

“Courtroom Whores”?—or Why Do Attorneys Call Us?: Findings from a Survey on Attorneys’ Use of Mental Health Experts

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Mental health professionals who serve as expert witnesses are repeatedly characterized as (in the words of one recent author) “Whores of the Court.” However, scholars have published little systematically gathered data about why attorneys seek mental health opinions and the criteria they use for selecting experts. We investigated these issues using a mailed survey of attorneys and judges. A slight majority of attorney respondents had requested mental health professionals’ opinion in the previous year. The most important factors in selecting experts were their knowledge, ability to communicate, and local reputation; national reputation and scholarly writings were least important. Forty-nine percent of the responding attorneys said that receiving a favorable opinion was a “very important” or “essential” consideration, although this did not necessarily mean they wanted a dishonest opinion. Our findings suggest that most forensic work is performed by mental health professionals who are chosen because of their knowledge, communication skills, and local reputations.

To many mental health professionals, lawyers, and judges—not to mention the general public—forensic psychiatry is an indecent business. The title of Margaret Hagen’s recent book, *Whores of the Court: The Fraud of Psychiatric Testi-*

mony and the Rape of American Justice,¹ succinctly captures the way such testimony has historically been characterized.^{2–5} Commentators have described courtroom psychiatrists as “itinerant experts-for-hire”⁶ who “sell not their bodies but their minds . . . in the brothels of the law.”⁷ Lawyers know which psychiatrists “are available for prosecution and defense”⁸ and they hire psychiatrists “who come with a bias in their minds to support the cause in which they are embarked.”⁹

Although legal and mental health pub-

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lications are an abundant source of disparaging anecdotes about psychiatrists who appear in court, systematic surveys have shown that lawyers and judges tend to respect the expertise of testifying psychiatrists.^{10, 11} Lawyers and mental health professionals have published little systematically gathered data about which attorneys seek mental health opinions, how often they do so, and the criteria they use for selecting experts. The authors' June 1997 search of the 1967-97 PsycInfo database using the strategy "(*ATTORNEY OR *PROFESSIONAL REFERRAL) AND (SURVEY OR QUESTIONNAIRE)" yielded just one 1977 article¹² that addressed this matter. This paucity of empirical knowledge is especially significant because lawyers are bringing mental health testimony to bear on a broadening variety of civil issues (e.g., copyright infringement,¹³ medical malpractice,¹⁴ and workplace discrimination and harassment¹⁵⁻¹⁷).

Although some courts have excluded novel mental health testimony when it lacked precision or an adequate scientific basis,^{16, 18-21} The Supreme Court's *Daubert* ruling²² appears to have enhanced the potential admissibility of such testimony.^{23, 24} Mental health professionals and legal experts are far from confident that the legal system will curtail the unsavory behavior of unscrupulous mental health experts and the impact of their testimony on legal outcomes.²⁵⁻²⁷ This trend suggests that mental health experts will increasingly have input into legal matters and that attorneys' selection of experts will increasingly influence the course and outcome of litigation.

Here, we report findings about how often practicing attorneys use mental health experts, the types of client matters that those attorneys handle, and attorneys' criteria for selecting experts. This article is based on results from a questionnaire survey mailed to attorneys and judges who work in and around Dayton, Ohio. In addition to asking about respondents' contacts with mental health professionals, the survey sought information about perceived needs for continuing legal education (CLE) on mental disability law. The authors' findings concerning attorneys' and judges' desires and needs for CLE are the focus of a separate article.²⁸

Methods

In May 1996, the authors mailed a questionnaire to all 1,353 attorneys listed in the Montgomery County section of the 1995 *Ohio Legal Directory*²⁹ and to all 105 trial level judges in Ohio Districts 2 and 12 who were listed in the 1995 *Ohio Judge Directory*.³⁰ Montgomery County (population, 600,000) is located in southwestern Ohio and includes the city of Dayton and several suburbs. Appellate Districts 2 and 12 include Montgomery County plus 13 surrounding counties that contain a mixture of suburbs, small cities, and farming communities.

