

Forensic and Non-Forensic Psychiatrists: An Empirical Comparison*

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In 1970, 116 or 1.0% of 12,517 psychiatrists responding to a nationwide survey indicated that they specialize in forensic psychiatry, and 48 others (0.4%) indicated that they specialize in correctional psychiatry.¹ In the same survey, 3.3% of respondents indicated that they spend an hour or more each week practicing in correctional institutions or prisons. If respondents to the 1970 survey were representative of the total population of U.S. psychiatrists, simple calculations indicate that a minimum of 800 psychiatrists in the nation engaged regularly in forensic or correctional psychiatric practice at that time. Judging from these observations, data reported in the present paper, and an apparent expansion of interest in forensic and correctional psychiatry during the 1970s, I would estimate that 5-10% of U.S. psychiatrists currently engage regularly in compensated forensic or correctional psychiatric practice.

Inasmuch as there will be no board certified forensic psychiatrists before May, 1978, any effort to define a population of forensic and correctional psychiatrists must rely upon an arbitrary operational criterion. Indeed, even after the American Board of Forensic Psychiatry is fully operative there will be competing criteria for defining this population. Moreover, in an era in which virtually every psychiatrist must take cognizance of certain medicolegal principles, an argument could be made that "forensicity" is a continuous variable distributed unevenly over the entire population of psychiatrists. Despite these methodological problems, an existing data set was explored for evidence of differences between a group of psychiatrists identified as having an unusual degree of experience in forensic psychiatry, correctional psychiatry, or law, and a group of psychiatrists not so identified.

The only quantitative data I have been able to ascertain in the existing literature that bear on the matter at hand are those resulting from a survey

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of Boston psychiatrists conducted in about 1973.² Tardiff received completed questionnaires from 156 (38.7%) of 403 psychiatrists and compared 100 psychiatrists who reported treating fewer than one violent patient per month with 56 psychiatrists who reported treating one or more violent patients per month. Psychiatrist sex was statistically independent of the treatment of violent patients, but there was a statistically significant negative association between psychiatrist age and experience and the treatment of violent patients. Past experience in forensic work was significantly associated with future availability for forensic work, but was not related to age, sex, or number of violent patients seen. It is noteworthy that 8% of the respondents evaluated over 50% of the total number of violent patients. These data suggest at least a *de facto* specialization in work with violent patients. Psychiatrists with offices in areas of Boston known to have high rates of violent crime were significantly more likely to indicate that they would be available for future forensic work.

Methods

A 10-page questionnaire was mailed to each member of the American Psychiatric Association practicing medicine in the state of Maryland. Anonymity was maintained by coding only the return envelopes and separating these from returned questionnaires immediately upon receipt. Thus, it was possible to send a follow-up postcard and, later, a second copy of the questionnaire to those who did not respond initially. It was also possible to identify non-respondents by name so that data on non-respondents were available from published biographical directories. The questionnaire directed respondents to answer all questions in terms of their practices and attitudes during 1974, the year immediately preceding this survey.

This study is part of a larger project, some of the preliminary results of which have been reported elsewhere.³⁻⁸

The two statistical tests used in preparing the results section of this paper are Chi-square and the t-test. Chi-square computations were corrected for continuity, where appropriate. For t-tests, pooled estimates of variance were used where F-tests did not lead to rejection of the assumption of equal variances at the 0.05 level of probability; otherwise separate estimates of variance were used. Interpretation of all t-tests was two-tailed. For ease of presentation, only the mean and the standard deviation are presented for interval level variables. The abbreviation "N.S." is used to indicate "not significant" ($p > .05$) in the following tables, and the word "significant" is used in the text to denote statistical significance ($p < .05$).

Results

Questionnaires were received from 482 (80%) of the 600 possible respondents. Although the majority of items were completed by all respondents, 73 (15.1%) of the respondents either failed to answer a question asking them to indicate their area of specialization within psychiatry or failed to complete a chart of the settings in which they practice. These respondents could thus not be validly classified as "forensic" or "non-forensic," for this classification was made primarily on the basis of

responses to these items.

