Rape Trauma Syndrome

A Review of Case Law and Psychological Research*

Patricia A. Frazier and Eugene Borgida[†]

This article analyzes recent case law on the admissibility of rape trauma syndrome evidence. Because many rulings on the admissibility of this evidence have been based on judicial assumptions about human behavior, rather than on scientific evidence, we next describe psychological research relevant to concerns raised about its scientific reliability, helpfulness, and prejudicial impact. Following this review, we evaluate both the expert testimony provided and the judicial decisions in recent cases in light of current research. Finally, we provide suggestions for future psychological research that could inform discussions of the admissibility of rape trauma syndrome evidence.

Psychologists and other mental health professionals have contributed their expertise to court proceedings for many years on such topics as insanity and competency to stand trial. Both the frequency of the use of expert psychological testimony and the types of issues about which psychologists testify have increased in recent years, however. Controversy surrounding the admissibility and ethics of such testimony also has escalated (see, e.g., Elliott, 1991; Ellsworth, 1991; Mc-Closkey, Egeth, & McKenna, 1986).

An example of a relatively new, and controversial, type of evidence is expert testimony on rape trauma syndrome (RTS). This testimony typically consists of a description of the common aftereffects of rape (i.e., RTS) and an opinion that a particular complainant's behavior is consistent with having been raped. The tes-

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[†] University of Minnesota.

timony is most often used to corroborate the complainant's claim that intercourse was not consensual when the defendant claims consent.¹

Previous reviews of the case law on RTS evidence revealed that appellate courts initially were divided sharply regarding its admissibility (Borgida, Frazier, & Swim, 1987; Frazier & Borgida, 1985). Several appellate courts have addressed the admissibility of RTS evidence since these initial reviews were published. While the issues have changed somewhat, courts continue to be divided, with some ruling in favor of expert testimony on RTS (*Lessard v. State*, 1986; *People v. Taylor*, 1990; *Simmons v. State*, 1987; *State v. Allewalt*, 1986; *State v. Bubar*, 1985; *State v. Gettier*, 1989; *People v. Hampton*, 1987; *State v. Huey*, 1985; *State v. Bubar*, 1985; *State v. Gettier*, 1988; *People v. Coleman*, 1989; *State v. Black*, 1987; *State v. Black*, 1986; *State v. Black*, 1986; *State v. Black*, 1986; *State v. Black*, 1986; *State v. Black*, 1987; *People v. Hampton*, 1987) and that several courts explicitly noted that they were *not* ruling on RTS evidence can be interpreted as additional evidence of the controversial nature of the testimony.²

The purpose of this article is, first, to review recent appellate court decisions on the admissibility of RTS evidence (i.e., cases decided since our earlier reviews). The second purpose is to describe psychological research relevant to concerns expressed by the courts in these recent decisions about the scientific reliability, helpfulness, and prejudicial impact of RTS evidence. This review provides the background for an evaluation of the expert testimony and judicial decision making in recent cases. These evaluations focus on the use of psychological research both by experts and by the courts. Finally, we provide suggestions for future psychological research that could inform discussions of the admissibility of RTS evidence. This article thus differs from law review articles on RTS that focus more specifically on the case law (e.g., Buchele & Buchele, 1985; Donohue, 1987/88; Dwyer, 1988; Fischer, 1989; Lawrence, 1984; Massaro, 1985; McCord, 1985).

Admissibility Criteria

Prior to reviewing the case law on RTS evidence, it is necessary to discuss briefly the criteria for the admissibility of expert psychological testimony. Unfortunately, there is no uniformly accepted standard by which courts evaluate such testimony. There are, however, a few basic requirements that must be met in

¹ RTS also has been used in (a) civil cases to establish damages sustained by a rape victim (e.g., *Alphonso v. Charity Hospital of Louisiana*, 1982); (b) the defense of rape victims charged with criminal offenses (e.g., *People v. Cruikshank*, 1985); and (c) cases involving child victims (e.g., *People v. Pullins*, 1985). Our review excludes these cases as well as those decided in military courts of appeal (e.g., *United States v. Moore*, 1983; *United States v. Tomlinson*, 1985).

² These cases involve testimony that (a) the complainant's reactions were typical of sexual assault victims (*People v. Farley*, 1987), (b) the complainant's behavior was not unusual (*State v. Horne*, 1986), (c) the complainant had been penetrated against her will (*People v. Mays*, 1986), and (d) the complainant had been sexually assaulted (*People v. Smith*, 1986).

order for expert testimony to be admissible. First, the expert must be qualified "by knowledge, skill, experience, training, or education" (Rule 702, Federal Rules of Evidence, 1984).³ Second, the evidence must assist the trier of fact (i.e., be helpful to jurors in their decision making). Third, the evidence must be scientifically reliable. In determining reliability, some courts rely on *Frye v. United States* (1923), which requires that scientific evidence be "generally accepted" within the relevant scientific community in order to be admissible. Other courts rely on the Federal Rules of Evidence, which do not require "general acceptance." The final criterion for admissibility is that the expert testimony be probative and not unfairly prejudicial to the defendant. Further clarification of these criteria is provided in the ensuing discussion.

