CRIMINIOLOGY

TOWARD CRIMINAL JURY INSTRUCTIONS THAT JURORS CAN UNDERSTAND*

LAURENCE J. SEVERANCE**
EDITH GREENE***
ELIZABETH F. LOFTUS****

I. INTRODUCTION

In April 1982, a Guatemalan busboy named Luis Marin went to trial, accused of intentionally starting a fire that killed twenty-six people at a Harrison, New York conference center. The evidence against defendant Marin was purely circumstantial. The prosecution argued to the jury that Marin was about to be fired for working under an assumed name, and that he intended to set a small fire in order to emerge as a hero and win back his job. Although the police did not find Marin with any incriminating evidence, the prosecution introduced testimony from co-workers to the effect that moments before the fire began Marin had disappeared, and suggested in argument that he used gasoline from his car to start the fire.1

The jury deliberated extensively. At one point during the deliberations, they asked the judge to clarify whether “intent includes state of

---

* This research was supported by grant 80-12333 from the National Science Foundation to Elizabeth Loftus and Laurence Severance. We gratefully acknowledge the assistance of Carla Iafrate, Wade Moberg, Kari Seeger, Barbara Johnson, Tim Seckel, and Debbie Pearce in collecting data reported herein. We also acknowledge the help of Jane Goodman in providing psycholinguistic analyses of protocol data reported herein.
** Attorney in private practice, Seattle. J.D., University of Washington, 1980; Ph.D., Duke University, 1974; B.A., University of California, Riverside, 1968.
1 Newsweek, Apr. 26, 1982, at 59.
mind, or what the accused was thinking” at the time. The jury eventually found Marin guilty beyond a reasonable doubt. Four days after the conviction, however, the judge overturned the jury’s verdict, reasoning that because the prosecution’s case failed to negate other explanations for the crime, the circumstantial evidence was insufficient to support a verdict of guilty beyond a reasonable doubt.

The Marin case illustrates the importance in criminal trials of the jury’s understanding legal instructions from the judge on concepts such as “criminal intent” and “reasonable doubt.” Where the jurors’ understanding of these concepts differed from the judge’s, opposite verdicts were reached with obviously profound consequences for the defendant.

From a legal perspective, the judge’s instructions are crucial information intended to provide the jury with proper legal standards for reaching a verdict. As one court stated:

The chief purpose of a charge is to aid the jury in clearly understanding the case and in arriving at a correct verdict. If this is not done, there can be no assurance that the verdict represents a finding by the jury under the law and upon the evidence presented.

This Article begins with an analysis of some of the problems resulting from the necessary process of instructing jurors on the laws they should apply to facts in reaching a verdict. We document a need for jury instructions that are both understandable to lay people and legally accurate. We then present the results of research aimed at improving jurors’ understanding of several key criminal jury instructions. The instructions on which we focused describe the concepts of reasonable doubt, criminal intent, and the limited use of evidence of prior convictions. We report a set of new instructions that were tested empirically and found to be psychologically sound. These linguistically simplified instructions and the existing pattern instructions on which they are based were presented to a nationwide sample of trial judges for purposes of comparison and assessment of their legal adequacy. We conclude the Article with a discussion of the judges’ reactions to the different versions of each instruction.

A. THE CONCERN FOR LEGAL ACCURACY IN JURY INSTRUCTIONS

In formulating jury instructions, considerable controversy may arise as to what constitutes an accurate statement of the law. Seemingly minor changes in wording have been the basis of successful appeals. For example, in People v. Garcia, a state appellate court cited a half dozen

---

3 Id.
erroneous variations in jury instructions on the concept of "proof beyond a reasonable doubt" in reversing a defendant's conviction of second degree murder on the ground of jury misinstruction. The court in Garcia noted that "well intentioned efforts to 'clarify' and 'explain' reasonable doubt criteria have had the result of creating confusion and uncertainty, and have repeatedly been struck down by the courts of review . . . ."6 Because appeals based on alleged error in instructing the jury are common,7 judges are often reluctant to deviate from language approved by higher courts, even where that language is difficult for the jurors to understand.

In most jurisdictions, an important response to the problem of inaccurate jury instructions has been the development of pattern instructions. Pattern jury instructions are statements of the law designed by committees of judges and lawyers for presentation to jurors; depending on the requirements of each individual trial, the court selects particular pattern instructions for use.8 There is some evidence that pattern instructions reduce the number of reversals based on claims that the law was incorrectly stated;9 however, a reliable effect of pattern instructions in reducing the overall number of appeals has not been demonstrated.10

B. THE CONCERN FOR JUROR MISUNDERSTANDING OF JURY INSTRUCTIONS

A second problem with jury instructions arises where instructions that are technically accurate statements of the law are ambiguous or misinterpreted by jurors. Misunderstanding can arise from the syntax of the instructions,11 the manner of presentation, or the general unfamiliarity of lay people with legal terminology.

A recent case illustrates the point. Defendant was driving a car, in which his girlfriend was a passenger, when he ran into a parked car. The two fled the scene on foot and were stopped within a few blocks by the police. Defendant was charged with knowingly driving a stolen car. At trial, his girlfriend testified that he did not know the car was stolen until she told him at the time of the accident. The defendant testified

---

6 Id. at 63, 126 Cal. Rptr. at 276.
9 Nieland, supra note 7, at 194.
10 Id. at 190.
11 Syntax generally refers to sentence structure or the arrangement of words to show their mutual relations in a sentence.
that he was sick and too sleepy to notice details that would have indicated that the car was stolen. The jury was instructed on the definition of knowledge in statutory language:

Knowledge. A person knows or acts knowingly or with knowledge when: (i) he is aware of a fact, facts, or circumstances or result described by a statute defining an offense; or (ii) he has information which would lead a reasonable man in the same situation to believe that facts exist which facts are described by a statute defining an offense.\(^{12}\)

The jury convicted the defendant. He appealed, alleging that part (ii) of the definition of knowledge was ambiguous because it could have led the jury to conclude erroneously (a) that it might presume knowledge if it found that a reasonable person would have known the car was stolen, or (b) that the statute redefined knowledge to include the case where an ordinary person in the defendant’s situation would have known the car was stolen. The Washington State Supreme Court agreed with the defendant and reversed the conviction on the ground that both of these interpretations of “knowledge” were incorrect; thus, the statute was sufficiently ambiguous to “seriously infringe on the rights of the defendant, if a juror used the wrong interpretation . . . .”\(^{13}\) Thus, pattern instructions that have been drafted to be legally accurate may fail to convey a correct understanding of the law to jurors.

Pattern instructions also have been criticized for being too abstract. Because they are written generally to apply in all cases, it can be argued that they do not apply effectively to the facts of any case in particular. In addition, the language of pattern instructions is often derived from statutory language and case law definitions; thus, many pattern instructions still embody obvious linguistic difficulties.

Ideally, jury instructions should be both legally accurate and understandable to the jurors who hear them. The trend, however, has been to emphasize legal accuracy rather than clarity. Consider for example, the early position taken by the drafters of California’s pattern instructions for criminal jury trials: “The one thing an instruction must do above all else is correctly state the law. This is true regardless of who is capable of understanding it.”\(^{14}\) One appellate court actually discouraged a trial judge from presenting legal concepts to the jury in simplified language, although the simplified language was held not to misstate the law.\(^{15}\) Other appellate courts, however, have acknowledged the importance of clear language. For example, in People v. Wilson,\(^{16}\) an appel-


\(^{13}\) State v. Sipp, 93 Wash. 2d 510, 515, 610 P.2d 1322, 1325 (1980).

\(^{14}\) California Jury Instructions—Criminal: Book of Approved Jury Instructions (BAJI) 44 (1950).

\(^{15}\) See Davis v. State, 373 So. 2d 382 (Fla. Dist. Ct. App. 1979).

late court reversed a trial jury's decision where the judge had given pattern instructions instead of using "concrete and direct language defining the rather simple issues of fact which the case presented." The court stated further:

Form [pattern] instructions . . . can be of great value to the judge in preparing his charge to the jury, but it is a misuse of these resources to read to the jury a lengthy and confusing incantation made up of form instructions submitted by the parties.18

C. EMPIRICAL STUDIES OF LINGUISTIC DIFFICULTIES FOR JURORS

Recent social science research suggests that jurors' difficulties in understanding instructions on the law are considerable and widespread. Strawn and Buchanan assessed juror comprehension of oral criminal pattern instructions used in Florida by comparing the understanding of subject-jurors who received instructions to that of a comparable group of subjects that did not receive instructions.19 They found that although the instructions helped to some extent,20 the instructed jurors still missed 27% of the test items and failed to show any improved comprehension for four of nine crucial content areas addressed by the instructions.21 Elwork, Sales, and Alfini studied Michigan civil pattern instructions on the law of negligence and found no reliable differences between a group receiving no instructions and a group receiving the pattern instructions.22 More recently, on the basis of further extensive testing, these researchers concluded that prior to deliberating on a defendant's guilt or innocence, the average juror may understand only about half of the legal instructions presented by the judge.23 From this they concluded that many verdicts in criminal jury trials reflect misunderstandings of the juror's role in the process and of what the law requires.

