## Gender Differences in the Practice Patterns of Forensic Psychiatry Experts

# Marilyn Price, MD, Patricia R. Recupero, MD, JD, David R. Strong, PhD, and Thomas G. Gutheil, MD

In the past 25 years, the number of female forensic psychiatrists has increased dramatically. To assess whether there are gender differences in the practice patterns of forensic psychiatry experts, members of the American Academy of Psychiatry and the Law were surveyed during an annual business meeting. Women in the sample were shown to perform fewer categories of evaluation than men. Women were less likely than men to do criminal work, civil commitment/involuntary medication evaluations, and testamentary capacity evaluations, but there was no significant difference in the percentage of those performing some personal injury/disability/fitness for duty, custody, sexual harassment, or malpractice evaluations. Gender was not a significant factor in determining hourly rate. When subjects were asked to comment on whether they thought that gender was a factor in the selection of a forensic expert, 80 percent of the women, but only 41 percent of the men, believed that gender was a consideration.

#### J Am Acad Psychiatry Law 32:250-8, 2004

In 1978 and 1979, the National Institute of Mental Health conducted an exhaustive search to identify forensic psychiatrists and found that women made up just 2.5 percent of their sample. It is not surprising that there were few women practicing forensic psychiatry in the late 1970s.<sup>1</sup> Forensic psychiatry intersects several systems—medicine, law, and criminal justice—that were all largely populated by men.<sup>2</sup> Thus, there were few female role models available to draw women into the field in the 1970s.

By the mid 1990s, the situation had improved, although most legal and criminal justice professionals were still men. In 1995, women comprised 23 to 25 percent of attorneys, 9 percent of judges, 12 to 23 percent of correctional officers, and less than 15 percent of full-time sworn personnel in local police departments and sheriff's departments.<sup>3,4</sup> Ednie<sup>2</sup> estimated that 10 percent of the membership of the American Academy of Psychiatry and the Law (AAPL) in 1994 was female.

Over the past few years, women have increasingly been drawn to careers in forensic psychiatry. Women account for approximately 25 percent of the current membership of AAPL. This trend may reflect the growing proportion of women entering medical school, psychiatry, and forensic psychiatry. The increased visibility of women who have gained leadership positions in AAPL has resulted in role models for women and an increase in the availability of mentoring relationships. With the large influx of women into the practice of forensic psychiatry, it appeared timely to examine whether there are any differences in the practice patterns of male and female forensic psychiatrists.

Surveys have indicated that attorneys consider a variety of factors when selecting a prospective expert witness. Focus is on academic rank, experience, number of publications, reputation in the community, observation of past testimony, and recommendation of colleagues.<sup>5–7</sup> Despite the increased use of experts in this era of complex litigation,<sup>6,8</sup> there have been few studies investigating the impact of the gen-

Dr. Price is Clinical Assistant Professor, Dr. Recupero is Clinical Associate Professor, and Dr. Strong is Assistant Professor, Department of Psychiatry and Human Behavior, Brown University School of Medicine, Providence, RI. Dr. Gutheil is Professor, Department of Psychiatry, Harvard Medical School, Boston, MA. Address correspondence to: Marilyn Price, MD, Butler Hospital, 345 Blackstone Blvd., Providence, RI 02906. E-mail: marilyn\_price@brown.edu

der of the expert on the selection of experts or on the fact-finding mission of the courts.<sup>9-17</sup>

This article reviews studies about the perception of women in the courtroom and how gender affects the selection and effectiveness of expert witnesses. The present study was designed to investigate whether the practice patterns of AAPL members differ between men and women. The paper will present the results of a survey of current practice patterns of male and female forensic psychiatrists. Implications of these findings are discussed.