Rape Trauma Syndrome Case Law

Qualitative reviews of the early case law (i.e., decisions made prior to 1985) revealed that arguments against the admissibility of RTS evidence have been made in regard to all four of these criteria (Borgida et al., 1987; Frazier & Borgida, 1985). The primary objections to the testimony in the early decisions concerned its helpfulness (e.g., whether the testimony is beyond the common knowledge of the jury), prejudicial impact (e.g., whether the testimony improperly bolsters the credibility of the complainant), and scientific reliability (e.g., whether the evidence can reliably determine whether a rape occurred). Our analysis of recent case law will assess whether the same concerns continue to be raised regarding the admissibility of RTS evidence.

Expert Qualification

As was true in earlier cases, the qualification of the expert was rarely a determining issue in the more recent cases. The defense objected to the qualifications of the expert in three cases; the expert was a rape crisis counselor in each (*State v. Bubar*, 1985; *State v. McCoy*, 1988; *State v. Robinson*, 1988). The courts upheld the qualification of the expert in all three cases on the basis that experts can be qualified on several grounds (e.g., training or experience). In cases where the qualifications of the experts were not questioned, the experts have been psychologists (*State v. Brodniak*, 1986; *State v. Gettier*, 1989; *People v. Hampton*, 1986), psychiatrists (*State v. Huey*, 1985), social workers (*Simmons v. State*, 1987; *State v. Black*, 1987), rape crisis counselors (*People v. Coleman*, 1989), physicians (*People v. Coleman*, 1988), and academic professionals (*Commonwealth v. Gallagher*, 1988). Rape crisis counselors thus seem to be more vulnerable to objections about their qualifications than other experts. This may be

³ The American Psychology-Law Society Specialty Guidelines For Forensic Psychologists recommend that "forensic psychologists provide services only in areas of psychology in which they have specialized knowledge, skill, experience, and education" [emphasis added] (Committee on Ethical Guidelines for Forensic Psychologists, 1991). Thus, whereas the Federal Rules allow experts to be qualified on one of several grounds, these guidelines recommend that psychological experts be qualified on all four grounds.

because they lack the educational credentials and research background of other experts or because they are more likely to be perceived as advocates for victims.

Scientific Reliability

The scientific reliability⁴ of RTS evidence was not often raised as an issue in the more recent appellate court decisions. Unlike concerns about expert qualification, however, the issue appeared to be a major factor in the evaluation of the testimony when it was raised. The cases that addressed the scientific reliability of the evidence will thus be discussed in some detail.

In People v. Hampton (1986), the Colorado Court of Appeals reversed a conviction on the grounds that RTS evidence had been improperly admitted by the trial court. The Colorado Supreme Court reviewed the case and reinstated the original conviction based on its finding that the testimony had been properly admitted at the trial court level (*People v. Hampton*, 1987). The difference between decisions lies in the differing standards imposed on the testimony by the two courts. Specifically, the Court of Appeals ruled that the testimony did not meet the criteria for admissibility outlined in *Frye v. United States* (1923) because it did not reliably establish that a rape occurred. On the other hand, the Supreme Court argued that the appellate court erred in applying the *Frye* test and that the Federal Rules more properly apply to this type of evidence. According to the Federal Rules, any weaknesses in the evidence should affect the weight given the evidence by the jury rather than the admissibility of the testimony itself. Whether the *Frye* test properly applies to this type of testimony is an ongoing debate in the literature (see, e.g., Frazier & Borgida, 1985; Lawrence, 1984; McCord, 1985).

The Washington Court of Appeals also reversed a conviction on the grounds that expert testimony on RTS had been improperly admitted by the trial court (*State v. Black*, 1987). Unlike the Colorado Supreme Court, the Washington Supreme Court affirmed the appellate court decision. Relying on the *Frye* test to determine the admissibility of the evidence, the Washington Supreme Court ruled that RTS is not a scientifically reliable means of proving that a rape occurred. This decision was based on the fact that their review of the scientific literature on rape trauma suggested that there is no typical response to rape and that the symptoms of rape trauma are not unique because they can be caused by other traumatic events (see Dwyer, 1988, for further discussion of this case).

The New York Court of Appeals also has discussed the reliability of RTS evidence (*People v. Taylor*, 1990). The New York Court concluded that although RTS is associated with a broad range of symptoms and there are individual differences in patterns of recovery, the relevant scientific community has generally accepted that rape is a traumatic event that triggers the onset of identifiable symptoms in many women. Unlike the Washington Supreme Court, they did not frame the question of scientific reliability in terms of whether RTS evidence proves that a complainant was raped.

⁴ Consistent with its use in judicial decisions, our use of the term *reliability* encompasses the psychometric concepts of both reliability and validity.

In sum, two of the three courts that have addressed this issue have decided that RTS evidence is scientifically reliable. Differences between courts reflect that questions about scientific reliability have been framed in two very different ways. Some courts are concerned with whether there is a consistent and generally accepted body of knowledge on the aftereffects of rape, whereas others are concerned with whether a diagnosis of RTS "proves" that a rape occurred. Courts that have framed the question in terms of whether the symptoms associated with rape trauma can prove that a rape occurred have tended to decide that the evidence is not reliable (e.g., State v. Black, 1987). Several commentators have noted that this interpretation sets an unreasonably high standard for the admission of expert testimony (Donohue, 1987/88; Massaro, 1985; McCord, 1985). According to the Federal Rules of Evidence (1984), expert testimony must tend to make the existence of a fact more or less probable, rather than "prove" the fact in question. Although there is debate regarding whether the Federal Rules or the Frye test is the appropriate standard for determining reliability, as well as whether these two standards really differ (Salzburg, 1983), neither requires that evidence be determinative proof.