These data corroborate the subjective impressions of the judges and commentators. One Oregon trial judge stated, for example, "When I read instructions to the jury, I hope that I will see a light go on in the

17 Id. at 585, 65 Cal. Rptr. at 844.
18 Id.
20 For example, 77% of instructed jurors understood that the effect of a not guilty plea is to require the state to prove the charges against the defendant, id. at 481; and 66% of instructed jurors knew that a statement made by a defendant could not be considered as evidence against him unless it was freely and voluntarily made, id.
21 Id. at 482. Instructed jurors failed to comprehend the meaning of "reasonable doubt," "information," "material allegation," and "breaking and entering" any better than the control group of jurors that had received no instructions. Id.
D. IDENTIFYING SPECIFIC INSTRUCTIONS IN NEED OF REFINEMENT

1. Archival Data

Evidence confirming the difficulties jurors have understanding judges' instructions has been derived from a systematic analysis of the questions jurors asked of judges during the course of their deliberations. In an earlier study, we reviewed court records of jury trials in nineteen superior courts in the State of Washington, noting all instances where the jury, during the course of its deliberation, sent written messages to the judge and the judge responded. Such questions and answers were included in the trial court's record and thus were accessible as public records. From the records of 405 jury trials, including both civil and criminal actions, we found that about one quarter of these juries submitted written questions. In many instances, jurors who had received the recommended pattern instructions sought further clarification. For example, one submitted item stated, "We are 11-1, one person feels they need a better definition of intent." Other juries had questions about "reasonable doubt": "We request further clarification of 'reasonable doubt' as it pertains to credibility of the witnesses," and "Can reasonable doubt apply to the jury as a whole and not just to individual jurors?" Invariably, the judges refused to paraphrase or offer an alternative explanation for the problematic instructions. In nearly all instances, judges simply referred the jurors back to the problematic instructions for rereading.

Not all sources of misunderstanding can be identified by analyzing the questions juries ask because jurors sometimes think they have understood instructions when in fact they have not. Nevertheless, our earlier research into the patterns of questions asked by jurors has identified certain criminal jury instructions that, regardless of their legal importance and virtually universal application, are difficult for jurors to comprehend.

First, jurors had difficulty understanding instructions on "reasonable doubt" and the closely linked concept of "presumption of inno-

---

24 Personal oral communication to L. Severance (Oct. 3, 1980).
25 An implicit assumption here is that jurors' questions correspond to their lack of understanding about a certain legal issue.
26 Severance & Loftus, Improving the Ability of Jurors to Comprehend and Apply Criminal Jury Instructions, 17 LAW & SOC'Y REV. 153 (1982).
27 Id. at 172.
29 Severance & Loftus, supra note 26.
cence.” Second, deliberating juries were left with questions about the meaning of “intent” even after receiving a pattern instruction defining the concept. For many crimes, “intent” is a mental state that must be proven to find guilt: a person is not found guilty of a crime unless the admitted acts were committed with the requisite intent, i.e., the intent to accomplish an illegal result. The obvious difficulties with this concept made instructions concerning “intent” a natural choice for closer examination.

The third problem on which we chose to focus arises when jurors hear evidence in court and then are instructed to limit their consideration of that evidence to a certain purpose. For example, a frequently used limiting instruction concerns evidence of prior convictions. Where a defendant’s prior convictions are admitted into evidence, the jury normally is instructed to consider the prior convictions solely to evaluate the credibility of the defendant as a witness and not as evidence of a propensity to commit crimes such as the one charged. The Federal Rules of Evidence, along with many state jurisdictions, permit evidence of prior convictions to be admitted under certain circumstances. Based in part on the questions asked by jurors on this issue, we selected limiting instructions on the use of prior convictions for further study.

30 Id. at 170-71. For example, the Washington pattern instruction given to juries when “intent” is an element of an alleged crime states: “A person acts with intent or intentionally when acting with the objective or purpose to accomplish a result which constitutes a crime.” Washington Pattern Jury Instructions—Criminal, supra note 8, at 10.01. See Table 1 infra.

31 For example, Washington Pattern Jury Instruction 35.02 listing the elements of first degree assault reads in part:

To convict the defendant of the crime of assault in the first degree, each of the following elements of the crime must be proved beyond a reasonable doubt:

(1) That on or about the ___ day of ________, 19__, the defendant assaulted ________;

(2) That the assault was committed [with a firearm] [or] [with a deadly weapon] [or] [by a force or means likely to produce death];

(3) That the defendant acted with intent [to kill a human being] [or] [to commit ________ upon the [person] [or] [property] of the person assaulted, or another]; and

(4) That the acts occurred in __________ County, Washington.

Washington Pattern Jury Instructions—Criminal, supra note 8, at 35.02 (bracketed material in original).

32 Federal Rule of Evidence 609 provides in part:

For the purpose of attacking the credibility of a witness, evidence that he has been convicted of a crime shall be admitted if elicited from him or established by public record during cross-examination but only if the crime (1) was punishable by death or imprisonment in excess of one year under the law under which he was convicted, and the court determines that the probative value of admitting this evidence outweighs its prejudicial effect to the defendant, or (2) involved dishonesty or false statement, regardless of the punishment.

Fed. R. Evid. 609(a).
2. Experimental Analysis of Specific Pattern Instructions

The pioneering work of Strawn and Buchanan\textsuperscript{33} and Elwork, Sales, and Alfimi\textsuperscript{34} suggested that an empirical approach could be used effectively to pinpoint comprehension difficulties in specific jury instructions. Building on this earlier work, in our previous study we presented an hour-long videotaped burglary trial to a group of college students who were eligible for jury duty.\textsuperscript{35} The tape was followed by either (a) no instructions, (b) general pattern instructions concerning the jury's duties,\textsuperscript{36} but excluding any specific instructions, or (c) general pattern instructions plus three additional specific pattern instructions pertaining to "reasonable doubt," "intent," and restrictions on the use of evidence concerning prior convictions.\textsuperscript{37}

The videotaped trial was an enactment, filmed in an actual courtroom with a real judge and credible actors as witnesses. The facts were intentionally balanced so that the defendant's guilt or innocence was unclear. The defendant had one prior conviction to which he admitted during cross-examination.\textsuperscript{38}

After observing the videotaped trial and hearing one of the sets of instructions, half of the participants were instructed to deliberate for up to thirty minutes; the others were not. Thereafter, each subject answered a questionnaire designed to measure comprehension and ability to apply the legal concepts embodied in the instructions.

a. The questionnaire

The subjects were asked to give a verdict of "guilty" or "not guilty" and then indicate how certain they were that their verdict was correct. We employed two different measures of jurors' understanding. First, we examined their ability to comprehend the meaning of instructions through the use of multiple choice questions that required the respondent to distinguish between correct and incorrect expressions of an instruction's meaning. There were separate sets of items probing the "reasonable doubt/presumption of innocence" instruction, the "intent"

\textsuperscript{33} Strawn & Buchanan, \textit{supra} note 19.
\textsuperscript{34} Elwork, Sales & Alfimi, \textit{supra} note 22.
\textsuperscript{35} Severance & Loftus, \textit{supra} note 26.
\textsuperscript{36} Instructions on the three critical legal concepts obviously are not given in isolation. Judges invariably instruct juries on their general duties and they often refer back to those general instructions when trying to clarify deliberating jurors' confusion. \textit{See supra} note 27 and accompanying text.
\textsuperscript{37} Pattern instructions were those developed for jurors in criminal trials in the State of Washington. \textit{See Washington Pattern Jury Instructions—Criminal, supra} note 8.
\textsuperscript{38} Thanks are extended to Dr. Barbara Hart, of the University of Texas, who made the videotape available for our research.
instruction, the limiting instruction, and the general instructions.\textsuperscript{39}

Second, we assessed the subjects’ abilities to apply jury instructions correctly to novel fact patterns. Subjects were presented with a series of single paragraph descriptions of factual situations.\textsuperscript{40} They responded to each paragraph by indicating on a scale ranging from -3 (Strongly Disagree) to +3 (Strongly Agree) whether they concurred with a proposed solution at the end of the factual situation. Each example tested their abilities to apply concepts embodied in the pattern instructions correctly in order to reach a legally accurate decision.

b. Findings

For the “comprehension” measures, subjects who received no instructions erred 35.6\% of the time; subjects with general pattern instructions erred 34.7\% of the time; and subjects with general plus specific pattern instructions erred 29.6\% of the time.\textsuperscript{41} “Reasonable doubt/presumption of innocence” was the only concept for which a specific pattern instruction was helpful. For this instruction, there was a comprehension error rate of 32.1\% with no instructions, 34\% with the general instruction only, but 26.2\% with general plus specific instructions.\textsuperscript{42}

\textsuperscript{39} An example of a comprehension measure for “intent” is the following: Intent to commit a crime:

(a) cannot be proved without the testimony of a psychologist;
(b) cannot be proved since it rests within a person’s mind;
(c) is assumed whenever a crime is committed;
(d) can be proved when a person acts with a clear purpose.

In the example, (d) is the correct answer.

\textsuperscript{40} An example of an “application” test item for reasonable doubt/presumption of innocence is the following:

A used car dealer claims that the accused hot wired one of his cars and drove it to the ocean 200 miles away, where it was found the next day. The accused has the burden of proving beyond a reasonable doubt that he was not in the vicinity at the time of the alleged crime, nor ever in the stolen car.

\textsuperscript{41} F (2,210) = 5.04, p < .007. Throughout this Article, reference will be made to the notion of “statistical significance.” Statistical significance is a term that implies that the likelihood that two measurements differ by chance is less than some acceptable level. In most social science research the minimum acceptable level is .05, represented as p < .05. This figure means that the probability that the statistical event being measured (for example, an improvement in comprehension) occurred by chance is less than 1 in 20 (5/100). Thus, p < .007 means that the probability that these comprehension scores could have resulted by chance and were not due to our experimental manipulations is less than 7 in 1000. For an explanation of the various basic methods of computing statistical significance, see A. Edwards, Statistical Analysis 132-35 (3d ed. 1969). The F test or Fisher ratio is used to determine whether two or more samples differ significantly: the larger the F ratio, the larger the level of significance. The number within the parentheses indicate the number of “degrees of freedom” associated with the Fisher ratio. For an explanation of the concept of degrees of freedom, see A. Edwards, supra, at 142.

