospital & Community Psychiatry*, 30, 387–393.
- Bachrach, L. L. (1987). Deinstitutionalization in the United States: Promises and prospects. *New Directions for Mental Health Services*, 35, 75–90.
- Beigel, A. (1982). Community mental health centers: A look ahead. *Hospital & Community Psychiatry*, 33, 741–745.
- Bigelow, D. A., Cutler, D. L., McCoomb, P., & Leung, P. (1988). Characteristics of state hospital patients who are hard to place. *Hospital & Community Psychiatry*, 39, 181–185.
- Commonwealth of Virginia (1950). *Code of Virginia, Title, 37.1, Vol. 6* (1984 Replacement and 1987 Cumulative Supplement). Charlottesville, VA: The Michie Company.
- DeRisi, W., & Vega, W. (1983). The impact of deinstitutionalization on California's state hospital population. *Hospital & Community Psychiatry*, 34, 140–145.
- Ehrenreich, N. S., Roddy, V. D., & Baxa, E. T. (1982). Civil commitment in Virginia: Variations between law and practice. Unpublished manuscript, University of Virginia, Charlottesville, VA.
- Goldman, H. H., & Manderscheid, R. W. (1987). Chronic mental disorder in the United States. In R. W. Manderscheid & S. A. Barrett (Eds.), *Mental health, United States, 1987* (DHHS Publication No. (ADM) 87-1518, pp. 1–13). Washington, DC: U.S. Government Printing Office.
- Grouse, A. S., Avellar, J. W., & Biskin, D. S. (1982). A clinical and legal evaluation of the need for involuntary commitment. *Developments in Mental Health Law*, 2, 33–34, 42–43.
- Hiday, V. A. (1977). Reformed commitment procedures: An empirical study in the courtroom. *Law & Society Review*, 11, 651–666.
- Hiday, V. A. (1982). The attorney's role in involuntary civil commitment. *North Carolina Law Review*, 60, 1027–1056.
- Hiday, V. A. (1983). Judicial decisions in civil commitment: Fact and attitudes and psychiatric recommendations. *Law & Society Review*, 17, 517–529.
- Hiday, V. A. (1988). Civil commitment: A review of empirical research. *Behavioral Sciences & the Law*, 6, 15–43.
- Hiday, V. A., & Goodman, R. R. (1982). The least restrictive alternative to involuntary hospitalization, outpatient commitment: Its use and effectiveness. *The Journal of Psychiatry & Law*, 10, 81–96.
- Hiday, V. A., & Scheid-Cook, T. L. (1987). The North Carolina experience with outpatient commitment: A critical appraisal. *International Journal of Law & Psychiatry*, 10, 215–232.
- Jones, L. R., Parlour, R. R., & Badger, L. W. (1982). The inappropriate commitment of the aged. *Bulletin of the American Academy of Psychiatry & Law*, 10, 29–38.
- Kiesler, C. A., & Sibulkin, A. E. (1987). *Mental hospitalization: Myths and facts about a national crisis*. Beverly Hills, CA: Sage.
- Klecka, W. R. (1980). *Discriminant analysis*. Beverly Hills, CA: Sage.
- Koch, R., Mann, L., & Vogel, W. (1987). Mental health recertification and recommitment practices in Virginia. Unpublished manuscript, The Office of Quality Assurance, Geriatric Services, & Mental Health Services, Commonwealth of Virginia, Richmond.
- LeBuffe, F. P., Granger, S. I., & Wise, T. N. (1979). The Virginia commitment law: Clinical characteristics of patients hospitalized involuntarily by court order. *Bulletin of the American Academy of Psychiatry & Law*, 7, 411–421.
- Lipsitt, P. D., & Lelos, D. (1981). Decision makers in law and psychiatry and the involuntary civil commitment process. *Community Mental Health Journal*, 17, 114–122.
- Mahler, H., & Co, B. T. (1984). Who are the "committed?". *The Journal of Nervous & Mental Disease*, 172, 189–196.
- Peters, R., Miller, K. S., Schmidt, W., & Meeter, D. (1987). The effects of statutory change on the civil commitment of the mentally ill. *Law & Human Behavior*, 11, 73–99.
- Rosenstein, M. J., Milazzo-Sayre, L. J., MacAskill, R. L., & Manderscheid, R. W. (1987). Use of

- inpatient psychiatric services by special populations. In R. W. Manderscheid & S. A. Barrett (Eds.), *Mental health, United States, 1987* (DHHS Pub. No. (ADM) 87-1518, pp. 59-97). Washington, DC: U.S. Government Printing Office.
- Roybal, E. R. (1988). Mental health and aging: The need for an expanded federal response. *American Psychologist, 43*, 189-194.
- Sharfstein, S. S. (1987). Reimbursement resistance to treatment and support for the long-term mental patient. *New Directions for Mental Health Services, 33*, 75-85.
- Tabachnick, B. G., & Fidell, L. S. (1983). *Using multivariate statistics*. New York: Harper & Row.
- Van Duizend, R., McGraw, B. D., & Keilitz, I. (1984). An overview of state involuntary civil commitment statutes. *Mental & Physical Law Reporter, 8*, 328-335.
- Warren, C. A. B. (1982). *The court of last resort: Mental illness and the law*. Chicago, IL: University of Chicago Press.
- Wexler, D. B. (1981). *Mental health law: Major issues*. New York: Plenum.
- Yesavage, J. A., Werner, P. D., Becker, J. M. T., & Mills, M. J. (1982). The context of involuntary commitment on the basis of danger to others: A study of the use of the California 14-Day certificate. *The Journal of Nervous and Mental Disease, 170*, 622-627.