Helpfulness

The helpfulness of RTS evidence was raised as a concern in only two recent decisions. Specifically, in *State v. Gettier* (1989), the expert testified in general terms about the characteristics exhibited by people who have experienced traumatic events. The defendant argued that the testimony was irrelevant because it did not "assist the trier of fact to understand the evidence or to determine a fact in issue" (p. 4). The Iowa Supreme Court ruled that the evidence was relevant to show that the complainant had been traumatized but added that it did not add much to the jury's common understanding.

In State v. Robinson (1988), the expert testified that it was not unusual for a victim to exhibit little emotion immediately following an assault. This testimony was offered to rebut the defendant's assertion that the complainant's lack of emotion was inconsistent with her claim of rape. The Wisconsin Supreme Court ruled that the testimony was helpful in "disabusing the jury of some widely held misconceptions about sexual assault victims" (p. 173). Similarly, the New York Court stated that patterns of responses of rape victims are not within the common understanding of lay jurors (*People v. Taylor*, 1990).

Thus, in cases where the helpfulness of the testimony has been in issue, courts have ruled that the testimony is indeed helpful, particularly when used to educate jurors regarding common misconceptions about rape. That the issue was raised in only two cases suggests that the helpfulness of the evidence was of less concern in more recent cases than it was in earlier cases.

Prejudicial Impact

By far the most common objection to expert testimony on RTS in recent cases is that it is unfairly prejudicial to the defendant. Courts have been divided fairly evenly on this issue, with approximately half of the courts deciding that the testimony was not unfairly prejudicial (Lessard v. State, 1986; Simmons v. State, 1987; State v. Allewalt, 1986; State v. Gettier, 1989; State v. Huey, 1985) and half of the courts reaching the opposite conclusion (Commonwealth v. Gallagher, 1988; People v. Coleman, 1989; State v. Black, 1987; State v. Brodniak, 1986; State v. McCoy, 1988). These differences of opinion partly reflect differences in the exact nature of the testimony provided, as described below.

First, testimony can differ in regard to whether or not the expert used the term RTS. For example, the expert in *State v. Allewalt* (1986) testified regarding the characteristics of Post Traumatic Stress Disorder (PTSD), stated that PTSD could be caused by several kinds of traumatic events, and gave an opinion that the complainant was suffering from PTSD. The Maryland Court of Appeals ruled that avoiding the term RTS is "more than cosmetic" (p. 751) and that the potential for unfair prejudice is largely reduced when the terminology does not equate the syndrome exclusively with rape. Conversely, the Washington Supreme Court found "such semantic distinctions unpersuasive" (*State v. Black*, 1987, p. 19) and ruled that the testimony is unfairly prejudicial because it constitutes an opinion regarding the guilt of the defendant.

A second distinction made by the courts is whether or not the testimony is used to rebut claims by the defendant that the complainant's behavior was inconsistent with her claim of rape. Courts have admitted testimony regarding a wide range of behaviors for this purpose, including failure to recall details of the assault (Simmons v. State, 1987), asking the defendant not to tell anyone about the assault (Lessard v. State, 1986), delayed reporting (People v. Hampton, 1986), and lack of emotion following the assault (People v. Taylor, 1990; State v. Robinson, 1988). In fact, the New York Court of Appeals ruled that RTS testimony is admissible only to explain behavior that may seem inconsistent to the jury (People v. Taylor, 1990; see also People v. Bledsoe, 1984).

It also should be noted, however, that other courts have *excluded* testimony offered to rebut a defendant's claim that a complainant's behavior was inconsistent with that of a rape victim. This includes testimony (a) explaining a complainant's inability to identify the defendant until years after the rape (*Commonwealth v. Gallagher*, 1988), (b) on the frequency of false accusations among rape victims (*State v. Brodniak*, 1986), and (c) that the complainant was still traumatized by the experience (*State v. McCoy*, 1988). The courts in *Brodniak* and *McCoy* both ruled that expert testimony on RTS generally is admissible but that the testimony offered in the particular case at hand went beyond what was proper.

Finally, the testimony has varied in terms of how specifically it is related to the case at hand. The evidence appears to be more acceptable to courts if the expert discusses the symptoms experienced by victims as a class rather than those experienced by a particular complainant (e.g., *State v. Gettier*, 1989). More often, the expert testifies about the typical behaviors of rape victims and offers an opinion that the complainant's behavior is consistent with that of a rape victim (e.g., *State v. Black*, 1987). This opinion can be given by an expert who has interviewed the complainant solely for the purpose of providing the testimony or by an expert who has provided counseling to the complainant. Whether the expert actually interviewed the complainant does not appear to be a major factor in determining prejudice. Nonetheless, some legal scholars recommend that, in order to reduce the risk of prejudice, experts not interview complainants (Dwyer, 1988).