\textsuperscript{42} F (2,210) = 4.03, p < .02.
For the "application" measures, subjects tended to agree with the correct applications of the law more strongly when specific instructions had been given than when they had not.\(^{43}\) When the effects of individual specific instructions were analyzed separately, however, the specific instruction on "intent" actually diminished agreement with the correct application of the law, relative to no instructions and to the general pattern instruction only.\(^{44}\) The specific instruction concerning reasonable doubt/presumption of innocence had no significant effect on subjects' application abilities.\(^{45}\) In fact, the limiting instruction was the only specific instruction that seemed to aid subjects in correctly applying the law.\(^{46}\)

Taken together, these results demonstrated that people without legal training have difficulty comprehending and applying pattern instructions. Even with those instructions, the overall error rate for the comprehension measures was 29.6%, and the overall level of agreement with correct applications of the instructions was not significantly different from the level of agreement given no instructions at all. None of the results were affected reliably by the presence or absence of deliberation prior to subjects' answering the questionnaire.

II. IMPROVING THE CLARITY OF CRIMINAL JURY INSTRUCTIONS

From a psychological perspective, the work of Elwork, Sales, and Alfiniti\(^{47}\) and Charrow and Charrow\(^{48}\) has suggested that specific psycholinguistic principles can be applied to jury instructions to eliminate problematic language, simplify meaning, and present instructions in a clear, logical way. From a legal perspective, however, the large number of verdicts that are reversed for error because of incorrect jury instructions suggests the potential folly of altering existing pattern instructions too dramatically.

In rewriting existing pattern instructions to improve juror understanding,\(^{49}\) we applied a range of specific principles that had been tested with success in other contexts.\(^{50}\) We tried to eliminate legal jargon and uncommon words on the assumption that people have more difficulty

\(^{43}\) F (2,210) = 4.01, p < .02.
\(^{44}\) F (2,210) = 2.99, p < .05.
\(^{45}\) F (2,210) = 0.85, n.s.
\(^{46}\) F (2,210) = 5.77, p < .004.
\(^{47}\) Elwork, Sales & Alfiniti, supra note 22, at 176; J. ALFINI, B. SALES & A. ELWORK, supra note 23, at 171.
\(^{49}\) See Severance & Loftus, supra note 26.
\(^{50}\) See supra notes 22-23, 47-48 and accompanying text. Charrow and Charrow's influential research suggested that jurors' ability to correctly paraphrase their instructions was en-
perceiving, remembering, and comprehending unfamiliar words. We also replaced abstract words with more concrete ones and avoided using homonyms (similar sounding words with more than one meaning). We made changes in grammar to avoid compound sentences and awkward, passive constructions.\textsuperscript{52}

To insure a logical structuring of the paragraphs, we used both hierarchical and algorithmic organizing principles. In a hierarchical structure, high-level concepts are broken down into their lower-level components and then integrated. According to the algorithmic method of structuring, ideas are presented so that an understanding of any particular idea follows from the understanding of previous ideas.

Some of the revisions we made were directly responsive to our analysis of subjects’ errors in comprehending the pattern instructions. For example, with regard to “intent,” many subjects (29\%) indicated doubts that a mental state such as intent could ever be proven beyond a reasonable doubt, even though the law clearly requires this finding for conviction. We made certain changes in order to reduce this type of apparent confusion.

We next submitted the rewritten instructions to legal scholars in order to validate the legality of the revised instructions. Further changes were made to satisfy their concerns. The results of our efforts, instructions with improvements that were still legally sound according to our legal experts, became the focus of empirical investigation. These

hanced considerably when certain linguistic features that impede comprehension were eliminated. The major psycholinguistic principles they applied included:

1. substituting active voice for passive voice, Charrow & Charrow, supra note 48, at 1325-26;
2. inserting “whiz” phrases (“which is . . .” or “that is . . .”) where needed, id. at 1323-24;
3. eliminating multiple negatives, id. at 1324-25;
4. reorganizing sentences to properly locate misplaced phrases and eliminate complicated embedding, id. at 1323, 1327-28;
5. reducing item lists and strings to no more than two, where possible, id. at 1326;
6. using directives such as “must,” “should,” and permissives such as “may” to help focus the jurors’ attention, id. at 1324;
7. replacing uncommon words with ones that are more common in the language, id. at 1324; and
8. rearranging existing instructions into a more logical organization, id. at 1326-27.

\textsuperscript{51} For example, the sentence, “Such evidence may be considered by you in deciding what weight or credibility should be given to the testimony of the defendant and for no other purpose,” was broken into two parts: “You may not use this evidence in deciding whether he or she is guilty or innocent. You may use evidence of prior convictions only to decide whether to believe the defendant’s testimony and how much weight to give it.” See infra Table 1.

\textsuperscript{52} For example, the phrase “you have an abiding belief in the truth of the charge . . .” was replaced by “you believe in the truth of the charge . . .”, See infra Table 1.

\textsuperscript{53} Professor John Junker and former Superior Court Judge and Professor Charles Z. Smith, both of the University of Washington School of Law, provided legal insight in developing revised instructions.
instructions appear in Table 1, side by side with pattern jury instructions.

### Table 1
**Examples of Pattern Instructions and Their Revised Counterparts**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Pattern Instruction</th>
<th>Revised Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Prior Conviction to Impeach a Defendant</td>
<td>Evidence that the defendant has previously been convicted of a crime is not evidence of the defendant’s guilt. Such evidence may be considered by you in deciding what weight or credibility should be given to the testimony of the defendant and for no other purpose.</td>
<td>Evidence that the defendant has previously been convicted of a crime is not evidence of the defendant’s guilt in this case. You may not use this evidence in deciding whether he or she is guilty or innocent. You may use evidence of prior convictions only to decide whether to believe the defendant’s testimony and how much weight to give it.</td>
</tr>
<tr>
<td>Intent</td>
<td>A person acts with intent or intentionally when acting with the objective or purpose to accomplish a result which constitutes a crime.</td>
<td>A person acts with intent or intentionally when he or she acts with the objective or purpose to accomplish a result that is a crime. It is possible to prove intent beyond a reasonable doubt by either direct or circumstantial evidence.</td>
</tr>
<tr>
<td>Burden of Proof; Presumption of Innocence; Reasonable Doubt</td>
<td>The defendant has entered a plea of not guilty. That plea puts in issue every element of the crime charged. The plaintiff has the burden of proving each element of the crime beyond a reasonable doubt. A defendant is presumed innocent. This presumption continues throughout the entire trial unless you find it has been overcome by the evidence beyond a reasonable doubt.</td>
<td>The defendant has entered a plea of not guilty. That plea puts in issue every element of the crime charged. The defendant is presumed to be innocent and is not required to prove his or her innocence or any fact. This presumption of innocence is present at the beginning of the trial and continues unless you decide after hearing all the evidence that there is proof beyond a reason-</td>
</tr>
</tbody>
</table>

*In State v. Walker, 19 Wash. App. 881, 884, 578 P.2d 83, 85 (1978), additional language in the pattern instruction stating, “You are not to consider doubts that are unreasonable or which are unsupported by evidence or lack of evidence,” was found by the court there to be unnecessarily confusing, although the language was not held to be erroneous.*
<table>
<thead>
<tr>
<th>Topic</th>
<th>Pattern Instruction</th>
<th>Revised Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burden of Proof; Presumption of Innocence; Reasonable Doubt (continued)</td>
<td>A reasonable doubt is one for which a reason exists.(^a) A reasonable doubt is such a doubt as would exist in the mind of a reasonable person after fully, fairly and carefully considering all of the evidence or lack of evidence. If, after such consideration, you have an abiding belief in the truth of the charge, you are satisfied beyond a reasonable doubt.</td>
<td>A reasonable doubt that the defendant is guilty. The state has the burden of proving each element of the crime beyond a reasonable doubt. A reasonable doubt about guilt is not a vague or speculative doubt but is a doubt for which a reason exists. A reasonable doubt is a doubt that would exist in the mind of a reasonable person after that person has fully, fairly and carefully considered all of the evidence or lack of evidence. If, after such thorough consideration, you believe in the truth of the charge, you are satisfied beyond a reasonable doubt. If you are satisfied beyond a reasonable doubt that all elements of the charge have been proved, then you must find the defendant guilty. However, if you are left with a reasonable doubt about the proof of any element, then you must find the defendant not guilty.</td>
</tr>
<tr>
<td>General Introductory Instruction</td>
<td>It is your duty to determine the facts in this case from the evidence produced in court. It is also your duty to accept the law from the court, regardless of what you personally believe the law is or ought to be. You are to apply the law to the facts and in this way decide the case. The order in which these instructions are given has no significance as to their relative importance. The attorneys may properly discuss any specific instructions they think are particularly significant. You</td>
<td>As jurors in this case, you have several duties: First, it is your duty to determine the facts in this case from the evidence produced in court; Second, it is your duty to accept the law as I will instruct you, regardless of what you personally believe the law is or ought to be; Third, to reach a verdict, you are to apply the law to the facts and in this way decide the case. With regard to your duty to determine the facts in this case, the evidence you are to consider consists of the testimony of</td>
</tr>
</tbody>
</table>
TABLE 1—Continued