## Gender in the Court

As more women have entered the traditionally male-dominated fields of medicine and law and flourished, it is important to recall that historically women have not always been equal participants in the legal process. In the past, women were excluded from access to every role in the courts. This exclusion of women was based on the myth that women were naturally frail, could not hold up under the rigors of court work, and would thus interfere with the efficient functioning of the court system.<sup>18</sup>

To illustrate this point, note that in 1872 the United States Supreme Court ruled that Myra Bradwell<sup>19</sup> was not entitled to practice law because she was a woman, and it was her "paramount destiny and mission" to be a wife and mother. Loken et al.<sup>20</sup> noted that although the role of women in society had dramatically been altered over time, "a separatesphere notion has persisted well into this last century and worked to keep women in their 'special sphere' of the home and the hearth by discouraging their service on juries" (Ref. 20, p 16). As recently as 1961, the Supreme Court, in Hoyt v. Florida, rejected a Fourteenth Amendment challenge brought by a female defendant convicted of second-degree murder by an all-male jury. The Supreme Court sustained the conviction and regarded as "reasonable" the automatic exemption of women from jury service unless they first registered with the court clerk, because women belonged in the home caring for the family.<sup>21</sup>

Surveys of professionals in related fields have noted advances in equality and opportunity for women but continue to report differences in the perception of gender bias in various situations, with women consistently perceiving more gender bias than men. In a study examining gender issues conducted in the Ninth Circuit, male attorneys and judges generally held the view that gender-influenced differences had subsided substantially over decades, leaving only traces, while women reported many continuing areas of gender bias. Attitudes about gender bias did not depend on age but rather on the gender of the respondent.<sup>22</sup> The data from the Eighth Circuit Gender Fairness Task Force confirmed that female attorneys were more likely than male attorneys to report gender bias, genderrelated incivility, and sexually inappropriate behavior.<sup>20,23,24</sup>

Riger *et al.*<sup>12</sup> found that female attorneys and judges perceived more bias in the courtroom than males. This finding was anticipated because women are more likely than their male colleagues to experience gender bias. Seventy-four percent of female attorneys reported at least one experience of gender bias in the courtroom (e.g., being dismissed as incompetent). Female litigants, witnesses, judges, and lawyers in the court system were more likely to be subjected to discourteous and disrespectful conduct not encountered by their male counterparts. There was use of patronizing language and improper forms of address (Ms. rather than Dr.) to undermine the credibility of female witnesses. Court observers in Rhode Island found 1.64 examples of gender bias per hour of court, mostly coming from attorneys.<sup>25</sup> Difference in perception also extends to the academic environment.26,27

These studies raise questions about whether women experts operating in a legal system with these residual problems can be viewed as equally effective and desirable experts as their male counterparts. The 1994 study by Walters<sup>9</sup> of expert witness testimony suggests that there are differences in types of testimony offered by men and women that reflect traditional stereotypes. She examined reported federal case law from 1980 to 1993 for both the U.S. District Court and the U.S. Circuit Court of Appeals for the District of Columbia. She studied the frequency of expert testimony by gender, the types of cases in which experts testify, and the substance of their testimony, to determine whether there was a genderbased division of labor among experts. Female experts made up only 11 percent of experts identified by gender in court opinions and testified in only 21 percent of the total cases.

Walters<sup>9</sup> noted that women were more likely to participate in traditionally female domains such as human disputes, accounting for 75 percent of the experts involved in education controversies (including education, family services, and social work) and 17 percent of the experts involved in civil rights cases. In contrast, women were expert witnesses in just two percent of criminal cases and four percent of economic controversies, such as corporate cases. Women did not serve as experts in contract disputes. Women represented just 14 percent of medical experts and just 7 percent of psychological experts. Walters noted that even when women testified in male-dominated fields, the female expert came from a "feminine occupation" and testified about a subject that was more stereotypically "feminine." The lone female expert in the criminal case category was an expert in sociology who testified about the dependent relationship between prostitutes and pimps.<sup>9</sup>

Women testified infrequently as the sole expert for a party, accounting for just seven percent of the solo appearances. Walters explained, "This skewed ratio may indicate that litigants feel testimony by women must be supplemented to satisfy the same evidentiary burden" (Ref. 9, p 636).

Walters' study did indicate that there had been changes over time. The total number of expert witnesses increased by 22 percent from the first half of the study period from 1980 to 1986 compared with the second half from 1987 to 1993. The number of women experts nearly quadrupled from the earlier to the latter timeframe. It is likely that this trend has continued as more women have entered traditionally male-dominated fields and have gained the experience and seniority to be called as experts.

## Gender and the Forensic Expert

Since the participation of women as forensic experts is a relatively new phenomenon, concern has been raised that women may not be viewed as exerting the same "expert power" as men. Memon and Shuman<sup>11</sup> suggested that attorneys appeared to be using more male than female experts because jurors would regard male experts as more credible and jurors often rely on superficial considerations such as appearance and presentation styles rather than the content of the expert's testimony.