In sum, the potential prejudicial impact of RTS testimony has become its most controversial aspect. Both the content and the purpose of the testimony are crucial factors in determining prejudice. In regard to content, courts seem to prefer testimony that refers to victims in general but are divided regarding whether the use of the term RTS is unfairly prejudicial. In regard to purpose, the testimony seems to enjoy somewhat greater acceptance if it is used to rebut a defendant's claim that the complainant's behavior was inconsistent with having been raped.

Psychological Research Relevant to Concerns about Admissibility

As this review of the case law suggests, decisions regarding the admissibility of expert testimony on RTS are based on judicial evaluations of the scientific literature on rape trauma as well as on judicial assumptions regarding the presumed helpfulness and/or prejudicial impact of the testimony. Because the issues that arise in making decisions about admissibility often are empirical questions, the purpose of this section is to review psychological research bearing on these issues. Specifically, we discuss research relevant to judicial concerns about the scientific reliability of RTS evidence as well as recent studies designed to test judicial assumptions regarding its helpfulness and prejudicial impact. Note that, rather than being a comprehensive review of the literature on rape trauma, this review focuses on research that addresses the specific concerns raised by the courts.

Scientific Reliability

Before discussing judicial concerns about reliability and the research relevant to these concerns, it is important to mention that evaluations of reliability are made difficult by the fact that the term RTS has several meanings in the literature. The term was coined by Burgess and Holmstrom (1974) to describe a two-stage model of recovery from rape (i.e., an acute and a reorganization phase). Although this study was very important in heightening awareness about the traumatic effects of rape, it was quite limited methodologically, and many of its results have not been replicated. Subsequent research, which is much more rigorous, conceptualizes rape trauma in terms of specific symptoms rather than more general stages of recovery. Finally, RTS often is described as a specific type of PTSD (DSM-III-R, APA, 1987). Equating RTS with PTSD also can be misleading because the symptoms listed in DSM-III-R are not identical to those described by Burgess and Holmstrom or those studied in most research on rape. Thus, RTS can refer to the stage model of recovery described by Burgess and Holmstrom, more recent studies on postrape symptoms, or rape-related PTSD. It seems most appropriate, however, to base assessments of scientific reliability on the entire, evolving body of research on rape.

Three general concerns have been raised by the courts regarding the scientific reliability of RTS evidence. First, questions have been raised about the notion of a "syndrome" given the wide range of symptoms experienced by rape victims. For example, one court argued that "because the symptoms associated with 'rape trauma syndrome' embrace such a broad spectrum of human behavior, the syndrome provides a highly questionable means of identifying victims of rape" (*State v. Black,* 1987, p. 16). This conclusion was based on the fact that victims can experience such "varied" symptoms as fear of being alone, fear of crowds, fear of the outdoors, and fear of the indoors.

In response to this concern, it should be noted that the symptoms described in *State v. Black* (1987) merely illustrate that victims develop fears related to the nature of the rape. In addition, that victims experience varied symptoms is consistent with the notion of a syndrome, which does not preclude variability. Finally, although victims can and do experience a range of symptoms, only a relatively few symptoms have been studied consistently (see Frazier & Cohen, 1992; Koss & Burkhart, 1988, for reviews). These include fear and anxiety (e.g., Kilpatrick, Veronen, & Resick, 1979), depression (e.g., Frank & Anderson, 1987), social maladjustment (e.g., Resick, Calhoun, Atkeson, & Ellis, 1981), and sexual dysfunction (e.g., Orlando & Koss, 1983). Recent studies (Burge, 1988; Kilpatrick, Saunders, Amick-McMullan, Best, Veronen, & Resnick, 1989) also have documented that many victims experience the symptoms of PTSD outlined in *DSM-III-R* (APA, 1987) (e.g., recurrent nightmares, irritability, hypervigilance).

A second concern about the reliability of RTS evidence is that because the symptoms experienced by rape victims are not unique, they could be caused by numerous other stressors. A closer look at the data suggests that this concern may be unwarranted. First, although the DSM-III-R (APA, 1987) lists rape as only one of several stressors that can cause PTSD, different stressors produce different types and levels of symptoms (Wilson, Smith, & Johnson, 1985). In addition, the particular manifestation of the disorder will differ across events. That is, a woman who has been raped may have recurrent nightmares about the assault, whereas a combat veteran may have recurrent nightmares about combat experiences. Raperelated PTSD thus can be distinguished easily from PTSD caused by other stressor events. Second, although the symptoms of PTSD do overlap with those of other disorders, particularly depressive and anxiety disorders, it is also the case that certain symptoms are unique to PTSD. For example, unlike other diagnostic categories, several of the symptoms of PTSD relate directly to a specific traumatic event (e.g., intrusive recollections and dreams of the event, avoidance of activities that arouse recollection of the event).

A final concern is that the concept of a rape trauma syndrome is not viable because not all victims respond to an assault in the same way. Individual differences in levels of postrape trauma clearly exist, and several factors associated with these differences have been identified (see, e.g., Frank & Anderson, 1987; Frazier, 1990, 1991; Meyer & Taylor, 1986). Research on individual differences in levels of postrape distress need not negate the helpfulness of the testimony to a jury. Rather, it could be incorporated into the testimony to help explain the response of a particular complainant. For example, in addition to describing the typical aftereffects of rape, the expert could describe research on factors affecting the degree of trauma experienced by victims. If one of these factors was relevant to a particular complainant, research on the relation between this factor and postrape recovery could be incorporated into the testimony to further explain the complainant's response.