<table>
<thead>
<tr>
<th>Topic</th>
<th>Pattern Instruction</th>
<th>Revised Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Introductory Instruction</td>
<td>should consider the instructions as a whole and should not place undue emphasis on</td>
<td>the witnesses and exhibits which I have admitted into evidence. You must not concern</td>
</tr>
<tr>
<td>(continued)</td>
<td>any particular instruction or part thereof.</td>
<td>yourselves with the reasons for these rulings. You will disregard any evidence which</td>
</tr>
<tr>
<td></td>
<td>The information in this case is only an accusation against the defendant which informs</td>
<td>either was not admitted or which was stricken by me. In determining what facts have</td>
</tr>
<tr>
<td></td>
<td>the defendant of the charge. You are not to consider the filing of the information or</td>
<td>been proved, you should consider all of the admitted evidence. Every party is entitled</td>
</tr>
<tr>
<td></td>
<td>its contents as proof of the matters charged.</td>
<td>to the benefit of all the evidence, whether produced by that party or by another party.</td>
</tr>
<tr>
<td></td>
<td>The evidence you are to consider consists of the testimony of the witnesses and the</td>
<td>The law does not permit me to express my views about the facts or evidence in any way</td>
</tr>
<tr>
<td></td>
<td>exhibits admitted into evidence. It has been my duty to rule on the admissibility of</td>
<td>and I have not intentionally done so. The law also does not permit me to try to influence</td>
</tr>
<tr>
<td></td>
<td>evidence. You must not concern yourselves with the reasons for these rulings. You will</td>
<td>your judgment as to the believability or credibility of witnesses.</td>
</tr>
<tr>
<td></td>
<td>disregard any evidence which either was not admitted or which was stricken by the court.</td>
<td>You are the sole judges of the credibility of the witnesses and of what weight is to be</td>
</tr>
<tr>
<td></td>
<td>In determining whether any proposition has been proved, you should consider all of the</td>
<td>given to the testimony of each. In evaluating the testimony of any witness, you may take</td>
</tr>
<tr>
<td></td>
<td>evidence introduced by all parties bearing on the question. Every party is entitled to</td>
<td>into account the following factors: the opportunity and ability of the witness to observe</td>
</tr>
<tr>
<td></td>
<td>the benefit of the evidence whether produced by that party or by another party.</td>
<td>the facts; the accuracy of the witness' memory; the witness' manner while testifying; any</td>
</tr>
<tr>
<td></td>
<td>You are the sole judges of the credibility of the witnesses and of what weight is to be</td>
<td>interest in the case or bias or prejudice the witness may have shown; the reasonableness</td>
</tr>
<tr>
<td></td>
<td>given the testimony of each. In considering the testimony of any witness, you may take</td>
<td>of the witness' testimony considered in light of all the evidence; and any other factors</td>
</tr>
<tr>
<td></td>
<td>into account the opportunity and ability of the witness to observe, the witness' memory</td>
<td>that bear on believability and weight. If it appears to you that I have expressed my opinion</td>
</tr>
<tr>
<td></td>
<td>and manner while testifying, any interest, bias, or prejudice the witness may have, the</td>
<td>concerning the evidence or the witnesses at any time, you must disregard</td>
</tr>
<tr>
<td></td>
<td>reasonableness of the testimony of the witnesses and exhibits which I have admitted into</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 1—Continued

<table>
<thead>
<tr>
<th>Topic</th>
<th>Pattern Instruction</th>
<th>Revised Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Introductory Instruction (continued)</td>
<td>witness considered in light of all the evidence, and any other factors that bear on believability and weight.</td>
<td>such opinion entirely.</td>
</tr>
<tr>
<td></td>
<td>Counsel's remarks, statements and arguments are intended to help you understand the evidence and apply the law. They are not evidence, however,</td>
<td>With regard to your duty to accept the law as I will instruct you, you should consider</td>
</tr>
<tr>
<td></td>
<td>and you should disregard any remark, statement or argument which is not supported by the evidence or the law as given to you by the court.</td>
<td>the instructions as a whole and should not place undue emphasis on any particular</td>
</tr>
<tr>
<td></td>
<td>The lawyers have the right and the duty to make any objections which they deem appropriate. Such objections should not influence you, and you should</td>
<td>instruction or part of an instruction. The order in which the instructions are given</td>
</tr>
<tr>
<td></td>
<td>make no presumption because of objections by counsel.</td>
<td>has no significance as to their relative importance. The lawyers may properly discuss</td>
</tr>
<tr>
<td></td>
<td>The law does not permit me to comment on the evidence in any way, and I have not intentionally done so. If it appears to you that I have so commented,</td>
<td>any specific instructions they think are particularly significant.</td>
</tr>
<tr>
<td></td>
<td>during either the trial or the giving of these instructions, you must disregard such comment entirely.</td>
<td>With regard to your duty to apply the law, the fact that the defendant has been</td>
</tr>
<tr>
<td></td>
<td>You have nothing whatever to do with the punishment to be inflicted in case of a violation of law. The fact that punishment may follow conviction cannot</td>
<td>charged is only an accusation. You are not to consider the filing of a written charge</td>
</tr>
<tr>
<td></td>
<td>be considered by you except insofar as it may tend to make you careful.</td>
<td>or its contents as proof of the matters charged. The lawyer's remarks, statement and</td>
</tr>
<tr>
<td></td>
<td>You are officers of the court and must act impartially and with an earnest desire to determine and declare the proper verdict. Throughout your deliberations</td>
<td>arguments are intended to help you understand the evidence and apply the law. They are</td>
</tr>
<tr>
<td></td>
<td>you will permit neither sympathy nor</td>
<td>not evidence, however, and you should disregard any remark, statement or argument</td>
</tr>
<tr>
<td></td>
<td></td>
<td>that is not supported by the evidence or by my instructions on the law.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The lawyers have the right and the duty to make any objections which they think are</td>
</tr>
<tr>
<td></td>
<td></td>
<td>appropriate. Such objections should not influence you, and you should make no</td>
</tr>
<tr>
<td></td>
<td></td>
<td>presumption because of objections by the lawyers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>You have nothing whatever to do with the punishment in case of a violation of law.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The fact that punishment may follow conviction cannot be considered by you except that</td>
</tr>
</tbody>
</table>
Our first test of the new instructions compared the responses of subjects who viewed the videotaped trial used in our previous study and then received either no instructions, general plus specific pattern instructions, or revised versions of those same instructions. The same questionnaire measures were taken as in the prior study.

The results showed consistently more accurate responses with the revised instructions. Most importantly, we found that revised instructions led subjects to endorse more strongly the correct applications of the targeted legal concepts than did pattern instructions or no instructions.\(^{54}\) Comprehension was also improved, with subjects who received revised instructions averaging 20.3\% errors in comparison to 29.3\% with no instructions and 24.3\% with pattern instructions.\(^ {55} \) Although the overall difference between revised and pattern instructions did not reach statistical significance for the multiple choice comprehension measures, the pattern of results for each of the individual concepts was consistent in showing lowest error rates with revised instructions.\(^ {56} \)

The experimental studies described above were conducted in a university setting with students who were registered voters, and thus eligible for jury duty, serving as subjects. In order to demonstrate the utility of these revisions for actual jurors, the next step was to move our research into a more generalizable setting.

### III. Testing the Advantages of Revised Language on Actual Jurors

To obtain a test population more representative of real juries, we

\[^{54}\] F (2,210) = 8.15, p < .001.

\[^{55}\] F (2,210) = 8.65, p < .001.

\[^{56}\] See Severance & Loftus, supra note 26, at 190, Table 6.
approached the Washington state court system for assistance. After reviewing the procedures we had used in testing student subjects, the court administrator and judges of the superior courts for the State of Washington allowed us to test two important populations: persons who had been selected and who had reported for jury duty in the past, and persons who were currently serving as jurors and awaiting assignment to courtrooms of the King County Superior Courts in Seattle, Washington.

A. OVERVIEW OF METHODOLOGY

Persons who had served previously as jurors (ex-jurors) and persons who were currently on jury duty (current jurors) were shown the same videotaped burglary trial that we used in the earlier studies with college students. They then heard either (a) pattern instructions pertaining to reasonable doubt, intent, restrictions on use of evidence of prior convictions, and general instructions outlining the jurors’ duties, or (b) our revised versions of these same instructions (see Table 1). These were the same variations we tested previously with college students. Since actual jurors are always given instructions at the close of trial, the no instruction condition was not included in this experimental design. After watching the trial and hearing the instructions, half of the participants deliberated to reach a verdict and the other half gave individual verdicts. All subjects completed questionnaires designed to measure their

57 We are particularly indebted to the Honorable Francis E. Holman and to King County Superior Court Administrator Robert Cannon and Assistant Court Administrator Michael Cason for their cooperation and assistance in implementing this research.

58 Ex-jurors in our study were randomly selected from lists of jurors who had served on jury duty in King County, Washington between February and September 1981. In all, 445 ex-jurors were contacted by mail and asked to participate in a study of jury behavior. Two hundred fifty-seven (64%) of those contacted agreed to participate. Ex-jurors’ reluctance to participate appeared to be closely tied to the distance they were asked to travel to our testing location at the University of Washington. Those ex-jurors who actually participated may have had a higher degree of interest in jury duty than those who chose not to participate.

One hundred sixty-two ex-jurors were contacted by telephone and actually participated in the research. These subjects participated in groups of three or more, but in all cases there were six persons on each deliberating jury. A total of 72 ex-jurors deliberated (36 heard pattern instructions; 36 heard revised instructions). Ninety did not deliberate (40 heard pattern instructions; 50 heard revised instructions).

Among current jurors, there was a much higher rate of participation. Jurors in King County serve for a two-week period and during this time, they may or may not be selected for actual juries. Therefore, a considerable amount of time is spent awaiting assignment to a courtroom. These persons seemed interested in participating in our research rather than just waiting. We solicited subjects from those waiting and had 100% participation. In all, 144 current jurors participated in our research. Thirty-six persons participated in each of the four conditions (receiving either pattern or revised jury instructions, then either deliberating or not deliberating). All current jurors observed the videotaped trial while sitting in the jury box of an actual courtroom. Those who deliberated retired to the adjacent jury room to deliberate.
comprehension of the instructions and ability to apply the concepts embodied therein. Each of the four possible combinations (pattern or revised instructions and deliberation or no deliberation) was presented both to ex-jurors and to current jurors.