For 409 respondents (84.9% of the total), sufficient information was available to classify the respondents as "forensic" or "non-forensic." Five respondents indicated "Forensic Psychiatry" as their primary specialty and also indicated that they work in correctional institutions or prisons. "Forensic Psychiatry" was indicated as the primary specialty by three others and as a secondary specialty by three others. Twenty-eight respondents indicated that they practice in correctional institutions or prisons, although they did not indicate Forensic Psychiatry as their specialty area. In addition, two other respondents pointed out that they had attended law school, and one other claimed extensive experience in correctional psychiatry. These 42 psychiatrists who identified themselves as forensic psychiatrists, had worked in correctional institutions, or had attended law school, were grouped together and, for brevity's sake, labelled as forensic psychiatrists. This paper compares these 42 forensic psychiatrists with 367 respondents (non-forensic psychiatrists) for whom sufficient information was available to determine that they did not fall within the forensic category.

Representativeness of the Data

Respondents and non-respondents did not differ substantially in age or sex distribution, in year of medical school graduation, or in percentage of foreign medical graduates.

Respondents did not differ significantly from respondents to a national survey of psychiatrists conducted four years earlier¹ when compared as to the proportions of each group who were non-Caucasian, female, or foreign medical graduates.⁶ Although the respondents did not differ significantly from respondents to the national survey in the proportions specializing in 13 other areas, a significantly ($p < .05$) greater proportion of Maryland psychiatrists (1.9%, as compared with 1.0%) indicated Forensic Psychiatry as their primary specialty.⁷ This difference, which reflects an "excess" of only about four forensic psychiatrists in Maryland, was attributed to the presence in Maryland during recent years of one of the nation's few training programs in forensic psychiatry funded by the National Institute of Mental Health.⁷

Demographic Characteristics

The mean age of the forensic psychiatrists (41.6 ± 9.5 years) was significantly ($p < .05$) lower than that of the non-forensic psychiatrists (45.0 ± 10.9 years).

Table 1 shows the percentage distributions of forensic and non-forensic psychiatrists by sex, race, and religion of rearing. No significant differences were observed between groups when compared on these demographic characteristics.

TABLE 1
DISTRIBUTIONS OF FORENSIC AND NON-FORENSIC PSYCHIATRISTS
BY SEX, RACE, AND RELIGION OF REARING

Variable	Forensic		Non-Forensic		Significance
	N	(%)	N	(%)	
SEX					
Male	40	(95.2)	310	(84.9)	N.S.
Female	2	(4.8)	55	(15.1)	

TABLE 1 (Continued)

Variable	Forensic		Non-Forensic		Significance
	N	(%)	N	(%)	
RACE					
White	38	(90.5)	348	(95.1)	N.S.
Non-White	4	(9.5)	18	(4.9)	
RELIGION					
Protestant	13	(31.0)	132	(36.1)	N.S.
Jewish	16	(38.1)	122	(33.3)	
Catholic	10	(23.8)	80	(21.9)	
Other	3	(7.1)	32	(8.7)	

Training

As shown in Table 2, forensic psychiatrists were somewhat more likely to have graduated from a foreign medical school and to have served no internship, but these differences were not significant. Forensic psychiatrists were significantly less likely to have had any psychoanalytic training.

TABLE 2
TRAINING OF FORENSIC AND NON-FORENSIC PSYCHIATRISTS

Variable	Forensic		Non-Forensic		Significance
	N	(%)	N	(%)	
MEDICAL SCHOOL					
U.S.	29	(69.0)	280	(76.3)	N.S.
Foreign	13	(31.0)	87	(23.7)	
INTERNSHIP					
Completed	38	(90.5)	347	(94.8)	N.S.
Not Completed	4	(9.5)	19	(5.2)	
PSYCHOANALYTIC TRAINING					
Yes	4	(9.5)	113	(30.8)	p < .01
No	38	(90.5)	254	(69.2)	

Practice Settings

Respondents were asked to indicate whether they engaged in any activity more than one hour per week in each of 14 practice settings, using categories of practice settings adapted from Arnhoff and Kumbar.¹ Fewer than 10% of the total respondent group indicated regular activities in institutions or schools for the mentally retarded or emotionally disturbed, in correctional institutions or prisons, in health and mental health associations or foundations, in drug addiction and rehabilitation centers, in elementary schools or secondary school systems, or in alcoholism centers. Settings in which more than 10% of all respondents practiced are shown in Table 3. Forensic psychiatrists reported practicing in state hospitals significantly more frequently than non-forensic psychiatrists.