The questionnaires explored several issues related to mental disability-related CLE and the respondents' contacts with mental health experts. The Attorney Survey first asked about respondents' age, sex, law school, years in practice, major areas of legal practice, and law school education concerning mental disability issues. Next, attorneys were asked about

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the number and frequency of client matters that raised issues related to mental health or disability and the frequency with which attorneys sought mental health expert opinions. Not all attorneys said that they used mental health experts, but those respondents who did were asked to complete the next portion of the survey, in which they rated the importance of several factors in choosing a mental health expert. The final sections of the survey asked attorneys about their sources of information and perceived need for CLE on mental disability law; attorneys were asked about their potential interest in attending CLE courses on several law-mental disability topics.

The Judges' Survey asked questions similar to those in the Attorney Survey concerning demographics, law school education, and need for CLE. Judges also were asked about what types of cases they heard, how frequently those cases raised issues concerning mental health and mental disability, and how they thought the attorneys appearing before them chose mental health experts.

Both survey forms were designed to cover only two sides of a single $8\frac{1}{2} \times 14$ -inch page and to take no more than five minutes to complete. Although the questionnaires requested demographic data, no personal identifiers were linked to the instrument, and the respondents' identities remain unknown to us. Each survey was mailed with a business reply envelope and two cover letters explaining the purpose and voluntary nature of the survey. Participants were assured that any reports of findings (e.g., in scholarly pub-

lications) would preserve individual respondents' anonymity.

Results

We received responses from 267 Dayton area attorneys. The Post Office returned 13 of the Attorney Surveys; assuming that the other 1,340 Attorney Surveys were received, the attorney response rate was 19.9 percent. Forty-one judges responded, and none of their surveys was returned unopened, yielding a response rate of 39 percent.

Table 1 describes respondents' demographic characteristics, the types of legal matters they handled or heard, and the frequency with which they encountered cases that raised mental health or mental disability issues. On average, judges were eight years older than the practicing attorneys, and a larger proportion of judges were men. A significantly greater fraction of judges than practicing attorneys dealt with criminal cases (71% versus 26%, $z = 5.7$, $p < 10^{-5}$ (two-sided)), and significantly more attorneys than judges dealt with estates (31% versus 12%, $z = 2.66$, $p = .008$ (two-sided)). The two groups encountered other types of legal matters at similar frequencies.

When asked what fraction of cases raised issues related to mental health or mental disability, the median response for both attorneys and judges was five percent, and the average rate for both groups was about one in seven. A quarter of the attorneys said that psychological issues arose in fewer than two percent of their cases, but only an eighth of the judges reported a rate this low. The seven judges who heard cases involving juveniles said

Table 1
Respondents' Demographic Characteristics and Principle Areas of Practice

	Attorneys	Judges
Demographics		
Age [*]	44.6 ± 11.2	52.3 ± 7.1
Sex ^{a†}		
Male	199 (74.5%)	35 (85%)
Female	60 (22.5%)	3 (7%)
Mean year of law school graduation	1979	1971
Years in practice	16.6 ± 10.8	
Years on the bench		9.7 ± 7.3
Major types of cases ^b		
Estate [‡]	82 (31%)	5 (12%)
Domestic relations	75 (28%)	13 (32%)
Bankruptcy	44 (16%)	1 (2%)
Insurance	34 (13%)	8 (20%)
Medical malpractice	36 (13%)	9 (22%)
Labor	27 (10%)	1 (2%)
Real estate	66 (25%)	12 (29%)
Personal injury	90 (34%)	20 (49%)
Adult criminal [*]	70 (26%)	29 (71%)
Juvenile	43 (16%)	7 (17%)
Workers' compensation/Social Security ^c	15 (6%)	0 (0%)
Percentage of cases that raise mental health/disability issues	14.9 ± 20.0	13.7 ± 16.7
Number of cases in last year that raised mental health/disability issues	13.3 ± 24.6	
Number of cases in last year that involved reports or testimony (group average) [§]	12.1 ± 24.6 ^d	36.2 ± 74.9
Number of times in last year that an expert mental health opinion was requested	6.69 ± 18.7	

^a Because not all responders answered this question, total equals less than 100%.