B. PROCEDURE

All participants in the study were told that they would be viewing a videotaped trial from another jurisdiction, after which they would hear instructions from a judge and then would be asked to reach a verdict. They were told further that we would be comparing their reactions to those of the jurors at the actual trial in order to evaluate the use of videotaped trial materials. This procedure was intended to encourage all participants to behave as actual jurors and take their roles seriously.

At the close of the trial and after the judge's instructions, participants were randomly divided into two groups. Each group was independently assigned to deliberate or not. Those in the deliberating groups were escorted to a conference room (ex-jurors) or jury room (current jurors), asked to choose a foreperson, given one written set of the judge's instructions they had heard,59 and asked to notify the experimenter when a verdict had been reached. They were left to deliberate for up to thirty minutes. After reaching a verdict, each participant was given a questionnaire to complete. Participants in the no deliberation group were given the questionnaire immediately following the videotaped trial and judge's instructions. These people were not provided with a written set of the judge's instructions.

C. QUESTIONNAIRE

The questionnaire first elicited a verdict of "guilty" or "not guilty" and then asked subjects to indicate how certain they were that their verdict was correct. Next, thirty multiple choice questions measured comprehension of the targeted concepts embodied in the instructions, and ten items measured jurors' ability to apply those concepts to novel fact situations. These questions were identical to those used in the earlier work testing college students. All jurors were also asked to give their subjective impressions of the judge's instructions, i.e., how effective the instructions were in helping them to understand the law. Jurors who deliberated were asked several questions about the deliberation process: how much they had participated in the discussion; how they would rate the overall quality of the deliberation; how much discussion of the

59 The standard practice in the State of Washington is for attorneys to submit two copies of their proffered instructions to the judge. One copy, containing citations, is for the judge's perusal; the second copy is routinely sent into the jury room.
judge's instructions they would have preferred. All jurors were given the additional task of defining in their own words the legal concepts of "reasonable doubt" and "intent," and were asked to indicate the legally proper way to use evidence of prior convictions. Finally, demographic information (i.e., age, ethnicity, and amount of jury experience) was obtained for all jurors.

D. RESULTS

1. Comparison of Ex-jurors and Current Jurors

The responses of ex-juror subjects and current juror subjects differed in several ways that affected our interpretation of the other results. First, the ex-jurors who participated in our research were significantly more experienced with jury duty than were current juror subjects. As indicated in Table 2, our ex-juror sample had been called to jury duty, had been assigned to a courtroom for the jury selection process, and had actually served on juries more than had our current jurors. While it is possible that the experience of the Current jurors would have been more similar to ex-jurors by the time their jury duty was completed, at the time that they participated in our research there were significant differences in the degree of experience between the two samples.

**TABLE 2**

**Demographic Features and Experience of Ex-juror and Courthouse Juror Participation in the Research**

<table>
<thead>
<tr>
<th>Individual Characteristic</th>
<th>Subject Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ex-Jurors (n = 162)</td>
</tr>
<tr>
<td>Age</td>
<td>48.7 yrs.</td>
</tr>
<tr>
<td>Years of education</td>
<td>14.6 yrs.</td>
</tr>
<tr>
<td>Number of times on jury duty</td>
<td>2.00</td>
</tr>
<tr>
<td>Number of times assigned to a courtroom</td>
<td>3.25</td>
</tr>
<tr>
<td>Number of civil trials actually served on</td>
<td>0.53</td>
</tr>
<tr>
<td>Number of criminal trials actually served on</td>
<td>1.49</td>
</tr>
</tbody>
</table>
Second, ex-jurors were significantly older and more educated than Current jurors. These differences, also summarized in Table 2, support the idea that those ex-jurors who agreed to take the time to participate in our research were to some degree self-selected in terms of their interest in juries and jury duty. Current jurors and ex-jurors did not differ in overall ethnic composition.

Although the experiments took place in an actual court setting for one group (current jurors) and in a university conference room for the others (ex-jurors), all subjects seemed to take the procedure seriously. Thus, we believe that differences between the two groups' responses are due largely to experiential and demographic factors rather than setting.

2. Verdicts

Overall, 35.5% of our subjects found the defendant guilty and 64.5% found him not guilty. The effects on verdicts of instructions, opportunity to deliberate, and setting are summarized in Table 3. These results demonstrate two significant effects. First, the Current jurors were more lenient than Ex- jurors, with only 28.5% of the former voting to convict as compared to 41.3% of the latter.\(^{60}\) Second, those jurors who deliberated were less likely to find the defendant guilty than were the jurors who did not have an opportunity to deliberate, as 28.4% of those

---

### TABLE 3

**Percent of Jurors Who Found Defendant Guilty**

\( (\times = 35.5)\)

<table>
<thead>
<tr>
<th></th>
<th>Pattern Instruction</th>
<th>Revised Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ex-Jurors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>((\times = 41.3%))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Deliberation</td>
<td>46</td>
<td>35</td>
</tr>
<tr>
<td>Deliberation</td>
<td>44</td>
<td>40</td>
</tr>
<tr>
<td><strong>Current Jurors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>((\times = 28.5%))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Deliberation</td>
<td>40</td>
<td>44</td>
</tr>
<tr>
<td>Deliberation</td>
<td>22(^a)</td>
<td>08(^b)</td>
</tr>
</tbody>
</table>

Note: Row values with different superscripts differ at .05 level of significance.

---

\(^{60}\) Z = 2.37, \(p < .02\). The Z-test is a statistical test for determining whether the difference between two proportions is statistically significant. For an explanation of the Z-test, see J. Bruning & B. Kintz, Computational Handbook of Statistics 199-201 (1968).
who deliberated voted to convict as compared to 41.3% of those who did not deliberate. Variations in the instructions did not affect verdicts significantly.

All jurors were asked to indicate how certain they were of their verdicts on a scale from 1 to 7 where 1 = Extremely uncertain, and 7 = Extremely certain. Only one variable seemed important here: current jurors were significantly more certain of their verdicts ($x = 4.91$) than were ex-jurors ($x = 3.09$).

3. Comprehension Measures

On the thirty multiple choice questions designed to assess jurors' understanding of the law as defined in the instructions, ex-jurors demonstrated better comprehension (21.4% errors over all thirty questions) than current jurors (26.1%). For two of the individual instructions, the distinction between current and ex-jurors was also significant. For questions dealing specifically with the intent instruction, there were 33% errors for ex-jurors, and 39% errors for current jurors. For questions that concerned jurors' general duties, the error rate for ex-jurors was 6%, and for jurors tested during jury duty, 11%. All of these differences may be due to the different demographic characteristics and jury experience of our two samples.

Based on our earlier work with college students, we anticipated that regardless of whether or not jurors deliberated, the revised instructions would enhance comprehension relative to the pattern instructions. The relevant data appear in Table 4 for each instruction. In three out of four cases—questions pertaining to reasonable doubt are the exception—jurers who heard the revised instructions tended to make fewer errors than jurors who heard pattern instructions, although statistical significance was achieved only for questions about the limiting instruction. The results indicated, however, that deliberating jurors who heard revised instructions achieved slightly higher comprehension (20.8% errors over all thirty questions) than did deliberating jurors who heard pattern instructions (25.4% errors). This same pattern was statistically significant for questions pertaining to the limiting instruction

---

61 $Z = 2.39, p < .02.$
62 $F(1, 296) = 127.45, p < .001.$
63 $F(1, 297) = 9.80, p = .002.$
64 $F(1, 297) = 6.07, p = .014.$
65 $F(1, 297) = 12.61, p < .001.$
66 $F(1, 297) = 4.32, p = .039.$
67 $F(1, 297) = 3.27, p = .072.$
TABLE 4
MEAN PERCENT ERRORS ON COMPREHENSION QUESTIONS
FOR SUBJECTS HEARING PATTERN AND REVISED
INSTRUCTIONS

<table>
<thead>
<tr>
<th>Instruction</th>
<th>Pattern Instruction</th>
<th>Revised Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intent</td>
<td>36.6</td>
<td>35.1</td>
</tr>
<tr>
<td>Limiting instruction</td>
<td>44.5&lt;sup&gt;a&lt;/sup&gt;</td>
<td>36.3&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Reasonable doubt</td>
<td>23.5</td>
<td>25.2</td>
</tr>
<tr>
<td>Jurors' general duties</td>
<td>8.6</td>
<td>7.4</td>
</tr>
<tr>
<td>Overall</td>
<td>24.3</td>
<td>22.8</td>
</tr>
</tbody>
</table>

Note: Row means with different superscripts differ at .05 level of significance.

when it was analyzed separately.<sup>68</sup> Thus, overall, the revised instructions did improve comprehension, especially when those instructions were accompanied by an opportunity to deliberate.

4. Ability to Apply Instructions

With regard to the ten questions measuring jurors’ abilities to apply the instructions to novel fact patterns, we predicted that the revised versions of the instructions would lead to more accurate applications of the

TABLE 5
MEAN LEVEL OF AGREEMENT WITH CORRECT APPLICATION OF THE LAW

<table>
<thead>
<tr>
<th>Instruction</th>
<th>Pattern Instruction</th>
<th>Revised Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intent</td>
<td>0.59</td>
<td>0.59</td>
</tr>
<tr>
<td>Limiting instruction</td>
<td>1.15&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.46&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Reasonable doubt</td>
<td>1.68</td>
<td>1.81</td>
</tr>
<tr>
<td>Overall</td>
<td>1.07</td>
<td>1.22</td>
</tr>
</tbody>
</table>

Note: Higher numbers indicate more correct responding; row means with different superscripts differ at .05 level of significance.