The concern that a source characteristic, such as an expert's gender, can determine outcome is centered on theories about the routes of persuasion.<sup>28–30</sup> Petty *et al.*<sup>28,29</sup> has noted that there are two routes: central and peripheral. According to Petty, when the central route is used, information is carefully processed and assessed. When the information is processed through peripheral routes, decisions are made that are not based on the quality of the material presented but rather on the appeal of the source. Peripheral processing is more likely to occur when the listener is either not motivated or is overwhelmed with information. Since expert testimony during a trial is likely to be complex and demanding, one would expect that jurors might very well rely on peripheral processing. Petty et al. found that when using peripheral processing, factors such as credentials and the appearance of the source may influence the persuasiveness of a particular message. Memon and Shuman<sup>11</sup> suggests that when a juror uses peripheral processing, generalizations about people based on group membership such as gender (stereotyping) become significant determinants.

The research of Cooper *et al.*<sup>31</sup> in 1996 on persuasion has demonstrated that under conditions of message complexity, jurors do in fact rely on heuristics or shortcuts rather than on the content of the message when judging its validity. Mock jurors were exposed to identical highly complex scientific expert testimony by one of two experts in a civil product liability trial concerning exposure to toxic substances. The two experts varied only in their credentials. The expert with the superior credentials was significantly more persuasive. In a follow-up study in 2000, Cooper et al.<sup>32</sup> found that when testimony was simplified, jurors tended not to rely on peripheral processing, but when the testimony was complex, credentials, hourly rates, and number of times a witness testified became factors in decision-making.

Despite these theoretical concerns, studies looking specifically at the effect of the gender of the expert witness or the attorney on decisions of jurors have shown mixed results. The available studies all have limitations, some because of sample size, and others because of the use of students as subjects or the use of audiotapes rather than videotapes in varying the gender. In many cases the responses of individual mock jurors are considered, and the effect of jury deliberation is not assessed.<sup>11–17,33,34</sup>

A 1996 study by Hahn and Clayton<sup>33</sup> seems to support gender-based decision-making. Undergraduate college students were read a brief summary of an assault and robbery case and viewed a videotape of either a passive or aggressive male or female attorney interrogating the only eyewitness to the crime. The students overall were more likely to acquit clients of male versus female defense attorneys. The gender difference was largely due to the finding that male but not female jurors perceived aggressive male attorneys as more persuasive than nonaggressive male attorneys. The aggressive female attorney was not perceived more favorably. This resulted in the female attorneys' being less successful overall at having the crime considered less serious and in obtaining a not guilty verdict.

Hahn and Clayton<sup>33</sup> noted that these findings were consistent with category-based expectations of men and women. Men have been viewed as aggressive, competitive, independent, dominant, logical, active, objective, ambitious, and self-confident, while women are tactful, gentle, quiet, aware of the feelings of others, and emotionally expressive.<sup>35</sup> Thus, the aggressive male attorney in the study by Hahn and Clayton<sup>33</sup> was conforming to the gender stereotype in behavior and speech, while the female attorney was not. Modifying the female attorney's presentation to an aggressive male style did not confer the same advantage, because the female was then viewed as less friendly.<sup>33</sup>

In contrast, Memon and Shuman<sup>11</sup> failed to show the expected stereotyped decision-making by jurors. They studied jurors who had been summoned for jury service but had not yet been called to serve on a panel. The entire sample of jurors listened to an audiotape presented by a male speaker of a civil malpractice claim alleging negligence by an obstetrician, and jurors were also given a written case summary of the audiotape. The role of gender was studied by presenting one of four slides of the defense expert that differed by gender and race during the audio presentation. There was no significant difference in the perception of female and male experts. The black female was seen as most persuasive, an interaction of gender and race.<sup>11</sup> The use of audiotapes and slides rather than videotapes may have contributed to the finding of no significant gender differences. In addition, the facts of the case may have been presented in such a clear manner that the subject did not need to rely on source characteristics such as gender.