^b Responders checked as many answers as applied to them. All categories mentioned by at least 10 percent of attorney responders are listed.

^c Fifteen attorneys listed these areas as their principal practice specialty.

^d Mean ± SD numbers of cases for the 198 attorneys who said that they had handled at least one case that raised mental health/disability issues in the last year.

* Significant difference between attorneys and judges, $z = 5.7, p < 10^{-5}$ (two-sided); † significant difference between attorneys and judges, $\chi^2 = 4.68, df = 1, p = .030$ (two-sided); ‡ significant difference between attorneys and judges, $z = 2.66, p = .008$ (two-sided); § significant difference between attorneys and judges, $t = 2.875, df = 237, p < .0044$ (two-sided).

that psychological issues arose in one-third of their cases; the remaining judges said that such issues arose in just one-tenth of their cases. About one-fourth of both groups said that psychological issues figured importantly in 20 percent or more of their cases. Both groups' responses are illustrated in Figure 1.

Women attorneys said that 19.9 ± 24.9 percent of their client matters raised mental health or mental disability issues; this percentage was significantly greater than the 13.4 ± 18.0 percent of cases reported by men ($t = 2.17, df = 253, p = .03$ (two-sided)). However, men and women said they had handled similar numbers of

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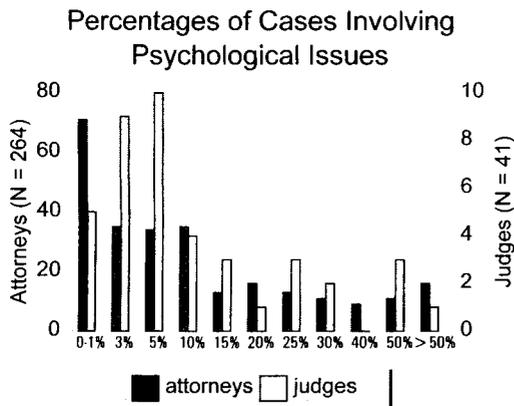


Figure 1. Histogram depicting the numbers of attorneys and judges who said that various percentages of their cases involved psychological issues.

client matters that involved psychological issues in the previous year (12.5 ± 28.2 for men, 15.5 ± 28.2 for women), and the difference in the number of times they had participated in client matters that involved experts' report or testimony (10.3 ± 22.9 for men, 18.1 ± 29.6 for women) was not significant ($t = 1.88$, $df = 193$, $p = .060$ (two-sided)).

The 15 attorneys who listed workers' compensation and Social Security as their major practice areas reported that half of their client matters involved psychological issues. Some of these attorneys reported dealing with "hundreds" of mental disability matters each year; in the last year, they had handled an average of 70 cases that involved mental health professionals' reports, and they had requested such reports an average of 43 times.

Two hundred fifty-seven attorneys answered the survey's question concerning whether they had sought the opinion of a mental health expert in the last year; 141 of them (54.9%) had done so at least once. The distribution of frequencies is

illustrated in Figure 2. Another 39 respondents said that they had sought mental health experts opinions at some time, although they had not done so within the last 12 months. On average, respondents said that they had sought mental health professionals' opinions 6.69 times in the last year, implying that the 257 attorneys had generated approximately 1,720 such referrals.

Attorney Survey respondents who said that they had sought mental health professionals' opinions were asked to rate 10 factors that might influence their choice of experts on a four-point scale (0 = not at all important, 1 = somewhat important, 2 = very important, and 3 = essential). Judges were asked to rate the same factors according to how they influenced attorneys' selection of experts. The attorneys' and judges average responses concerning each factor are shown in Figure 3; also shown is the percentage of attorneys who said that the factor was "very important" or "essential" to their choice of an expert.