In sum, the specific concerns raised by the courts about the reliability of RTS evidence may not be warranted. The symptoms identified in recent research are relatively circumscribed, and at least some symptoms of rape trauma are unique. Research on individual differences in responses to rape can be incorporated into expert testimony and thus can add to, rather than detract from, its helpfulness.

On the other hand, as noted, we have addressed only the specific concerns about reliability raised by the courts in these recent decisions. These may not actually be the most important concerns. The basic issue in evaluating the scientific status of RTS is not the range of symptoms experienced by victims, the uniqueness of the symptoms, or individual differences in levels of distress. Rather, the basic issue is whether there is a consistent body of evidence, based on well-designed research, about the aftereffects of rape. When a finding has been sufficiently established in the literature is a difficult question to answer (see Elliott, 1991, and Ellsworth, 1991, for a discussion of this issue in a different context). In our opinion, although early studies were plagued by numerous methodological problems (see Katz & Mazur, 1979), several studies have since been conducted that are much more sophisticated methodologically (see Ellis, 1983, for a review). These studies have assessed victim recovery at several points after the assault using standardized assessment measures and have employed carefully matched control groups. This research has established that rape victims experience more depression, anxiety, fear, and social adjustment and sexual problems than women who have not been victimized. Research on PTSD among rape victims is more recent but consistently suggests that many victims experience PTSD symptoms following an assault. Initially high symptom levels generally abate by 3 to 4 months postassault, although significant levels of distress continue for many victims.

Helpfulness

The primary concern about the helpfulness of RTS evidence in judicial decisions is whether the testimony is "beyond the ken" of the average juror. For example, in one of the first decisions on the admissibility of RTS evidence, the Minnesota Supreme Court ruled that the evidence is not helpful because most jurors are adequately informed about rape and rape victim behavior (*State v. Saldana*, 1982). Whether jurors are likely to be informed about rape is a question that can best be answered empirically.

In order to test judicial assumptions about the extent of juror knowledge about rape, Frazier and Borgida (1988) administered an 18-item Sexual Assault Questionnaire (SAQ) to two expert and two nonexpert groups. The expert groups consisted of 22 experts on rape and 20 experts on PTSD. The two nonexpert groups were 87 students and 55 nonacademic university employees. Results indicated that both nonexpert groups scored significantly lower on the SAQ than the experts. The employee and student groups answered at almost chance levels (57% and 58% correct, respectively). For example, the nonexperts were not aware of the frequency of multiple victimization experiences or the behavioral changes often apparent following a rape. Both of these could be important factors in jurors' assessments of the credibility of a complainant. That is, jurors may perceive a complainant who has made a number of life changes as unstable rather than as exhibiting a normal reaction to a crisis.

In addition to completing the SAQ, both expert groups were asked for their opinions about the admissibility of RTS evidence and its helpfulness to jurors. There was almost complete agreement among the experts that jurors are not sufficiently knowledgeable about rape and its aftereffects. Thus, both the responses to the SAQ and the experts' opinions about juror knowledge suggest that expert testimony on rape trauma could be helpful in educating jurors and that the judicial assumption that jurors *are* adequately informed about rape victim behavior may not be well founded.

Prejudicial Impact

Courts have expressed various concerns about the potential for expert testimony on RTS to unfairly prejudice the defendant. For example, courts have argued that expert testimony unfairly prejudices the defendant by "creating an aura of special reliability and trustworthiness" (*State v. Saldana*, 1982, p. 324). The evidence also is more likely to be seen as prejudicial if the expert (a) uses the term *RTS*, (b) does not testify about "unusual behaviors," and (c) links the testimony specifically to the case at hand. Whether jurors give expert testimony undue weight and whether the above-mentioned factors affect the prejudicial impact of the testimony also are empirical questions.

One study that directly assessed whether jurors give expert testimony undue weight examined the impact on juror decision making of two types of expert psychological testimony (polygraph or RTS) as well as the presence or absence of an opposing expert (Brekke, 1985). A nonexpert control group also was included. Mock juries listened to an audiotaped reenactment of an actual rape trial (in which type of expert testimony was varied) and deliberated to a unanimous verdict. Jurors also completed various measures evaluating both the complainant and the defendant (e.g., credibility ratings).

Brekke reasoned that if jurors give undue weight to expert testimony, jurors exposed to such testimony also should be extremely likely to vote for conviction, have poor recall of case facts, and offer few criticisms of the expert during deliberations. Results indicated, first, that jurors exposed to expert testimony rendered more guilty verdicts, considered it more likely that the defendant committed rape, and recommended longer sentences than jurors not exposed to expert testimony. The effects of the expert testimony on juror decisions were quite small, however (e.g., the largest effect accounted for 8% of the variance in judgments). Other evidence suggested that there were no significant effects of expert testimony on recall of case facts. Finally, jury deliberation analyses indicated that discussions of the experts were not consistently positive. Brekke also examined whether the expert testimony was unfairly prejudicial to the defendant. Unfair prejudice was operationalized as derogation of the defendant in conjunction with enhanced evaluations of the complainant. Results suggested that there were no differences across conditions on ratings of the defendant's credibility or honesty. Analyses of jury deliberations also failed to reveal effects of expert testimony on evaluations of the defendant. There was some suggestion, however, that expert testimony enhanced evaluations of the complainant. For example, jurors exposed to expert testimony rated the complainant as more credible than other jurors.