Some studies have failed to show any gender difference. In 1993, Vondergeest *et al.*<sup>34</sup> presented college students acting as mock jurors with a transcript of an armed robbery case and asked them to render a verdict. The testimony focused on the defendant's having passed a polygraph test. Testimony was presented solely in a written transcript, and the gender of the expert was varied by referring to the expert as he or she. No differences in verdict outcome were noted based on gender of the expert.<sup>35</sup> The use of college students rather than a sample more representative of a true jury pool is a limiting factor.

It has been suggested that it is not the gender of the expert alone that determines credibility, but rather the congruency between the gender of the expert and the domain of the case.<sup>13–17</sup> This hypothesis predicts that women would be more effective witnesses than men when the subject of the testimony concerns traditionally female issues such as child custody. This theory raises questions about whether the actual practice patterns of men and women experts differ along lines of perceived effectiveness. Again, studies produced variable results.

Swenson *et al.*<sup>17</sup> in 1984 demonstrated that the gender of the expert exerts just a marginally significant effect in mock jurors' assessment of an expert's expertise in a child custody dispute. The testimony concerned the witness's opinion about the parents in a child custody case. The female expert was rated as showing greater expertise than the male, which is consistent with the stereotype that women are better judges of the needs of children than men.

Rodlund<sup>13</sup> hypothesized that in an abuse case, a female expert on child sexual abuse would be more persuasive than a male expert. Mock jurors, mostly students, watched a videotape, differing only in the sex of the expert witness testifying about the battered child syndrome. Groups of 6 to 12 jurors met to reach a verdict. If there was no verdict after an hour of deliberation, the jury was considered hung. In the trial simulation, all the juries presented with a female expert remained at deadlock after an hour, while half of those exposed to a male expert reached verdicts, which were evenly split between guilty and not guilty. Again, the use of students as subjects was a limiting factor.

Schuller and Cripps<sup>14</sup> investigated the impact of gender of the expert in a simulated audiotaped homicide trial involving a battered woman who had killed her abuser and was claiming self-defense. When the expert was a woman and the testimony was presented before the defendant's testimony, overall verdicts of jurors, undergraduates in a large Canadian city, were more lenient. This difference in leniency was because male jurors' but not female jurors' perceptions were more favorable to the defendant when the expert was female.<sup>14</sup> Schuller and Cripps<sup>14</sup> noted that these findings are in keeping with their theory:

In general women as experts (i.e., in the role of professionals) are likely to present situations of gender role incongruency, and hence, a female witness' credentials or performance may be perceived less favorably relative to a man's. As such, the testimony a female expert conveys may have less of an impact on the decision process compared with identical testimony conveyed by a male counterpart [Ref. 14, p 18].

However, expert testimony pertaining to battered wife syndrome covers a topic that is gender appropriate for women. Thus when the expert testimony concerns an issue about which women may be perceived as more knowledgeable than men, female experts are viewed more favorably than male experts.<sup>14</sup> The study was limited because only individual juror responses were assessed rather than jury verdicts. Thus, the effect of deliberation and the gender composition of a jury were not considered.

Schuller et al.,16 in a later study, found further support for their theory. The mock trial involved the amount of damages to be awarded in an antitrust price-fixing case that was situated in either a maledominated industry, the supply of crushed rock to a road construction company, or female-dominated industry, supply of fine cotton to a women's clothing company. The gender of the plaintiff's expert was varied. Presentation of a male expert resulted in a statistically more favorable verdict for the plaintiff and increased certainty of judgment rating only in the male congruent domain. When the case involved the female-dominated industry, there was a trend for a more favorable decision for the plaintiff when a female expert testified. Differential evaluation of the male and female expert was more pronounced in the male-dominated domain possibly because the testimony concerned price fixing, which can be viewed as being in the male sphere. Again the study was limited, because actual verdicts by a mock jury were not studied, and the impact of a deliberation on decisionmaking was not considered.

#### Methods

To evaluate the current practice patterns of forensic psychiatrists, the authors with the support of the Gender Issues Committee, the AAPL leadership, and the AAPL Research Committee, surveyed members of AAPL who attended the annual AAPL business meeting in 2001. The two-page questionnaire requested information about age, sex, board certification, professional and academic affiliation, involvement in committees of APA and AAPL, number of publications, and number of years since residency. We also asked questions about the forensic practice of our members and collected data about the types of cases consulted on and hourly fees charged. Members were also asked to respond to questions about whether they felt that gender was a factor in selecting an expert.