Attorneys said that the two most im-

Number of Times Attorneys (N = 257) Sought Experts' Opinions in Last Year

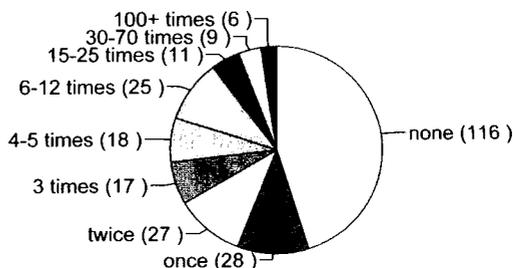


Figure 2. Number of times attorneys sought experts' opinions in the last year.

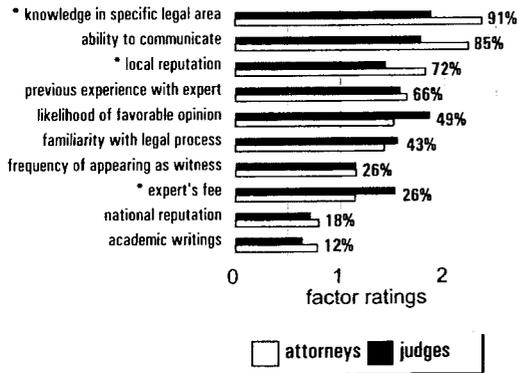


Figure 3. Attorneys' and judges' ratings of factors that influence choice of mental health experts. * Indicates significant difference between attorneys' ratings and judges' ratings. The percentages indicate the fraction of attorneys who rated each factor "very important" or "essential."

portant factors in selecting an expert were the expert's knowledge in the specific area at issue and the expert's ability to communicate effectively and persuasively as a witness. The "knowledge" item was rated very important or essential by 91 percent of attorneys, and the "communication" item received these ratings from 85 percent. Judges also believed these factors affected attorneys' choice of experts, but they ranked the likelihood that the expert would render a favorable opinion just behind the knowledge item as a determinant of which expert might be selected. However, the likelihood of receiving a favorable opinion was ranked fifth by the attorneys, with 49 percent of them saying that this factor was very important or essential. Judges thought that academic writings and national reputation were the least important factors affecting lawyers' choice of experts, and the attorneys confirmed this.

The overall average responses for attorneys and judges were similar (1.48 and

1.41, respectively), which allowed us to make valid between-group comparisons. Attorneys' and judges' rankings were highly correlated (Kendall's $\tau = 0.690$, $z = 2.68$, $p = .0074$ (two-sided)). The two items rated significantly more important³¹ (using the Holm multiple test procedure³² to lower the α -level indicative of significance) by attorneys than judges were expert's local reputation ($z = 2.85$, $p = .0043$ (two-sided)) and knowledge about the specific legal area at issue ($z = 3.17$, $p = .0015$ (two-sided)); the attorneys rated the expert's fee as a significantly less important factor than did the judges ($z = -3.46$, $p = .00054$ (two-sided)).

We wondered whether attorneys who sought professionals' opinions more frequently might emphasize particular factors in selecting experts. However, we found previous experience with the expert was the only factor correlated with frequency of seeking experts' opinions (Spearman's $R_s = .275$, $z = 3.62$, $p = .0003$ (two-sided)). The expert's familiarity with the legal process appeared to be significantly correlated ($R_s = .193$, $z = 2.532$, $p = .011$ (two-sided)), but this finding is not significant after statistical correction for multiple comparisons.³²

Other subgroups of attorneys showed few variations in how they responded to the questionnaire. Compared with other attorneys, lawyers handling domestic relations matters were even less concerned about experts' national reputations ($z = -2.96$, $p = .0031$ (two-sided)) and their academic credentials ($z = -3.71$, $p = .00021$ (two-sided)). Among attorneys who said that they recently had partici-

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pated in client matters that involved psychological issues, those who handled estate cases said that they participated in fewer client matters that involved experts' reports or testimony than did the other attorneys ($t = -2.94, df = 196, p = .0033$ (two-sided)), as did those attorneys who handled real estate matters ($t = -2.51, df = 196, p = .012$ (two-sided)). Lawyers whose practices involved personal injury cases, criminal defense work, criminal prosecution, and labor law did not differ from other attorneys in their responses.