TABLE 3
PRACTICE SETTINGS OF FORENSIC AND NON-FORENSIC PSYCHIATRISTS

Setting	Forensic		Non-Forensic		Significance
	N	(%)	N	(%)	
PRIVATE PRACTICE					
Yes	28	(66.7)	272	(74.1)	N.S.
No	14	(33.3)	95	(25.9)	
GENERAL HOSPITAL					
Yes	24	(57.1)	153	(41.7)	N.S.
No	18	(42.9)	214	(58.3)	

TABLE 3 (Continued)

Setting	Forensic		Non-Forensic		Significance
	N	(%)	N	(%)	
PRIVATE HOSPITAL					
Yes	8	(19.0)	71	(19.3)	N.S.
No	34	(81.0)	296	(80.7)	
STATE HOSPITAL					
Yes	15	(35.7)	59	(16.1)	p < .01
No	27	(64.3)	308	(83.9)	
CMHC					
Yes	14	(33.3)	89	(24.3)	N.S.
No	28	(66.7)	278	(75.7)	
MEDICAL SCHOOL					
Yes	14	(33.3)	116	(31.6)	N.S.
No	28	(66.7)	251	(68.4)	
GOVERNMENT AGENCY					
Yes	10	(23.8)	66	(18.0)	N.S.
No	32	(76.2)	301	(82.0)	
COLLEGE OR UNIVERSITY					
Yes	10	(23.8)	62	(16.9)	N.S.
No	32	(76.2)	305	(83.1)	

Activities

Table 4 presents data on the percentages of respondents who spent an average of one hour per week or more in direct patient contact, consultation, administration, teaching, and research. Forensic psychiatrists were significantly more likely to engage regularly in administration.

TABLE 4
CATEGORIES OF ACTIVITY AMONG FORENSIC AND NON-FORENSIC PSYCHIATRISTS

Activity	Forensic		Non-Forensic		Significance
	N	(%)	N	(%)	
DIRECT PATIENT CONTACT					
Yes	42	(100.0)	346	(94.3)	N.S.
No	0	(0.0)	21	(5.7)	
CONSULTATION					
Yes	39	(92.9)	295	(80.4)	N.S.
No	3	(7.1)	72	(19.6)	
ADMINISTRATION					
Yes	32	(76.2)	191	(52.0)	p < .01
No	10	(23.8)	176	(48.0)	
TEACHING					
Yes	32	(76.2)	271	(73.8)	N.S.
No.	10	(23.8)	96	(26.2)	
RESEARCH					
Yes	16	(38.1)	97	(26.4)	N.S.
No.	26	(61.9)	270	(73.6)	

Patient Population

Respondents were asked to estimate the percentage of their patients during 1974 who were white and non-white, and the percentages falling into each of four age groups and into each of five social class groups. Although all these data are subject to errors of estimation which, to some extent, cancel each other out, the data on patient social class also lack validity to the extent that psychiatrists are unable to assign patients reliably to social class categories. Nonetheless, there is no reason to believe that specializing or not

specializing in forensic psychiatry is associated with any particular bias in these sources of error.

As shown in Table 5, forensic psychiatrists reported treating significantly higher proportions of working class and lower class patients, and a significantly lower proportion of middle class patients.