A study by Brekke and Borgida (1988) provides some data regarding the impact of the specificity of RTS testimony on juror decisions. Mock juries listened to an audiotaped reenactment of an actual rape trial containing either (a) no expert testimony, (b) standard expert testimony providing general information about rape, or (c) expert testimony linked to the specific case. When the testimony was presented in the trial also was varied.

Results suggested that juries exposed to the specific testimony were more likely to convict and to recommend harsher sentences for the defendant than those exposed to the standard expert testimony. In addition, the testimony had greater impact when it was presented early in the trial. The testimony with the greatest impact was always the specific hypothetical version presented early in the trial. Under these circumstances, the expert testimony seemed to function as a filter through which jurors interpreted subsequent case facts. When the expert testimony came late in the trial, jurors tended to interpret the case in light of their preconceived notions and biases about rape. Though it could be argued that these data indicate that the evidence unfairly prejudices the defendant, analyses of jury deliberations found that expert testimony did not affect the favorability of the discussions of the defendant's credibility. Rather than being prejudicial to the defendant, the expert testimony seemed to counteract the otherwise pervasive effects of rape myths on juror judgments (see Borgida & Brekke, 1985).

In sum, these two studies suggest that expert testimony does exert some influence on jury decision making in rape trials. Jurors do not, however, appear to give the testimony undue weight nor does the testimony appear to unfairly prejudice the defendant. Testimony that is specifically related to the case at hand has more impact but appears to counteract juror biases against the complainant rather than prejudice the defendant.

Evaluation of Expert Testimony and Judicial Decisions on Rape Trauma Syndrome

This review of the relevant psychological research provides a basis for evaluating both the expert testimony provided and judicial decision making in recent RTS cases. First, we evaluate whether the expert testimony provided in recent cases is supported by existing research. Second, we address the manner in which courts use psychological research in their decision making. Although there are other criteria by which judicial decisions could be evaluated (e.g., consistency in applying admissibility criteria), we focus specifically on the extent to which courts seem to be aware of and informed by relevant psychological research. Our evaluation of these issues is based on information available in appellate court decisions. These decisions do not provide complete information about either the testimony provided or the bases for the judicial decisions, although they are the best indicators available (Hafemeister & Melton, 1987).

Expert Testimony

As mentioned previously, expert testimony on RTS can take several forms. Experts can testify in general terms about the symptoms of posttraumatic stress without interviewing the particular complainant. More commonly, experts provide testimony about posttraumatic stress responses as well as testimony that the particular complainant's behavior is consistent with such responses. This more specific testimony can be based on interviews with the complainant performed for the purpose of providing testimony or as part of a counseling relationship.

Whatever particular form the testimony takes, the expert should be qualified, and the testimony should be helpful, scientifically reliable, and not unfairly prejudicial. We will focus in this section on the scientific reliability of the testimony. Whether the specific testimony provided is based on reliable data is a different question than whether research on RTS generally is reliable. In other words, expert testimony provided in specific cases varies in terms of how well it conforms to the research literature.

Unfortunately, the information available in the appellate decisions about the content of the expert testimony provided in these cases suggests that some of the testimony may not have a firm basis in the research literature. This seems particularly true of testimony used to explain complainant behaviors that seem inconsistent with having been raped. Several examples follow. In Lessard v. State (1986) the expert stated that it is "very common" for a victim to ask an assailant not to tell anyone about the assault. To our knowledge, this particular behavior has not been documented in the research literature on responses to rape. Statements by the experts in both Simmons v. State (1987) and Commonwealth v. Gallagher (1988) concern behaviors that also have not been documented in the research literature, although they can be seen as consistent with the acute trauma experienced by victims immediately following an assault (i.e., failure to recall details of the assault and inability to identify the defendant until years after the rape). Testimony in *People v. Hampton* (1986) that victims of acquaintance rape are more likely to delay reporting is supported in the research literature (e.g., Williams, 1984); whether this behavior is part of RTS is questionable, however. The expert testimony in People v. Taylor (1990) and State v. Robinson (1988) concerned the controlled style of responding in the immediate postrape period described by Burgess and Holmstrom (1974). Few other researchers have documented this style of responding because they have not interviewed victims in emergency rooms.

In sum, experts in recent cases have described a broad range of symptoms and behaviors as consistent with RTS, some of which do not appear to be based on research. Testimony that is not research based often seems to be prompted by a defendant's claims that a complainant's behavior was inconsistent with having been raped. If virtually any victim behavior is described as consistent with RTS, the term soon will have little meaning. Indeed, some critics have argued that this already is the case (e.g., Lawrence, 1984).