<sup>68</sup> F (1,297) = 4.08, p = .044.
law. Data on the mean level of agreement with the correct application of these instructions are shown in Table 5, with responses coded so that the closer a number is to +3, the greater the agreement with the correct application of the law. Our findings demonstrate that jurors who heard revised instructions tended to apply the instructions more accurately than jurors who heard pattern instructions. Despite the consistent trend, however, the only statistically significant effect for type of instruction was for the questions regarding the limiting instruction.69

As with our previous findings, jury sample (ex-jurors vs. current jurors) and the opportunity to deliberate were important variables. For example, ex-jurors agreed more often with correct applications of "reasonable doubt" than current jurors.70 Across all ten scenarios, however, this pattern held only for those jurors who did not deliberate; the mean level of agreement for non-deliberating ex-jurors was 1.31, and for non-deliberating current jurors, .97.71 Where jurors had been given an opportunity to deliberate, there was no difference in ex-jurors’ and current jurors’ abilities to apply the law correctly. The impact of experiential and educational differences between ex-jurors and current jurors thus seemed to be reduced by the deliberation process.

5. Jurors’ Subjective Impressions of the Judge’s Instructions

A key objective in attempting to make jury instructions understandable is to ensure that the proper legal standards are applied consistently to defendants in different trials. If instructions are not understandable, verdicts will tend to be based on idiosyncratic features of the trial or personal attitudes of the jurors rather than on the proper legal standards.72 We asked jurors to indicate how effective the judge’s instructions were in helping them to understand the law on a scale that ranged from 1 (Not at all effective) to 5 (Extremely effective).

Current jurors who received revised instructions and then deliberated perceived those instructions to be significantly more effective than jurors in any of the other conditions.73 Since current jurors were less experienced and less well educated than ex-jurors, it appears likely that

69 F (1,297) = 4.81, p = .029.
70 Ex-jurors’ mean = 1.90; current jurors’ mean = 1.56. F (1,292) = 5.74, p = .017.
71 p < .05 by Newman-Keuls test. Overall jury sample × opportunity to deliberate interaction: F (1,288) = 4.84, p = .029. The Newman-Keuls test is a systematic procedure for comparing all possible pairs of group means. For an explanation of the method of constructing such tests, see B. Winer, STATISTICAL PRINCIPLES IN EXPERIMENTAL DESIGN 191-96 (2d ed. 1971).
72 Strawn & Buchanan, supra note 19, at 478.
73 Mean response with revised instructions and deliberation = 3.84; with pattern instructions and deliberation, 3.34. Overall interaction: F (1,285) = 8.43, p = .004.
current jurors were especially in need of simple and clear instructions in order to understand the law, and, as a result, the revised instructions were more effective for them than were the pattern instructions. Ex-jurors, who were somewhat better educated and more experienced, apparently benefited less from the simplified language of the revised instructions than did current jurors, with the result that there were no significant differences between their perceived effectiveness of revised and pattern instructions.

6. Deliberating Jurors’ Subjective Impressions of Deliberations

For jurors who deliberated, variations in the instructions (revised and pattern) and subject population (ex-jurors and current jurors) did not affect either the extent to which jurors felt they had participated in the deliberations, or ratings of the overall quality of the group deliberations.

All groups indicated that they thought they had had about the right amount of discussion concerning the instructions: on a scale ranging from 1 (Preference for a lot less discussion of the instructions) to 3 (Preference for the same amount of discussion) to 5 (Preference for a lot more discussion), the overall mean response was 3.36. None of the experimental manipulations caused reliable variation from this mean.

7. Jurors’ Paraphrases of Specific Jury Instructions

In our final series of questions, we attempted to evaluate our jurors’ understanding of the judge’s instructions by asking them to paraphrase some of the concepts central to the instructions that they had heard at the close of the trial.\textsuperscript{74} Each juror was asked to write an explanation of the legal concepts “reasonable doubt” and “intent,” and of the restricted use of evidence of prior convictions. We then analyzed the written responses to each term.\textsuperscript{75}

As a basis for evaluating the jurors’ understanding, the content of each instruction was divided into units of meaning to provide a convenient list of essential legal components to which the paraphrase could be compared. Although pattern and revised instructions were analyzed separately, the content units for each were virtually identical. This similarity was attributable to the fact that most of the revisions were syntactical rather than semantic. Table 6 summarizes the component units of meaning for each instruction. Each juror’s paraphrases were compared

\textsuperscript{74} This idea sprang from the work of Charrow & Charrow, supra note 48.

\textsuperscript{75} Special thanks are extended to Ms. Jane Goodman for her assistance in performing this analysis.
with the component units of meaning of the given instructions and categorized as (a) essentially correct, (b) erroneous, or (c) ambiguous.

**TABLE 6**

**COMPONENT UNITS OF MEANING FOR THREE TARGETED LEGAL CONCEPTS, PRESENTED BY CONCEPT**

<table>
<thead>
<tr>
<th>Reasonable Doubt</th>
<th>Intent</th>
</tr>
</thead>
<tbody>
<tr>
<td>presumption of innocence</td>
<td>act</td>
</tr>
<tr>
<td>doubt for reason</td>
<td>purpose/objective</td>
</tr>
<tr>
<td>doubt in mind</td>
<td>crime</td>
</tr>
<tr>
<td>reasonable person consider</td>
<td>Use of Prior Conviction</td>
</tr>
<tr>
<td>evidence/proof</td>
<td></td>
</tr>
<tr>
<td>satisfy</td>
<td>evidence of</td>
</tr>
<tr>
<td>defendant</td>
<td>not guilt</td>
</tr>
<tr>
<td>abiding belief/remaining doubt</td>
<td>weight/credibility/believe</td>
</tr>
<tr>
<td>innocence/guilt</td>
<td>defendant’s testimony</td>
</tr>
</tbody>
</table>

a. Reasonable doubt

Paraphrases were classified as essentially correct if they included the minimum indication of doubt by an objective external standard; for example, “That there is a reasonable chance there is doubt of a crime,” or “A valid reason to doubt.” By comparison, paraphrases were classified as ambiguous if it was unclear whether or not there was an articulable standard for deciding on the evidence. Responses such as “Not enough evidence,” “The facts are not clear,” or “Some aspect of the case you are not sure about” fell into this category. Paraphrases that indicated too rigorous an objective standard (e.g., “Not 100% evidence of guilt,” or “Absolute proof not present”) or too subjective a standard (e.g., “Guilty or not guilty in my mind and consciousness,” or “What’s right in your mind”) were rated as erroneous.

b. Intent

Correct paraphrases were easily discernible because of the small number of component units of meaning. Examples of correct paraphrases are “It is on your mind to commit a crime,” or “Having the idea in mind of doing something unlawful.” We rated answers that failed to mention an essential component (e.g., crime) as incorrect, despite the fact that other components were accurately defined (e.g., “Will to do right or wrong,” “A preconception,” or “Having consciously made a de-
cision to do something or not to do something”). There were very few ambiguous paraphrases of intent.

c. Prior conviction

Correct paraphrases included the essential components noted in Table 6 (e.g., “Only as an aid in determining credibility,” or “For weighting truthfulness of testimony”). Incorrect paraphrases were of three types. One type implied that the use of evidence of a prior conviction was absolutely impermissible; another, that the use of such evidence was proper on the issue of defendant’s guilt or innocence; the third implied that the juror had no grasp of the concept at all.

d. Findings

Paraphrase data are summarized in Table 7. The clearest findings, appearing in the overall results of Table 7, were that correct paraphrases outnumbered incorrect paraphrases when revised instructions were given but not when pattern instructions were given. This result was most pronounced for jurors who deliberated.\textsuperscript{76} Such findings lend strength to the pattern observed elsewhere in our results that revised instructions accompanied by an opportunity to deliberate tend to enhance understanding.

Several collateral findings help to complete the picture. First, jurors who did not deliberate tended to produce more purely subjective

\begin{center}
\textbf{TABLE 7}
\end{center}

\begin{center}
\textbf{PERCENTAGE OF CORRECT, INCORRECT, AND AMBIGUOUS PARAPHRASE DEFINITIONS FOR REASONABLE DOUBT, INTENT, AND PRIOR CONVICTION INSTRUCTIONS COMBINED}
\end{center}

\begin{tabular}{|l|c|c|c|}
\hline
 & Correct & Incorrect & Ambiguous \\
\hline
Pattern Instructions Deliberation & 31.7 & 49.3 & 19.0 \\
\hline
Pattern Instructions No Deliberation & 42.0 & 47.3 & 10.7 \\
\hline
Revised Instructions Deliberation & 47.7 & 36.7 & 15.7 \\
\hline
Revised Instructions No Deliberation & 45.7 & 43.7 & 10.7 \\
\hline
\end{tabular}

\textsuperscript{76} While the trends are clear, these data were not significantly different.
definitions of reasonable doubt than jurors who did deliberate, using paraphrases such as "Guilty or not guilty in my mind and consciousness," "You honestly believe the defendant guilty," or "What's right in your mind." Second, jurors who receive revised instructions tended to respond in less formal language and to use the first person more often, suggesting that the use of simpler, more direct language promotes personal involvement and makes the task of jurors less abstract.77

E. DISCUSSION

Several themes recur in our data. First, jurors with greater experience and learning apparently comprehend and apply jury instructions better than those who are less experienced and/or less well educated. This general finding is demonstrated in comparisons of the more experienced and better educated ex-jurors with the less experienced and less well educated current jurors.