TABLE 5
PATIENT POPULATION BY RACE, AGE, AND SOCIAL CLASS
FOR FORENSIC AND NON-FORENSIC PSYCHIATRISTS

Patient Characteristics	Forensic		Non-Forensic		Significance
	Mean	(S.D.)	Mean	(S.D.)	
RACE					
% White	80.2	(20.9)	84.0	(22.4)	N.S.
% Non-White	19.8	(20.9)	14.2	(19.5)	N.S.
AGE					
% Under Age 12	5.5	(11.3)	7.6	(17.7)	N.S.
% Age 12-17	18.8	(17.7)	13.6	(16.0)	N.S.
% Age 18-64	71.4	(24.7)	71.1	(28.2)	N.S.
% Age 65 and Over	4.3	(4.8)	6.0	(10.1)	N.S.
SOCIAL CLASS					
% Upper Class	4.2	(6.8)	4.6	(10.1)	N.S.
% Upper Middle Class	21.3	(19.0)	25.6	(25.5)	N.S.
% Middle Class	28.6	(14.6)	38.5	(25.7)	p < .01
% Working Class	27.7	(19.0)	18.2	(16.9)	p < .01
% Lower Class	18.1	(21.2)	11.4	(19.1)	p < .05

Attitudes Toward Patients and Profession

Respondents were asked to indicate the extent of their agreement or disagreement with each of 13 controversial statements by checking one of the following choices: "Agree strongly," "Agree somewhat," "Neutral," "Disagree somewhat," "Disagree strongly," or "No opinion." Seven of the 13 items were adapted from previous studies of physicians' prescribing behavior.^{9,10} Responses were scored by assigning a score of "1" to "Agree strongly" and a score of "5" to "Disagree strongly"; "No opinion" responses were treated as missing data.

Table 6 shows the mean scores of forensic and non-forensic psychiatrists on these 13 attitudinal items. Forensic psychiatrists had a significantly lower opinion of their patients' knowledge of psychotherapy and of psychopharmacology. Forensic psychiatrists placed significantly less emphasis on years of experience as a predictor of quality of psychiatric care.

TABLE 6
SOME ATTITUDES TOWARDS PATIENTS AND THE PRACTICE OF PSYCHIATRY
AMONG FORENSIC AND NON-FORENSIC PSYCHIATRISTS

Item	Forensic		Non-Forensic		Significance
	Mean	(S.D.)	Mean	(S.D.)	
In general, my patients have a high degree of knowledge and sophistication concerning psychotherapy.*	3.6	(1.3)	3.2	(1.2)	p < .05
In general, my patients have a high degree of knowledge and sophistication concerning psychopharmacologic agents*	4.5	(0.7)	4.0	(1.0)	p < .01
The appearance of information on psychiatry in the lay publications has, in general, probably done more harm than good.**	3.7	(1.2)	3.4	(1.3)	N.S.

TABLE 6 (Continued)

Item	Forensic		Non-Forensic		Significance
	Mean	(S.D.)	Mean	(S.D.)	
On balance, the writings of Thomas Szasz and other critics of the use of the medical model in psychiatry have done more harm than good.	2.9	(1.3)	2.6	(1.3)	N.S.
A psychiatrist's own conscience is probably more important in maintaining high quality psychiatry than reviews of his work by other psychiatrists.*	2.9	(1.4)	2.7	(1.4)	N.S.
While both are important, it is more important that a psychiatrist devote more time to his patients than to keeping himself informed of new scientific developments.*	3.2	(1.2)	3.2	(1.3)	N.S.
A year-long internship in medicine or pediatrics would probably be more useful to the prospective psychiatrist than a year's post-graduate training in psychology, sociology, or anthropology would be.	3.7	(1.4)	3.9	(1.3)	N.S.
In psychiatry, as in medicine generally, it is more important to treat the underlying disorder than to provide merely symptomatic therapy.	2.2	(1.2)	2.0	(1.2)	N.S.
The widespread increase in crime in our country might well be alleviated if we were able to act on Karl Menninger's advice that crime be considered a disease which should be treated by physicians.	3.7	(1.4)	4.0	(1.2)	N.S.
Many factors are important in good psychiatric care, but some things may be more important than others. In general, I would guess that a psychiatrist who has been out of residency for twenty-five years is likely to give better care to his patients than a psychiatrist who is only five years out of training.*	3.8	(1.1)	3.3	(1.2)	p < .05
I would usually have more respect for a psychiatrist who exhibits readiness to try out new forms of treatment than for one who makes sure to follow only practices which have been well tried and tested.**	2.9	(1.2)	3.0	(1.3)	N.S.
The recent change in DSM-II regarding the diagnosis of homosexuality represents a step backwards for scientific psychiatry.	3.3	(1.6)	3.0	(1.4)	N.S.
I suspect that in twenty or thirty years schizophrenia and the affective disorders will be generally viewed as biochemical or genetic diseases.	3.4	(1.2)	3.5	(1.2)	N.S.