The AAPL newsletter was used to distribute a second questionnaire that requested information about gender, years since residency, percentage of time spent in forensic work, and academic rank. Respondents were asked whether attorneys had ever expressed to them any preference concerning the gender of an expert for a particular case. If this had occurred, subjects were asked to describe the circumstances and the rationale given.

#### Results

Of the 145 questionnaires that were distributed at the AAPL business meeting, 94 were returned, for a response rate of 65 percent. Demographic characteristics of the sample are presented in Table 1. The sample was 32 percent female. Ninety percent of the sample was board certified, and 75 percent were diplomates from either the American Board of Forensic Psychiatry or the American Board of Psychiatry and Neurology with Added Qualifications in Forensic Psychiatry. Fifty percent of the women and 33 percent of the men had completed a forensic fellowship. The women in the sample were younger on average (42.7 years) than the men (49 years) (t = 2.84, df =

 Table 1
 Demographic Characteristics of Survey Respondents

, i		
Men	Women	
64	30	
49.73 (11.97)	42.73 (9.04)	
18.69 (13.00)	11.15 (10.74)	
33.3	50	
75	77	
17	17	
47	70	
36	13	
59	63	
40	41	
30	40	
51	56	
56	32	
60	61	
	$\begin{array}{c} 64\\ 49.73\ (11.97)\\ 18.69\ (13.00)\\ 33.3\\ 75\\ 17\\ 47\\ 36\\ 59\\ 40\\ 30\\ 51\\ 56\end{array}$	

\*p < 0.001

92, p = .0055) and had fewer years since completing their residency than the men (t = 2.68, df = 88, p =.0088).

We used logistic regression to test the relative strength of association between the reported usual charge per hour for forensic consultation (dichotomized at the median value) and the following variables: years since residency (centered at the group mean of 16.35 years), gender, level of academic credentials (In-training/None, Lecturer/Assistant Professor, Associate /Full Professor), diplomate status, and number of publications  $(0, \leq 10, \text{ or } > 10)$ . Interactions between gender and the other independent variables were tested in the logistic model by entering the two-way interaction terms as a block after all other terms. Two variables were found to be significant: years since residency (p < .003) and possession of some academic credentials (p = .013). No gender interaction terms were significant. Individuals with more than the average number of years since residency were more likely to charge a higher fee than the median (OR = 1.09; 95% CI = 1.03-1.16). Possessing some form of academic credentials also increased the likelihood that individuals reported charging more than the median (OR = 3.44; 95%) CI = 1.393 - 10.29). Attaining associate or full professor status did not increase the likelihood that individuals charged more than the median beyond having obtained assistant professor or lecturer status (OR = 0.59; 95% CI = 0.268 - 1.22).

We then examined responses by gender to practice related variables (see Table 2). We grouped the types of evaluations into seven categories for statistical purposes. Subjects were considered to have performed a type of examination if they reported completing even one such evaluation per year. The seven categories were criminal responsibility, which also included competency to stand trial and sexual offender evaluations; divorce/custody evaluations; civil commitment and involuntary medication evaluations; conservatorship/guardianship/testamentary capacity evaluations; personal injury/disability/fitness for duty evaluations; malpractice; and sexual harassment/sexual misconduct.

Women were shown to perform evaluations in fewer categories than men 2.93 versus 3.86 (p =.035). Women were less likely to do criminal work, civil commitment/involuntary medication evaluations, and conservatorship/guardianship/testamentary capacity evaluations but there was no significant difference in the percentage of those performing some personal injury/disability/fitness for duty, custody, sexual harassment, or malpractice evaluations.