In addition to this basic tendency, there are effects due to the language of the jury instructions and the opportunity to discuss legal concepts in the course of deliberations. A fundamental trend that appears throughout the data is the tendency for juror understanding to be enhanced when the language is relatively clear and when there is an opportunity to discuss legal concepts through deliberation. Thus, those who deliberated after receiving revised instructions were found to better comprehend the legal concepts. Furthermore, the paraphrased instructions of jurors who received revised instructions, followed by deliberation, showed the highest percentage of correct responses.

Not surprisingly, the impact of clear language and an opportunity to deliberate is greatest for those who initially seem at the greatest disadvantage—the relatively inexperienced, less well educated current jurors. We found that it was current jurors, armed with revised instructions and an opportunity to deliberate, who perceived the judge's instructions to be most effective. Moreover, relative to current jurors, the advantage that ex-jurors showed in applying the legal concepts to novel fact patterns occurred only where there was no opportunity to deliberate.

Two of the three independent variables examined in this study affected verdicts. First, less experienced current jurors tended to be more lenient and also more certain than ex-jurors in reaching verdicts. This finding is analogous to the finding of Kalven and Zeisel that judges, who presumably have had a great deal of trial experience, are more apt to

77 Compare the following concrete paraphrase of the revised reasonable doubt instruction, "If I have a doubt in my mind by the weight of the evidence, he or she is not guilty," with a more abstract paraphrase of the pattern instruction, "Based on the evidence, the uncertainty that a reasonable and prudent person would have about the guilt of the defendant."
convict a defendant than are jurors who watch the same trial. Our
data corroborate the inverse relationship between experience and leni-
ency. Second, jurors who deliberated tended to be more lenient than
jurors who did not deliberate. This finding suggests that the delibera-
tion process may expose jurors to additional reasons for doubting the
guilt of the defendant. At the very least, this result occurred for the
particular facts of the case used in our research. Third, and most nota-
ibly, the variations in instructions did not affect verdicts reliably. Thus,
as a policy matter, it appears that the revisions we developed do not tip
the scales of justice for or against the defendant in comparison to the
language of the original pattern instructions. Inasmuch as the revised
instructions enhance jurors’ understanding of relevant legal concepts
without biasing verdicts, our findings provide a clear basis for recom-
mending the use of these simplified jury instructions in actual trials.
This recommendation would, of course, require that the revised instruc-
tions maintain legal accuracy.

IV. RESPONSE OF THE JUDICIARY AND SUPERSIMPLIFIED
INSTRUCTIONS

At the onset of our research, a review of appellate cases indicated
that the wording of jury instructions is often fragile; minor variations in
wording may be the basis of reversals for error in instructing the jury.
Our initial efforts to revise the language of existing pattern instructions
thus were tempered by two concerns: first, that extensive alterations
from existing pattern instructions would be unacceptable to appeals-
conscious trial court judges; and, second, that appellate judges might
reject such substantially altered instructions as an excessive departure
from established precedents.

An informal sampling of approximately ten state trial judges’ opin-
ions of our revised instructions, however, provided us with a different
message. The judges indicated that our initial revisions did not seem to
go far enough—that what was needed were instructions even more sim-
plified than those of our initial efforts. Based on this response, we un-
dertook to develop an even more simplified version of the targeted
instructions. By further refining our revised instructions and, in some
instances, reorganizing the format of instructions, we developed the
“supersimplified” instructions that appear in Table 8.

### TABLE 8

**Examples of Supersimplified Instructions**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Supersimplified Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Prior Conviction to Impeach a Defendant</td>
<td>You may not use evidence of a prior conviction to decide if the defendant is guilty in the current case. But, you may consider a prior conviction when evaluating a defendant’s credibility and how much weight to give his (or her) testimony.</td>
</tr>
<tr>
<td>Intent</td>
<td>A person acting with intent acts with the deliberate purpose of accomplishing a crime. Intent can be proven beyond a reasonable doubt by either direct or circumstantial evidence.</td>
</tr>
</tbody>
</table>
| Burden of Proof; Presumption of Innocence; Reasonable Doubt | The defendant pleads “not guilty.” The defendant is presumed to be innocent and need not prove his (or her) innocence concerning any element of the crime. You must wait until you have heard all the evidence before you come to a decision in this case.

The defendant’s plea of “not guilty” means that the state must prove each element of the crime beyond a reasonable doubt. A reasonable doubt about guilt is not a vague feeling or suspicion. It is a doubt that a reasonable person has after carefully considering all of the evidence.

If you are satisfied that all of the elements of the crime are proven beyond a reasonable doubt, you must find the defendant “guilty.” If you have a reasonable doubt about the proof of any element of the crime, you must find the defendant “not guilty.” |
| General Introductory Instruction           | You have three distinct duties as jurors in this case: 1) You must determine the facts in this case from the testimony and evidence presented during the trial; 2) You must accept and apply the law as I instruct you, regardless of what you believe the law should be; 3) You must find the defendant “guilty” or “not guilty” by applying the law to the facts that you have determined.

First, to determine the facts in this case, you must consider all of the evidence admitted in court. Evidence consists of exhibits and testimony of witnesses. You must not consider any evidence that I have not admitted. Every party may benefit from evidence introduced by the opposing party.

You are not to consider as evidence the mere fact that the defendant has been accused. You are the sole judges of the credibility of the witnesses. You must decide what
TABLE 8—Continued

<table>
<thead>
<tr>
<th>Topic</th>
<th>Supersimplified Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Introductory Instruction (continued)</td>
<td>weight to give to the testimony of each witness. By law, my personal opinions about the facts or evidence in this case must not influence your judgment. I can offer some suggestions to help you evaluate each witness' testimony: (A) Consider the witness' ability to observe and remember facts. Ask yourselves: Could the witness see or hear clearly at the time? How accurate is the witness' memory? (B) Consider the witness' manner and attitude when testifying. Ask yourselves: Is the witness confident or hesitant? Does the witness appear biased or prejudiced in any way? How believable is the witness' testimony in light of all the evidence? Second, in accepting these instructions on the law, consider the instructions as a whole. One instruction should not take precedence over another. The order of the instructions has no significance. Third, in applying the law to the facts, remember that the lawyer's remarks, statements and arguments are not part of the evidence. They are intended to help you understand the evidence and apply the law. Disregard any remark, statement or argument which is not supported by the evidence or my instructions. Finally, you have absolutely nothing to do with the punishment of a convicted defendant. The fact that punishment may follow a conviction must not influence your verdict, except that it may tend to make you careful. Throughout your deliberation, do not allow sympathy or prejudice to influence you. You are officers of the court and must act fairly and with the sincere desire to determine the proper verdict. To reach a verdict, your decision must be unanimous.</td>
</tr>
</tbody>
</table>

Following the same procedures employed in our previous research, we presented two groups of students at the University of Washington, who were also registered voters, with the same videotaped burglary trial previously used and then gave them either pattern instructions or the supersimplified instructions. In this study, all subjects deliberated.

Our results showed no difference in comprehension between the two groups, but there was one significant difference between the groups in ability to apply the instructions to novel fact patterns: subjects who received the supersimplified instructions performed better in applying "reasonable doubt/presumption of innocence" than did subjects who re-
ceived standard pattern instructions.79

While this study explored the possibility that substantial simplification of the language of pattern instructions may enhance juror understanding, it provided no basis for determining whether courts would be willing to accept alternative versions of the instructions, either revised or supersimplified, in actual trials. Our final study was directed toward answering this question.

V. Trial Judges' Evaluations of Alternatively Worded Criminal Jury Instructions

Underlying our attempts to draft understandable jury instructions was the concern that however clear to lay people our revised instructions might be, unless they were accepted by trial judges, they might never see their day in court. Because trial judges ultimately choose which instructions will be given to jurors, we decided to survey state court judges currently sitting throughout the United States to determine how they rated the language of the revised, supersimplified, and existing pattern instructions.

A. Methodology

In this study, 435 state superior court judges randomly selected from across the country were asked to complete a questionnaire designed to measure the legal adequacy and probable acceptance of our linguistic revisions in relation to the pattern instructions.80 Each judge was sent one of four versions of our questionnaire. Mailing was done randomly so that each of the four versions was distributed evenly throughout the country.

Three versions of the questionnaire were quite similar (i.e., the “pattern,” “revised,” and “supersimplified” versions). In each version, the judges were asked to evaluate three instructions: intent, reasonable doubt/presumption of innocence, and the limiting instruction. These instructions were presented in either their pattern form, the revised form that we had developed in the earlier phases of this research, or the supersimplified form that was an attempt to radically simplify the language of the instructions. We asked several questions about each instruction, including:

79 F (1,50) = 4.14, p = .047.
80 We obtained a list of the names and addresses of all superior court judges in the United States. We thank the Honorable James E. Noe, King County Superior Court, for making this list available to us. Using a map of the United States that had been divided into Congressional districts, we placed each judge in his or her respective Congressional district, and then randomly selected one judge from each of the 435 districts.
1. In your opinion, is this instruction a legally adequate statement of the law?
2. How effective do you think the instruction will be in conveying the intended legal concepts to the jury?
3. What, if any, aspects of the instruction do you find particularly helpful or troublesome?
4. Overall, would you consider this a proper instruction to give to a jury?
5. Do you perceive bias favoring either party in the language of this instruction?

The fourth version of our questionnaire had a different format. Here, a judge was given all three forms (i.e., pattern, revised, and supersimplified) of a particular instruction, and then asked to rank-order the instructions along these lines:

1. Rank the instructions as legally adequate statements of the law in your jurisdiction. Which do you most prefer? Which do you least prefer?
2. Rank the instructions as to their effectiveness in conveying the intended legal concepts to a jury.
3. Rank the instructions as to the least amount of bias favoring either party in the language of the instruction.
4. Overall, which instruction would you choose to give to the jury?
5. What, if any, aspects of each instruction do you find particularly helpful or troublesome?