Discussion

Efforts to interpret or generalize from the above results should be made cautiously. The surveys' respondents came from a single geographic region, which consisted of a mid-size Midwestern city and its surrounding areas. While the surveys' target population was representative of similarly situated attorneys and judges, the experiences of individuals who work in large metropolitan areas or rural areas may differ substantially from those represented in the present study.

The low rate of response (but one comparable to Poythress's 1983 survey of circuit court judge³⁴) is a second reason for interpreting findings cautiously, especially those derived from the attorneys' questionnaires. However, although only one-fifth of the attorneys who were contacted responded, the absolute number of responses was large enough to allow several highly significant statistical inferences about response patterns. Also, the reported fractions of attorneys' and judges' types of cases closely matches the

distributions of cases and practices in the Dayton area. For example, 11 attorneys whose work involved criminal prosecution mailed responses; this number is about one-fifth of the number of attorneys who do criminal prosecution work in Montgomery County. The survey findings therefore appear to be representative of Dayton area attorneys, although a higher response rate would have let us state this with more confidence.

Although more than two decades separate the present survey from the one conducted by Benedek and Selzer¹² in 1975, some of the results are strikingly similar (an additional point supporting the present study's validity). In our group of attorney respondents, 54.9 percent had sought a mental health professional's opinion in the previous year; 57 percent of the Ann Arbor attorneys surveyed by Benedek and Selzer said that they had done so. Benedek and Selzer found that 30 percent of their respondents made nine or more referrals a year, and that 3 percent sent over 50 clients for evaluation; Figure 2 shows that attorneys in our survey had a similar distribution of responses. In both the current and the previous study, it appeared that a minority of attorneys specialize in areas of law that frequently raise mental health and mental disability issues and that most attorneys encounter, or notice, these issues only occasionally.

The women respondents said that one-fifth of their cases involved psychological issues, a significantly higher fraction than was reported by men. This finding, although not surprising, has at least three interpretations: women attorneys may

choose to work in areas (e.g., domestic relations) where psychological issues are more salient; women may be more perceptive of emotional issues than men; or women may simply have given a higher estimate of the occurrence of psychological issues than men did. Despite this finding, women did not handle significantly more cases with psychological factors than men did, and they did not deal with mental health expert opinions more often. Concerning this last finding, however, the apparent trend toward encountering more opinions in the women's case load may suggest that our survey's power was too low to detect what is actually a significance difference.

In addition to these between-sex differences, there were great differences within sexes (and within other subgroups, such as practice area) in the frequency with which attorneys and judges thought that psychological questions come up. For example, the lawyers who handled personal injury work said that 17.8 ± 20.4 percent of their client matters raised mental health/disability issues—a very large distribution of answers. Similarly, judges who heard criminal cases said the mental health/disability issues arose in 9.7 ± 13.2 percent of these cases. While it is possible that differences in types of cases fully explain these broadly distributed answers, different levels of sensitivity to emotional issues probably played a role in generating responses with such large variances.

Once an attorney recognizes that litigating a case will require a mental health professional's expert opinion, how is the expert selected? When attorneys seek out

psychiatric expertise, are they looking for someone who is "ready to swear an oath for a fee" (p. 53)²⁷? Our survey suggests that the answer is "Sometimes." Forty-nine percent of attorney respondents said that the likelihood that the expert would produce an opinion favorable to their side was a "very important" or "essential" factor in determining which expert they called. Yet attorneys rated this factor below four others: their previous experience with the expert was more important to them, as were the expert's knowledge, ability to communicate to a jury, and local reputation.