The ethical issues that arise here are the same as those that arise in regard to other types of expert psychological testimony. It is the ethical responsibility of each expert "to present the science of psychology . . . fairly and accurately . . . [and to be] guided by the primary obligation to aid the public in developing informed judgments . . ." (APA, 1990, p. 392). In other words, it is incumbent upon experts to be familiar with the existing research and only to describe victim behaviors that have been reliably established in the literature. If testimony is not research based, it is very important that the basis of the testimony be stated clearly. Which victim behaviors have been reliably established is, of course, open to interpretation and experts are bound to disagree (see e.g., Elliott, 1991, and Ellsworth, 1991). Surveys of experts regarding the reliability of different aspects of the research can provide an objective means of determining consensus in the field (Kassin, Ellsworth, & Smith, 1989). On the other hand, these experts may have a vested interest in portraying their own work as reliable (Fiske, Bersoff, Borgida, Deaux, & Heilman, 1991).

There also are pragmatic issues to consider in providing expert testimony on RTS that should be mentioned. First, the term *PTSD* generally is viewed as less prejudicial than *RTS* because the former does not equate symptoms exclusively with rape. The term *PTSD* also is preferable because, as discussed previously, the term *RTS* has no clear referent. Second, expert testimony consisting of a general description of research on the aftereffects of rape is seen as less prejudicial than testimony by an expert who also states that a particular complainant's behavior is consistent with that of a rape victim. Using nontreating expert witnesses and limiting the testimony to research on victims as a class has several advantages (see Buchele & Buchele, 1985; Dwyer, 1988). For example, it reduces the risk that the testimony will lead to compulsory examinations of complainants by defense experts (Massaro, 1985) and lessens concerns about the extent to which the expert's testimony depends on the veracity of the particular complainant.

General testimony describing research on the aftereffects of rape is not without its critics, however. It has been argued that expert testimony on RTS lacks relevance because existing research does not compare "true" victims to "false" victims, which is the crucial issue in consent defense cases. Rather, existing research compares rape victims to *nonvictims*. If false victims are indistinguishable from true victims, and different from nonvictims, expert testimony may not be helpful. For example, a complainant who is a false victim may have engaged in consensual sex with a defendant but later regret having done so. Although the experience would not be defined as rape, she may nevertheless exhibit stressrelated symptoms (e.g., depression) that are similar to the symptoms experienced following a "true" rape. To our knowledge, however, no research on this issue currently exists and, because of the infrequency of false claims, may never develop. In general, it appears unlikely that a false victim (i.e., one who engaged in consensual sex that she later called rape) would exhibit the specific symptoms of rape-related PTSD exhibited by true victims (e.g., recurrent and intrusive thoughts about the event, exaggerated startle response, hypervigilance to danger). If expert testimony were offered in such a case, the expert would testify about typical characteristics and behaviors of rape victims, including the symptoms of rape-related PTSD. Other testimony would be offered about the victim's behavior following the incident, and it would be up to the jury to determine the complainant's credibility. Thus, expert testimony would still serve to educate jurors about rape and aid them in their decision making.

Judicial Decisions

In addition to evaluating the content of the expert testimony provided, it is instructive to assess the bases for judicial decisions on the admissibility of RTS testimony. There are many criteria by which these decisions could be evaluated (e.g., consistency in applying admissibility criteria, definition of what constitutes RTS evidence). We will focus specifically on the extent to which judicial decisions seem to be informed by the relevant psychological research.

In order to examine this issue, we performed a count of psychological research articles cited in recent appellate court decisions.⁵ This count suggested that courts may not be particularly well informed regarding the most recent research on rape. For example, although these decisions were published between 1985 and 1990, the most recent research article cited was published in 1983. The 1974 Burgess and Holmstrom study was by far the most frequently cited (in 7 out of 16 decisions). Only two other studies were cited more than once and both represent rather early research (Kilpatrick et al., 1979; Notman & Nadelson, 1976). The DSM-III (APA, 1980) and DSM-III-R (APA, 1987), which list the symptoms of PTSD, also were cited frequently.

It is somewhat ironic that *State v. Black* (1987), which contained the most complete research review, was the only recent case in which a court ruled that the evidence is not scientifically reliable. Their discussion of reliability concluded with the following quote from an article published in 1979: "To date, investigations of how a rape experience affects women over time have been scarce and methodologically poor. . . . Therefore these studies provide little, if any, scientifically valid data regarding the effects of a rape experience" (Kilpatrick et al., 1979, pp. 658–659). Thus, although the court in *Black* cited the most recent research, their conclusion about the adequacy of the research was drawn from an article published several years prior to most of the research they reviewed.

As discussed previously, some research exists that could inform judicial decisions about the helpfulness (Frazier & Borgida, 1988) and prejudicial impact of RTS evidence (Brekke, 1985; Brekke & Borgida, 1988). This research has not yet begun to influence decisions on RTS. The Frazier and Borgida study was, however, cited by the Minnesota Supreme Court (*State v. Hall*, 1987) to support its decision that expert testimony on adolescent sexual abuse was helpful to the jury.

⁵ We did not count citations included as part of references to other cases or articles.

This study also has been cited in recent law review articles (e.g., Dwyer, 1988; Fischer, 1989), which may make it more accessible to the courts.

In sum, although our review of the case law suggests that recent decisions reflect less concern about the scientific reliability of RTS evidence, this change may not necessarily reflect an awareness by the courts of the increased sophistication of the research. Indeed, the citation count suggested that courts may review only a small portion of the available research. On the other hand, that research relevant to helpfulness and prejudice has not informed judicial decisions is not surprising given the limited number of studies and the recency of their publication.