Overall, we received responses from 133 judges or 31% of the sample. Of these, 110 (25%) completed the questionnaire; others gave us only their comments or informed us that they tried civil cases exclusively. Of those responding, 22% answered the pattern version, 26% answered the revised version, 33% answered the supersimplified version, and 19% answered the comparison questionnaire.

B. RESULTS

1. Intent Instruction

Overall, judges preferred the revised version of the intent instruction over the pattern and supersimplified forms. When asked, “Is this instruction a legally adequate statement of the law?” more judges answered affirmatively for the revised version than for the other intent instructions.81 For those judges who rank-ordered the three versions of

---

81 On a scale from −2 to +2 where −2 = Positively no and +2 = Positively yes, the mean response to the revised version was .77; to the pattern version, .48; and to the supersimplified
intent according to their legal adequacy, the revised form was most preferred.\textsuperscript{82}

In response to the question, "How effective do you think this instruction will be in conveying the intended legal concepts to the jury?" the revised version of intent received the highest mean score,\textsuperscript{83} although judges who ranked the three instructions comparatively on the basis of perceived effectiveness did not differ significantly in their rankings of the three versions. When judges were asked which of the three versions they would prefer to give to the jury, however, the revised version was most preferred.\textsuperscript{84}

In terms of the perceived bias inherent in the three versions of the intent instruction, the revised instruction was viewed as slightly more biased in favor of the prosecution, but the scores did not differ significantly for the pattern or supersimplified forms.\textsuperscript{85} This slight prosecution bias possibly can be attributed to the fact that the revised instruction included this statement: Intent can be proved by either direct or circumstantial evidence.

2. Reasonable Doubt/Presumption of Innocence

Like the intent instruction, the revised version of the reasonable doubt instruction was clearly favored by judges. Among judges who rated only one version, the revised instruction was given the highest mean score in terms of its legal adequacy\textsuperscript{86} and was thought to be some-

\textsuperscript{82} On a ranking scale where 1 = Most preferred version and 3 = Least preferred version, the mean rank for the revised version = 1.76; for the pattern version = 2.38; and for the supersimplified version = 1.86. Friedman ANOVA on rank-order data, chi-square = 4.67, 2df, \( p = .09 \). The Friedman analysis of variance (ANOVA) by ranks is a statistical test to determine whether rank sums for different instructions, for example, differ at some predetermined level of significance (usually \( p < .05 \)).

\textsuperscript{83} On a scale from 0 to 4 where 0 = Not at all effective, and 4 = Extremely effective, the revised instruction = 1.90; pattern instruction = 1.42; supersimplified instruction = 1.42. Chi-square = 17.07, 8df, \( p = .03 \).

\textsuperscript{84} On a scale from 1 to 3 where 1 = Most preferred version, and 3 = Least preferred version, mean rank for revised intent instruction = 1.68; pattern instruction = 2.47; supersimplified instruction = 1.84. Friedman ANOVA chi-square = 6.63, 2df, \( p = .04 \).

\textsuperscript{85} On a scale from -3 to +3 where -3 = strong defense bias, 0 = no bias, and +3 = strong prosecution bias, the mean score for revised instruction = .63; pattern instruction = -.16; supersimplified instruction = .13. Not significant by chi-square.

\textsuperscript{86} On a scale from -2 to +2, the revised instruction = .73; pattern = 0; supersimplified = .34. Chi-square = 12.47, 8df, \( p = .13 \).
what more effective at conveying the intended legal concepts to a jury. The judges who saw all three versions and then ranked the instructions produced similar results. The revised version tended to be preferred on the dimension of legal adequacy, and was seen as most effective in communicating the concept of reasonable doubt to the jury. In response to the question, "Would you consider this a proper instruction to give to the jury?" the revised version received more affirmative votes and was ranked as the most preferred form of the instruction. Finally, in terms of the perceived bias of each version, the pattern instruction was thought to be slightly more biased in favor of the prosecution, and the revised version was ranked as having the least amount of bias overall.

3. Limiting Instruction

The judges found very few differences among the three versions of the limiting instruction. Although the revised limiting instruction received a slightly higher score for legal adequacy than did the other two versions, this difference was not statistically significant. However, there was a difference in the perceived effectiveness of the instructions, and here the revised instruction received the highest mean score. For the questions, "Would you consider this a proper instruction to give to the jury?" and "Do you perceive bias favoring either party in the language of this instruction?" there were no statistically significant differences in judges' responses. Also, there were no differences in the rankings of the revised, pattern, and supersimplified instructions from judges who read all three versions and ranked the instructions in order of preference.

---

87 On a scale from 0 to 4, revised instruction = 2.19; pattern instruction = 1.48; supersimplified instruction = 2.03. Chi-square = 11.74, 8df, p = .16.
88 On a scale from 1 to 3, mean rank for revised instruction = 1.63; pattern = 2.11; supersimplified = 2.26. Friedman ANOVA chi-square = 4.11, 2df, p = .12.
89 On a scale from 1 to 3, mean rank for revised instruction = 1.56; pattern = 2.17; supersimplified = 2.28. Friedman ANOVA chi-square = 5.44, 2df, p = .06.
90 On a scale from -1 to +1 where -1 = No, this is not a proper instruction, and +1 = Yes, this is a proper instruction, the revised version = .42; pattern version = -.28; supersimplified version = .19. Chi-square = 9.35, 4df, p = .05.
91 On a scale from 1 to 3, mean rank for revised instruction = 1.47; for pattern = 2.29; for supersimplified = 2.24. Friedman ANOVA chi-square = 7.18, 2df, p = .03.
92 On a scale from -3 to +3, revised instruction = .33; pattern = .52; supersimplified = .32. Chi-square = 16.04, 10df, p = .09.
93 On a scale from 1 to 3, mean rank for revised = 1.50; pattern = 2.25; supersimplified = 2.25. Friedman ANOVA chi-square = 6.00, 2df, p = .09.
94 On a scale from 0 to 4, where 0 = Not at all effective, and 4 = Extremely effective, revised version = 2.54; pattern version = 2.08; supersimplified version = 1.92. Chi-square = 16.70, 8df, p = .03.
VI. GENERAL DISCUSSION

The strategy of the studies reported in this Article was (a) to identify certain criminal jury instructions that are difficult for jurors to understand, yet are crucial and used frequently in most jurisdictions; (b) to develop alternative language that would improve jurors’ understanding; (c) to validate the use of the alternative language in a setting and with juror participants that approximate those of actual trials; and (d) to present information on trial judges’ reactions to the alternatively worded instructions. The result is a set of alternatively worded instructions that both enhanced juror understanding and received favorable ratings by the trial judges included in our sample. We believe the revised language of the pattern instructions is appropriate for use in actual court cases and will preserve legal accuracy while also enhancing communication with jurors.

Although the findings generally seem clear, one caveat is in order. This concerns the notion of external validity, or the extent to which results of any experimental research can be generalized to other persons and situations. Because the experimental situation we used to test understanding of the pattern and revised instructions did not mirror exactly the conditions of an actual trial (for example, the trial was presented on videotape and thus not viewed live, our jurors were aware that their verdicts were not binding, and their deliberation time was limited), we must be cautious about overgeneralizing from the favorable results of these studies.95

There is, however, room for cautious optimism. First, results from the archival study enabled us to select jury instructions for revision that were indeed problematic—these instructions were frequently used but difficult for jurors to understand. Second, we tested our revised instructions in a setting that closely resembled that of a real trial, and we used actual jurors as our subjects. This closer approximation to reality is certainly an improvement over jury simulation studies of the past.96 Finally, results from the trial judges’ survey demonstrated that the language changes we proposed were acceptable to those trial judges who responded and were thought to communicate effectively crucial infor-

95 For a general critique of jury simulation studies, see Simulation Research and the Law, 3 Law & Hum. Behav. 1 (1979).

96 The resemblance of our simulation to a real trial was close, but still not complete. For example, jurors did not participate in voir dire—a portion of the trial in which counsel asks questions of potential jurors that relate to the law. However, mock jurors did hear closing arguments, in which counsel has the opportunity to argue and explain the law, interpreting legal issues so as to favor his or her side. Given the inevitably biased interpretations, the court has an even greater duty to provide neutral guidance so that jurors can indeed understand the relevant law.
mation to jurors. In many respects, the judges' evaluations provide the best test of the external validity of our research and lend confidence to the view that our findings are generalizable to actual jury trials and will improve jurors' understanding of their instructions.

As a policy matter, it is important to examine whether changes in the language of jury instructions such as those presented here are likely to affect verdicts. If, for example, verdicts of guilty dramatically increase or decrease as the result of language variations, we could assume that simplified language somehow was shifting the decision criteria used by jurors away from existing standards. The data reported here, however, showed reliable effects on verdicts of deliberation (i.e., those who deliberated were more likely to acquit) and of juror sample (i.e., less experienced jurors were more likely to acquit), but no reliable effects of instruction variations. These results suggest an interactive effect of jury instructions, such that jurors who have an opportunity to deliberate and who have little jury experience at the outset benefit the most from simplified language. In short, it appears that linguistic improvements in the instructions do not shift jurors' decision criteria relative to pattern instructions, though they do help jurors to comprehend and apply the instructions to facts more accurately.

More broadly, our results suggest that lawyers and judges need not despair that juries sometimes seem ill equipped to understand and apply the law. Our findings demonstrate that simplified language and organized presentations of legal concepts can effectively help jurors, particularly when coupled with the opportunity to discuss and deliberate. Proper attention to devising jury instructions that are meaningful to lay people, as well as legally accurate, can accomplish the important task of informing jurors of the relevant legal concepts.