The fact that attorneys often choose an expert who will render a favorable opinion does not mean that they want a meretricious opinion. A criminal defense attorney, for example, might be understandably reluctant to seek the opinion of a psychiatrist who is a well-known "witness for the prosecution,"³⁵ even if he thought the psychiatrist would be a sincere and superb witness. If attorneys say that obtaining a favorable opinion is an important criterion for selecting a psychiatric expert, that does not mean that they want a dishonest opinion. They simply may wish to enlist the help of mental health professionals who will confirm their well-founded beliefs about their clients and whose professional credentials will permit testimony that supports their clients' cases.

Judges may have had several reasons to opine that obtaining a favorable opinion was a stronger factor than attorneys indicated. Many attorneys may have been reluctant to admit (even on an anonymous questionnaire) that this factor was highly

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influential. But the difference between attorneys and judges may reflect their different experiences with cases. Judges only hear testimony from experts who support the position of the attorney who calls them as witnesses; they do not hear from the experts whose findings end litigation because they do not support the retaining attorney's position. Judges may not realize that the expert witnesses they hear represent a winnowed subset of the mental health professionals' opinions that attorneys seek and receive; they also may selectively remember low credibility witnesses or witnesses who seemed biased. A variety of "availability heuristics" thus may distort judges' perceptions about why attorneys pick particular psychiatric experts.

Interestingly, the two factors most closely related to a mental health professional's expertise—national reputation and scholarly writing—were rated lowest by attorneys. Fewer than 20 percent of attorney respondents said these matters were "very important" or "essential" in selecting an expert, and the judges agreed that such qualifications seemed least important to the lawyers presenting cases in their courts. Highly publicized "battles of the experts" such as the Hinckley and duPont insanity cases shape public perceptions of forensic psychiatric practice. However, it is far more typical for forensic work to be performed by mental health professionals who are chosen by attorneys because of their solid local reputations, knowledge in the area at issue, and communication skills.

The findings of this report are modest. However, they represent a beginning effort to address an important forensic topic empirically and to supplement anecdotes

and suspicions with systematically gathered data. If predictions of greater psychiatric and psychological involvement in litigation are correct, then the subject matter of this report will take on increasing importance in determining the results of litigation. Future research should investigate the degree to which the findings of this study are replicable and applicable to other regions. Studies using larger sample sizes and more sophisticated research methods—especially techniques for externally validating attorneys' and judges' perceptions of their decisions and choices—hold the potential for helping researchers and legal decision makers understand some of the hidden forces that shape legal outcomes.

Acknowledgments

The authors appreciate the financial support of the Small Grants Program of the Department of Psychiatry, Wright State University, which helped fund this project. The authors also thank Dän Lee Dimke, Darlene Kamine, William Klykylo, Lynn McLaughlin, Rachel Mossman, Mollie Mossman, Michael Perlin, Richard Perna, and Teri Thienhaus for their advice and assistance in this project.

References

1. Hagen M: Whores of the Court: The Fraud of Psychiatric Testimony and the Rape of American Justice. New York: Regan Books, 1997
2. Resnick PJ: Perceptions of psychiatric testimony: a historical perspective on the hysterical invective. *Bull Am Acad Psychiatry Law* 14:203–19, 1986
3. Mossman D: Is forensic testimony fundamentally immoral? *Int J Law Psychiatry* 17:347–68, 1994
4. Michael L. Perlin, Unpacking the myths: the symbolism mythology of insanity defense jurisprudence. 40 *Case W Res L Rev* 599 (1989–1990)