We also asked members to comment on whether they felt that gender was a factor in the selection of a forensic expert. On this question, women were much more likely than men to believe that their gender was a factor in being retained as an expert. Eighty percent of women believed that gender was a consideration, whereas only 41 percent of men believed that their gender played a role in their being retained (p =.001, OR = 6.8). This indicates that the women have had different beliefs about being retained. Many female experts wrote that their gender became

Survey Item	Men	Women	Significance
Feel gender is an issue (%)	40.63	80.00	$(\chi^2 = 12.72, df = 1, p = .001)$
No attorney preference (%)	92.60	96.20	
Cases for the defense (%)			
<50	35.94	26.67	
=50	29.69	60.00	
>50	34.38	13.33	$(\chi^2 = 8.57, df = 2, p = .014)$
Mean number of evaluation types (SD)	3.86 (1.95)	2.93 (1.98)	(t = 2.13, df = 92, p = .035)
Frequency of evaluation types (%)			
Criminal*	82.81	53.33	$(\chi^2 = 9.09, df = 2, p = .003)$
Divorce/custody	39.10	33.30	
Civil commitment <sup>+</sup>	79.69	50.00	$(\chi^2 = 8.61, df = 2, p = .003)$
Conservatorship‡	60.94	36.67	$(\chi^2 = 4.83, df = 2, p = .028)$
Personal injury§	71.90	63.30	
Malpractice	51.56	56.67	
Sexual harassment	35.90	50.00	

\*Criminal responsibility, competency to stand trial, sexual offender evaluations

+Conservatorship/guardianship, testamentary capacity evaluation

§Personal injury, disability/fitness for duty evaluations

a consideration in being retained when the lawyer perceives an advantage to having a female expert.

There were only 45 responses to the AAPL newsletter, limiting statistical analysis. However the results again suggest a difference in perception according to gender. We asked, "Have attorneys ever expressed to you a preference for the gender of an expert for a particular case?" This question asks about direct experience rather than perception. Sixty percent of the female experts but only 25 percent of the male experts had personal experience with an attorney's clearly indicating the preference of an expert on the basis of gender (p = .003, OR = 4.5). Female experts provided some representative examples. Several female forensic experts noted that an attorney representing a defendant in a sex crime had informed them that they were selected because of the positive effect their gender would have on the jury. Female experts were also viewed as preferable in defending a male client against allegations of sexual harassment. Male experts were less likely to report gender preferences by attorneys, although four male experts reported that they were asked to recommend a female expert for cases involving rape or sexual harassment.

### Discussion

The data collected from AAPL members suggest that women are now being drawn into active forensic practice and are thriving. The presence of role models has probably encouraged women to enter the field. Fifty percent of the women in the sample had completed a forensic fellowship and 63 percent had been appointed to a committee of AAPL. Hourly rates charged for forensic consultation were not affected by gender but rather by years since residency and credentials, factors that one would predict should be relevant, reflecting seniority and experience versus stereotypes.<sup>5</sup>

However, caution must be raised about interpretation of these preliminary findings, as this sample may not be representative of the experience of the membership of AAPL as a whole. The sample was drawn from members attending the annual business meeting and included many of the most senior male and female members of APPL who might be expected to have established themselves and to transcend gender.

The majority of our sample of women who practiced in the field perceived that gender plays a role in the selection of an expert and the types of evaluations that were offered to them. Eighty percent of women in the sample believed that gender played a role in their being retained, whereas only 41 percent of men believed that their gender was an issue (p = .001, OR = 5.8). Women reported that their gender was viewed as an advantage in cases such as sexual harassment and rape. Their testimony in support of a male was viewed as bolstering the credibility of the male defendant.

The 1994 study by Walters<sup>9</sup> appeared to support a gender-based division of labor in Federal Courts. However, her study examined an earlier time frame. It is unclear whether this perception by the majority of women members in the study that gender affects the retention of experts was based on past or more recent experience.

It is perhaps not surprising that attorneys might want to exploit a source characteristic of an expert, such as gender. However, an expert cannot establish a reputation as an effective witness based solely on this factor. While a female expert may initially be retained because of gender considerations, further consultation will be based on the quality and integrity of the work product. Study participants in response to the question, "Have attorneys ever expressed to you a preference in the gender of an expert for a particular case?" reported that attorneys specifically requested female experts for cases involving sexual harassment or rape. However, none of the subjects reported an experience of specific rejection of a woman as an expert based on her gender for other types of cases.

In addition, the survey indicates that the successful female expert is clearly not limited to cases belonging to a traditional female domain. The data indicate that women did not predominate in sexual harassment or rape evaluations. The study demonstrated that women were underrepresented in criminal work, which is viewed as a male-dominated field, but women did not predominate in divorce/custody evaluations, a traditionally female domain. Despite concerns about gender's influencing selection, there were no gender differences in retention across a range of types of evaluations, including civil commitment, conservatorship, guardianship, testamentary capacity, personal injury, fitness for duty, and malpractice.