It also should be mentioned that researchers need to pay more attention to how they disseminate their work if it is to have an impact on the legal system. As Melton (1987) notes, the influence of psychology on the legal system is less than it should be because (a) the diffusion of knowledge into the system is slow; (b) psychologists have failed to address questions of interest to the law; and (c) even when research has been designed explicitly to test legal questions, insufficient attention has been paid to ensuring that it reaches the proper audiences. Use of social science research by the courts is substantially more likely when researchers make a concerted effort to make their research accessible to the legal system. Several recent articles provide excellent suggestions for how that can be accomplished (e.g., Grisso & Melton, 1987; Hafemeister & Melton, 1987; Melton, 1987).

Future Research

Psychological research directly relevant to the admissibility of RTS evidence is rather limited. We therefore would like to present some suggestions for research that could inform future discussions of its scientific reliability, helpfulness, and prejudicial impact.

Scientific Reliability

Most research on the aftereffects of rape was not conducted for the purpose of establishing the scientific reliability of expert testimony on RTS. Several types of research would be useful for this purpose. For example, one of the concerns about RTS evidence is that the symptoms of rape trauma are not unique. Most research to date has focused on symptoms that are more *common* among rape victims (e.g., fear, anxiety, depression) but not necessarily *unique* to rape. Additional research on the unique symptoms of rape-related PTSD would be particularly helpful in addressing this concern. Studies that assess differences in PTSD symptomatology across events also would be useful. Translation to a legal context would be facilitated by reporting percentages of victims experiencing each symptom rather than mean scale scores.

Another way to assess the uniqueness of rape trauma is to conduct prospective studies of symptomatology prior to, and following, the rape. This type of study would address concerns that the symptoms of rape trauma could have been present prior to the rape. Research of this type obviously would be very difficult to conduct. One possibility would be to administer measures of symptoms and victimization experiences at several points in time among samples of women who are known to be at risk, such as college students (Koss, Gidycz, & Wisniewski, 1987). Comparisons could be made between victims and nonvictims and between prerape and postrape functioning among victims. This design also would provide information on factors associated with increased risk of being victimized.

Finally, surveys of experts regarding their opinions about the degree of research support for various aspects of rape trauma would provide another basis for evaluating scientific reliability (see Kassin et al., 1989). In a previous study (Frazier & Borgida, 1988), we asked experts for their general opinions about the reliability of RTS evidence. We did not, however, ask about the reliability of research on specific topics or whether the evidence on each topic was reliable enough to present in court. This information would be helpful to courts in evaluating the evidence and to experts in preparing their testimony.

Helpfulness

To date, only one study has assessed common knowledge about rape and rape victim behavior (Frazier & Borgida, 1988). This initial research could be expanded in several ways. First, the SAQ, or a similar measure, could be administered to nonexpert samples that are more representative of average jurors. In addition, the expert samples could be asked for their opinions regarding juror understanding of each separate issue (Kassin et al., 1989). Other methods of assessing juror common understanding have been used in the eyewitness area and could be used to assess common knowledge about rape trauma. For example, in addition to administering questionnaires similar to the SAQ (e.g., Deffenbacher & Loftus, 1982), investigators interested in juror knowledge about eyewitness accuracy have conducted mock jury studies (Hastie, 1980; cited in Wells, 1984) and have asked subjects to estimate the results of prior research on eyewitness accuracy (Brigham & Bothwell, 1983).

These studies would provide information on the extent of knowledge about rape among jurors. The question of how much knowledge is sufficient remains, however. Although they are unlikely to establish absolute standards of common understanding, it would be interesting to survey judges regarding their attitudes about RTS evidence and how much knowledge they feel is sufficient.

Prejudicial Impact

Judicial concerns about the prejudicial impact of expert testimony on RTS also suggest several testable questions that have not yet been addressed. These questions are generally concerned with how variations in the content of expert testimony influence juror judgments. For example, do juror evaluations differ as a function of whether the expert uses the term RTS or the more neutral PTSD? Is the testimony more prejudicial when the expert has interviewed the complainant and links the symptoms of rape trauma directly to the case at hand? Is the testimony less prejudicial when it is used to rebut claims by the defendant that the complainant's behavior was inconsistent with having been raped? All of these

questions could be addressed using designs similar to those employed by Brekke (1985) and Brekke and Borgida (1988). In light of Monahan and Walker's (1988) recommendations, studies also could assess the effect of the method of presentation of RTS evidence (i.e., expert testimony versus jury instructions) on juror judgments. Careful attention should be paid to defining "unfair prejudice" to the defendant in this research.

Although we hope we have provided an impetus for future research relevant to expert testimony on RTS, one caveat needs to be mentioned. That few studies have been designed to address questions concerned with the admissibility of expert testimony may be because very few cases ever go to trial (Chandler & Torney, 1981; Galvin & Polk, 1983). Although very little systematic evidence exists, available data suggest that there is considerable attrition in the processing of rape cases from the time of the initial police report to sentencing (Galvin & Polk, 1983) and that extraneous variables (e.g., defendant race) affect the severity of charges filed (Bradmiller & Walters, 1985; Chandler & Torney, 1981; LaFree, 1980). Research is thus needed on all aspects of the legal processing of rape cases, including expert testimony.

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