*Adapted from Becker, Stolley, Lasagna, *et. al.*⁹

**Adapted from Coleman, Katz, and Menzel.¹⁰

Relative Use of Treatments

An index of the total number of treatments administered by each respondent group was calculated, and was used to calculate the percentage of

reported treatments that fell into each of 8 categories (see Appendix). Table 7 shows the results of these calculations. Forensic psychiatrists showed a significantly greater proportionate use of pharmacotherapy and a significantly lower proportionate use of intensive, dynamic, individual psychotherapy and of psychoanalysis.*

TABLE 7
PROPORTIONATE TREATMENT USE BY FORENSIC AND NON-FORENSIC PSYCHIATRISTS

Treatment Modality	Forensic		Non-Forensic		Significance
	Mean	(S.D.)	Mean	(S.D.)	
Electroshock Treatment	0.7	(3.2)	0.2	(1.3)	N.S.
Social Therapies	21.8	(20.7)	16.5	(18.8)	N.S.
Supportive, directive or other short-term psychotherapy	21.9	(16.1)	18.9	(18.4)	N.S.
Intensive, dynamic, individual psychotherapy (excluding psychoanalysis)	17.2	(15.5)	28.4	(25.1)	p < .001
Psychoanalysis	0.0	(0.1)	5.0	(14.1)	p < .001
Hypnotherapy	0.3	(1.5)	0.6	(3.7)	N.S.
Behavior Therapy	1.8	(5.1)	1.6	(5.5)	N.S.
Pharmacotherapy	36.3	(23.6)	24.3	(24.3)	p < .01

Relative Referral for Treatment

An index of the total number of referrals of patients by each respondent group was calculated and was used to calculate the percentage of reported referrals falling into each of 8 categories. Table 8 shows the results of these calculations. Forensic psychiatrists reported significantly higher proportions of referrals for pharmacotherapy and for intensive, dynamic, individual psychotherapy, and a significantly lower proportion of referrals for psychoanalysis and for electroshock treatment.

TABLE 8
PROPORTIONATE REFERRALS FOR TREATMENT BY FORENSIC AND NON-FORENSIC PSYCHIATRISTS

Treatment Modality	Forensic		Non-Forensic		Significance
	Mean	(S.D.)	Mean	(S.D.)	
Electroshock Treatment	1.8	(6.5)	5.1	(16.8)	p < .05
Social Therapies	30.5	(30.4)	24.2	(27.8)	N.S.
Supportive, directive or other short-term psychotherapy	12.5	(16.4)	15.1	(22.5)	N.S.
Intensive, dynamic, individual psychotherapy (excluding psychoanalysis)	26.5	(29.6)	15.2	(20.2)	p < .01
Psychoanalysis	0.6	(2.0)	4.9	(13.3)	p < .001
Hypnotherapy	0.9	(3.6)	0.7	(3.7)	N.S.
Behavior Therapy	4.0	(12.4)	4.3	(14.1)	N.S.
Pharmacotherapy	19.3	(31.1)	7.0	(16.2)	p < .05

Discussion

Although the data reported here document 17 statistically significant differences between the forensic and non-forensic groups, it should be emphasized that comparisons showed no significant differences on 43 other variables. In other phases of the project from which these data are drawn,

*These findings are similar to those that result from comparisons of the absolute numbers of patients treated with each modality. Due to space limitations, these data are not reported here.

similar comparisons were made between younger and older psychiatrists, male and female psychiatrists, U.S. and foreign medical graduates, users and non-users of psychoanalysis or ECT, and so on. Some of these comparisons reveal groups that are much more dissimilar than the forensic and non-forensic groups compared here. Thus, one prominent conclusion to be drawn from the present study is that forensic and non-forensic psychiatrists, as herein defined, are more similar than dissimilar.