There are several reasons that this study may have underestimated the expected trend toward those domains. The study was limited, because it was not designed to assess whether the defense or plaintiff retained the expert, to identify differences in the actual number of evaluations performed in each category and to determine whether women had refused to perform these types of evaluations when approached. Since the women in the study were senior, the sample may not reflect the experience of those entering the field. Once a woman gains experience, gender considerations may no longer exert as much of an influence in selection for specific cases.

There are other important aspects of forensic psychiatry that are likely to show gender differences. These are not addressed in this study but could indirectly affect perception of sexual bias. Factors such as presence of incivility, sexually inappropriate behavior, disrespectful conduct, patronizing language, and improper forms of address by attorneys and judges should be studied further.

The studies looking specifically at the effect of the gender of the expert witness or the attorney on decisions of jurors have shown varied results, and they have significant limitations. Some studies used samples that were not representative of true jury pools. College students were used as subjects although juries are composed of individuals of varied age, socioeconomic class, and education. In other studies gender was manipulated by the use of audiotapes rather than videotapes and may not fully reflect the influence of gender. Some of the studies assessed the responses of individual mock jurors. Thus, the effect of jury deliberation was not assessed.<sup>11-17,33,34</sup> The more careful analysis of the case during the process of deliberation may diminish the effect of source characteristics of the expert. Alternatively, source characteristics such as gender of the expert may have even more effect depending on the jury composition and development of leaders who sway others. Further studies should evaluate the effect of jury deliberation on gender considerations.

The impact of stereotypes based on gender may be positive, neutral, or negative in relation to expert testimony on any given topic.<sup>7</sup> Further study is needed to explore whether the use of stereotypes in fact plays a role in the real world and, if so, what is the extent of the influence. Cooper *et al.*<sup>31</sup> suggest that gender bias, like other source characteristics, can be minimized when information is presented in a manner that jurors can understand. Thus, the best expert, whether male or female, appears to be the one who can express concepts for the decision maker in a simple, convincing manner. In other words, being an effective teacher may render an expert more credible, regardless of gender considerations. The practice patterns of the experts surveyed indicate that this may be a far more important matter than gender-based considerations.

#### Acknowledgments

The authors thank Renée L. Binder, MD, for extensive assistance in editing and revising the manuscript and for suggestions about the questionnaire; the other members of the Gender Issues Committee (Liza H. Gold, MD, Elizabeth Hogan, MD, Robert I. Simon, MD, Roy B. Lacoursiere, MD, Sharon K. Dodd-Kimmey, MD, Harold J. Bursztajn, MD, Munazzah Khawaja, MD, and Maureen Hackett, MD) for suggestions concerning the questionnaire; and Anne T. Ryan, EdD, and E. Kathleen Farrell, EdD for help in distributing the questionnaire.

#### References

- Hanson CD, Sadoff RL, Sager P, *et al*: Comprehensive survey of forensic psychiatrists: their training and their practices. Bull Am Acad Psychiatry Law 12:403–10, 1984
- 2. Ednie KJ: Challenges for women in forensic psychiatry. New Direct Mental Health Serv 69:43–8, 1996
- Commission on Women in the Profession, America Bar Association: Women in the Law: A Look at the Numbers. Washington, DC: American Bar Association, 1995
- 4. Frazier PA, Hunt JS: Research on gender and the law: where are we going, where have we been? Law Hum Behav 22:1–16, 1998
- Champagne A, Shuman D, Whitaker E: An empirical examination of the use of expert witnesses in American courts. Jurimetr J 31:375–92, 1991
- Devine D, Clayton LD, Dunford BB, et al: Jury decision-making: 45 years of empirical research on deliberating groups. Psychol Public Policy Law 7:622–727, 2001
- 7. Goodman-Delahunty J: Approaches to gender and the law: research and applications. Law Hum Behav 22:129-43, 1998
- Shestowsky D: Where is the common knowledge?—empirical support for requiring expert testimony in sexual harassment trials. Stanford Law Rev 51:357–79, 1999
- 9. Walters AP: Gender, empiricism and federal courts: gender and the role of expert witnesses in federal courts. Georgetown Law J 83:635–55, 1994
- Gross SR, Syverud KD: Getting to no: a study of settlement negotiations and the selection of cases for trial. Mich Law Rev 90:319-20, 1991
- Memon A, Shuman DW: Juror perception of experts in civil disputes: the role of race and gender. Law Psychol Rev 22:179– 87, 1998
- 12. Riger S, Foster-Fishman P, Nelson-Kuna J, et al: Gender bias in courtroom dynamics. Law Hum Behav 19:465–80, 1995
- Rodlund MJ: Jurors' perception of gender differences in expert witness testimony. Doctoral dissertation. Grand Forks, ND: University of North Dakota, 1992
- Schuller RA, Cripps J: Expert evidence pertaining to battered women syndrome: the impact of gender and timing of testimony. Law Hum Behav 22:17–31, 1998
- Schuller RA, Smith VL, Olson JM: Jurors' decisions in trials of battered women who kill: the role of prior beliefs and expert testimony. J Appl Soc Psychol 24:316–37, 1994
- Schuller RA, Terry D, McKimmie B: The impact of an expert's gender on jurors' decisions. Law Psychol Rev 25:59–74, 2001