5. Perlin ML: Morality and pretextuality, psychiatry and law: of "ordinary common sense," heuristic reasoning, and cognitive dissonance. *Bull Am Acad Psychiatry Law* 19:131-50, 1991
6. Will G: An incompatible marriage of psychiatry and law. *Boston Globe*, June 24, 1982 (cited by Resnick PJ, Ref 2, p 204)
7. Perr I: Commentary. *Psychiatric News*. January 18, 1985 (cited by Resnick PJ, Ref 2, p 204)
8. Overholser W: *The Psychiatrist and the Law*. New York: Harcourt Brace, 1953, p 109 (cited by Resnick PJ, Ref 2, p 210)
9. Tracy Peer, 10 Cl. and Fin. 154 (1843) (cited by Resnick PJ, Ref 2, p 210)
10. Serena D. Stier and Kurt J. Stoebe, Involuntary hospitalization of the mentally ill in Iowa: the failure of the 1975 legislation. *64 Iowa L Rev* 1284 (1979)
11. Hiday VA: Are lawyers enemies of psychiatrists?: a survey of civil commitment counsel and judges. *Am J Psychiatry* 140:323-6, 1983
12. Benedek EL, Selzer ML: Lawyers' use of psychiatry: Part II. *Am J Psychiatry* 134: 435-6, 1977
13. Felsenthal E: Courts hear mental-health experts in more civil cases. *Wall Street Journal*. August 23, 1995, pp B1-B2
14. *Machesney v. Bruni*, 905 F. Supp. 1122 (D. D.C. 1995)
15. *Jordan v. Gardner*, 986 F.2d 1521 (9th Cir. 1993)
16. *Shepherd v. American Broadcasting Companies*, 862 F. Supp. 486 (D. D.C. 1994)
17. McMorris FA: Can post-traumatic stress arise from office battles? *Wall Street Journal*. February 2, 1996, pp B1, B10
18. Slants & Trends. *13 Mental Health Law Rep* 65 (1995)
19. *Chandler Exterminators, Inc. v. Morris*, 416 S.E.2d 277 (Ga. 1992)
20. *Martin v. Benson*, 481 S.E.2d 292 (N.C. 1997)
21. *Kostelac v. Feldman's, Inc.*, 497 N.W. 2d 853 (Iowa 1993)
22. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993)
23. Zonana H: *Daubert v. Merrell Dow Pharmaceuticals*: a new standard for scientific evidence in courts? *Bull Am Acad Psychiatry Law* 22:309-25, 1994
24. Slovenko R: The *Daubert* sequelae. *Psychiatric Times*. 1997, Vol. 14, No. 5, pp 22, 24
25. American Psychiatric Association's Council on Psychiatry and Law: Peer review of psychiatric expert testimony. *Bull Am Acad Psychiatry Law* 20:343-52, 1992
26. Golding SL: Mental health professionals and the courts: the ethics of expertise. *Int J Law Psychiatry* 13:281-307, 1990
27. Slovenko R: Impeaching an expert witness. *AAPL Newsletter* 21:52-53, 1996
28. Mossman D, Kapp MB: Attorneys' and judges' perceived needs for continuing legal education on mental disability law: findings from a survey. *J Psychiatry Law* 25:327-45, 1997
29. Ohio Bar Association: *The Ohio Legal Directory*. Dallas, TX: Legal Directories Publishing Company, 1995
30. Ohio Judicial Conference: *The Ohio Judge Directory*. Columbus, OH: Ohio Judicial Conference, 1995
31. Mehta CR, Patel NR, Tsiatis AA: Exact significance testing to establish treatment equivalence with ordered categorical data. *Biometrics* 40:819-25, 1984
32. Holm S: A simple sequentially rejective multiple test procedure. *Scand J Stat* 6:65-70, 1979
33. Krauth J: *Distribution-Free Statistics: An Application-Oriented Approach*. Amsterdam: Elsevier, 1988, pp 153-62
34. Poythress NG: Psychological issues in criminal proceedings: judicial preference regarding expert testimony. *Crim Just Behav* 10:175-94, 1983
35. Johnson J: Witness for the prosecution. *The New Yorker*. May 16, 1994, pp 42-51