Such differences as are observed, however, seem to be explained by the fact that most of the psychiatrists in the forensic group work in correctional institutions. Thus, the middle class is underrepresented and the working and lower class overrepresented in the inmate population. The staff shortages in correctional facilities and the general undesirability of the work setting result in the hiring of younger, less experienced, non-psychoanalytic psychiatrists (similar to the population working in state hospitals) who find an unsophisticated patient population and who must engage in administrative activities in order to coordinate the delivery of services to large numbers of patients. This work load makes it difficult for the psychiatrist to engage in time-consuming individual psychotherapy, although he or she may refer patients to non-physician therapists within the institution. The high proportion of psychotic patients and the shortage of psychiatric manpower result in a high use of pharmacotherapy, and ethical and policy constraints result in a relatively low proportion of referrals for electroshock treatment.

The evidence presented in this paper suggests that forensic and non-forensic psychiatrists are more similar than dissimilar and that the observed differences between the two populations are consistent with our knowledge of psychiatric practice within correctional institutions. The cross-sectional survey data used in this study do not further our understanding of subspecialty choice within psychiatry. The findings, however, do underscore the importance of practice setting as a determinant of psychiatrist behavior. If we are willing to accept differences in practice setting as an explanation for differences in practices — including the distribution of treatments administered to patients — then we must be forthright in acknowledging that our choice of treatment modalities is not based entirely on biomedical criteria.

Perhaps correctional psychiatry is analogous to battlefield surgery: one does what one can under the circumstances. If so, we must wonder by what standards correctional psychiatry is to be judged. The development of criteria for assessing the adequacy of treatment has been said to be complex and controversial.¹¹ I would suggest that a large share of the complexity and controversy results from our failure to come to grips with the fact that our implicit criteria for assessing the adequacy of treatment include an assessment of the resources available. We cannot expect that treatment rendered on a battlefield, at the scene of a car crash, or in a state hospital or prison will be the same as treatment in a university hospital. Where the limiting factor in the adequacy of treatment is the availability of resources, those responsible for the flow of resources must be held accountable for nonnegligent inadequacies of treatment.

Unfortunately, the small sample size in the present study precludes a meaningful comparison between correctional psychiatrists and other forensic

psychiatrists. It would be of great interest if there were evidence that the propensities of correctional psychiatrists had diffused into the broader population of forensic psychiatrists. After all, the exigencies of battlefield surgery led to important advances in military surgery and, eventually, general surgery. It is not inconceivable that the exigencies of correctional psychiatry force its practitioners to employ only the most effective and efficient techniques.

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Appendix

$$TTI = \frac{N}{\sum_{i=1}^N} ((BT_i + ST_i + ECT_i + HT_i + IT_i + PT_i + PA_i + DT_i) / 100)$$

where TTI = Total Treatment Index, BT_i = number of patients treated with behavior therapy by respondent i, and similarly for ST (social therapies), ECT (electroshock treatment), HT (hypnotherapy), IT (intensive, dynamic, individual psychotherapy), PT (pharmacotherapy), PA (psychoanalysis), and DT (supportive, directive, or other short-term psychotherapy). TTI for forensic psychiatrists (mean = 1.7; S.D. = 1.6) did not differ significantly from TTI for non-forensic psychiatrists (mean = 1.6; S.D. = 3.4).

A Total Referral Index (TRI) was similarly constructed, using the numbers of patients referred by the respondent with the expectation that the patient would receive a particular treatment modality. Although TRI for forensic psychiatrists (mean = 10.3; S.D. = 17.0) was twice as large as TRI for non-forensic psychiatrists (mean = 5.1; S.D. = 12.8), this difference was not statistically significant.

For each of the treatment modalities listed in tables 7 and 8, the percentages were calculated by dividing the total number of treatments of that type, summed across respondents, by TTI or TRI, respectively. The mean and standard deviation of these percentages are reported in tables 7 and 8.