- Swenson RA, Nash DL, Roos DC: Source credibility and perceived expertness of testimony in a simulated child custody case. Profess Psychol Res Pract 15:891–8, 1984
- Babcock BA: A place in the palladium: women's rights and jury service. U Cin Law Rev 61:1139–68, 1993
- 19. Bradwell v. Illinois, 83 U.S. 130, 141 (1872).
- Loken JB, Murphy DE, Battey RH, *et al*: Final report and recommendations of the eighth circuit gender fairness task force. Creighton Law Rev 31:9–57, 1997
- 21. Hoyt v. Florida, 368 U.S. 57 (1961).
- 22. Coughenour JC, Hug P Jr, Patel MH, *et al*: The effects of gender in the federal courts: the final report of the ninth circuit gender bias task force. South Cal Law Rev 67:741–1080, 1994
- Cortina LM, Lonsay KA, Freedman LV, *et al*: Eighth Circuit gender fairness study: what's gender got to do with it?—incivility in the Federal Courts. Law Soc Inquiry 27:235–57, 2002
- Lonsay KA, Freedman LV, Cortina LM, *et al*: Understanding the judicial role in addressing gender bias: a view from the Eighth Circuit Federal Court System. Law Soc Inquiry 27:205–25, 2002
- Breton T: Empirical study finds gender bias in Rhode Island Courts. Natl Law J 8:13–19, 1986
- 26. Nonnemaker L: Women physicians in academic medicine. N Engl J Med 342:399-405, 2000
- 27. Carr PL, Ash AS, Friedman RH, et al: Faculty perceptions of

gender discrimination and sexual harassment in academic medicine. Ann Intern Med 132:889-96, 2000

- Petty RE, Cacioppo JT: Attitudes and Persuasion: Classic and Contemporary Approaches. Dubuque, IA: Wm. C. Brown, 1981, pp 255–6
- Petty RE, Cacioppo JT Goldman R: Personal involvement as a determinant of argument based persuasion. J Personal Soc Psychol 41:847–55, 1981
- Petty RE, Cacioppo JT: Communication and Persuasion: Central and Peripheral Routes to Attitude. New York: Spring-Verlag, 1986
- Cooper J, Bennet EA, Sukel HL: Complex scientific testimony: how do jurors make decisions? Law Hum Behav 20:379-80, 1996
- 32. Cooper J, Neuhaus IM: The "hired gun" effect: assessing the effect of pay, frequency of testifying, and credentials on the perception of expert testimony. Law Hum Behav 24:149–71, 2000
- Hahn PW, Clayton SD: The effects of attorney presentation style, attorney gender, and juror gender on juror decisions. Law Hum Behav 20:533–54, 1996
- Vondergeest L, Honts CR, Devitt M.K. Effects of juror and expert witness gender on jurors' perception of an expert witness. Mod Psychol Studies 1:1–6, 1993
- Broverman IK, Vogel SR, Broverman DM, et al: Sex role stereotypes: a current appraisal. J Soc Issues 28:59–78, 1972