3

THE SOCIAL PSYCHOLOGY OF JURY DELIBERATIONS

JOAN B. KESSLER

A survey of relevant research on small group behavior is coupled with a survey of the limited jury product and process research especially emphasizing group size research, which is an unresolved issue currently under investigation. Although the recording of the deliberations of real juries is impossible, some researchers have used jurors from jury pools deliberating in mock juries; others have used student jurors.

Current research methodology, including the use of videotaped trial dramatization, is discussed.

Most jury research has involved examination of the product of jury deliberations because information is easy to collect and there is much interest in this area in the legal community. The author, however, stresses the need for more process jury research to more fully understand the workings of the jury and to contribute to the creation of a formalized theory of jury behavior.

Chapter 3

THE SOCIAL PSYCHOLOGY OF JURY DELIBERATIONS

JOAN B. KESSLER

The mystique of jury deliberations has long fascinated lawyers and laymen and more recently social scientists. Jury deliberations are secret and there is great curiosity about what goes on in the juryroom.[1] Communication researchers interested in studying small group interaction have used the jury as one small problem-solving group. But the jury is a specialized small group, and generalizations of small group findings from other contexts to the jury must be made in a guarded manner. This chapter summarizes relevant general small group research and the limited jury deliberation product and process research. Directions for further needed jury research are suggested.

THE WHYS OF JURY RESEARCH

The first systematic empirical study of the jury was conducted by the University of Chicago. The major focus of this interdisciplinary study

> was to bring together into a working partnership the lawyer and the social scientist; . . . the hope was to marry the research skills and fresh

AUTHOR'S NOTE: *Research for this chapter was assisted by a faculty research grant from Loyola University of Chicago.*

> perspectives of the one to the socially significant problems of the other, and in the end to produce a new scholarship and literature for both. . . . It was the intention . . . that new data be collected about old legal institutions [Kalven and Zeisel, 1966: v].

The Chicago study did collect new data, and the heuristic function that the project played is evidenced by the more than sixty articles which have been published as extensions of results from the study.

The book *The American Jury* represents the central focus of the civil section of the study: it analyzes the extent to which the judge and jury disagree on the verdict reached. The study consisted of judges in 3,576 cases responding to a questionnaire and relating their judgment on each case before the jury reached its verdict. In about 80% of the cases the same decision was reached by both judge and the jury. This section of the Chicago Project has implications for the continuation of the jury system (Kalven and Zeisel, 1966). If judges and juries arrive at the same decisions, the question arises as to whether the expensive jury system should be maintained.

Further analysis of the verdicts by Kalven (1958) showed that the first ballot vote by juries has a strong relationship to their final verdict. In about 90% of cases when the majority said "not guilty" on the first ballot, the jury found the defendant "not guilty" on the final vote. Moreover, in an earlier study (Weld and Roff, 1938), experimenters read scripts of a trial to mock juries and found that jurors came to their decision even before all the evidence was presented.

In addition to this question of the value of the jury's deliberation, actual study of these deliberations has been very difficult. In the Chicago Project, one phase dealt with actually recording live jury deliberations in Wichita, Kansas. The American Bar Association sanctions and federal law[2] which followed have closed the door to further recordings of actual jury deliberations. Jury deliberations are shrouded in secrecy, and the courts are resistant to any infringement on their privacy.

If the value of deliberations is in question, and if the study of actual deliberations is impossible, the questions of the why and how of jury deliberation studies may be raised. Researchers have stressed the need for evaluation of the deliberation process as the jury is a major part of our justice system. Kalven and Zeisel question their own jury studies and asked if they had studied the wrong things by not studying the jury's deliberations. These researchers and others have stressed the need for studies of jury deliberations (Kalven and Zeisel, 1966; Erlander, 1970; Zeisel, 1973).

Many questions have been raised in the literature about jury deliberations. For instance, some of the issues researchers want to find out about include how foremen are chosen, how jury size affects deliberations, how the requirement of

unanimous-versus-nonunanimous verdicts affects deliberations, how personal traits of the litigants and jurors affect deliberations (see chapter 4 by Stephan for a discussion of research in these areas), how judge's instructions affect deliberations, and how videotaping affects the deliberations. Analyses of simulated jury deliberations have begun to answer some of these questions about the jury; and although general studies of the small group's decision-making process are quite common in the social-psychological literature and may answer other jury-related questions, further studies of specialized decision-making processes of the jury are needed to give an accurate picture of the jury deliberation process.

THE HOWS OF JURY RESEARCH

Types of Stimuli and Types of Juror Subjects

As this chapter will demonstrate, research on jury deliberation is limited. One reason is the difficulty in using real trials and real jurors for experimentation. However, though taping of real deliberations is unlawful, variations are possible. Strodtbeck (1962) reports having no problem obtaining assistance from judges in Chicago, St. Louis, and Minneapolis who provided space and jurors from jury pools for use in his experiment. Forston (1968) used jurors from the county courts of Minneapolis and Chicago in analyzing various methods of jury research. Simon and Mahan (1971) used both real and student jurors to find out how jurors compare with judges in defining "burden of proof" in probability terms. They found that students were more defendant-prone than real jurors, but both groups of jurors defined "burden of proof" in a more similar manner than the judges did, especially in civil actions. Forston (1972) has also used student jurors; and in comparing eight groups of real jurors and eight groups of student jurors, he found that the monetary rewards were slightly higher with student jurors, that somewhat more time was spent in the discussion of personal experiences with the real jurors, and that the student jurors seemed to have a better understanding of the judge's instructions. The cost and problems involved with using actual jurors may not equal the benefits of using them in experimentation, Forston concluded. Kessler (1973a and 1973b) and Kulka and Kessler (1973) used student jurors in view of the time and money they had available.

The motivation of subjects that is needed in order to create the feeling of importance in their decision-making process may be difficult in laboratory simulations. Realistically portrayed trials and carefully delivered judge's instructions to the jury can help to approach a real-life situation. Merely reading sections of trial testimony or lawyer's closing statements may not supply enough

realistic simulation to the subjects, yet many studies have used this inexpensive and convenient method of presentation. The Chicago Project, however, relied on audiotapes of edited trial transcripts which more closely approximate a realistic simulation. Although both audio- and videotape enable more than one group of jurors to decide the same case and thereby allow for comparisons between jury decisions, the added video treatment creates a more realistic situation and enhances motivation.

Experimentation with videotaping actual trials has already begun. For instance, in the chambers of Judge Sam Street Hughes of Ingham County Court, Mason, Michigan, criminal trials were videotaped during December, 1971. The recording equipment and crew were paid for by the Michigan Bar Association under a grant from the National Law Enforcement Assistance Association for an experiment in modernizing trial apparatus (*New York Times,* 1971: 5). This experiment represents a departure from the American Bar Association's 1937 policy against use of electronics in the courtroom. Chief Justice Thomas M. Kavanagh of Michigan ordered an exception to this ABA policy as part of an attempt to bring the Michigan courts into the "space age" (*New York Times,* 1971: 24). Judge John B. Wilson, Jr., of Marion criminal court in Indianapolis, Indiana, is taping a real criminal trial with the agreement of defense and prosecution (*Daily Herald,* 1974), and similar experiments have been conducted around the country under the supervision of the National Center for State Courts in Denver (see *Chicago Tribune,* 1974).

Currently jury researchers at Michigan State University (Miller, et al., 1974) are using a videotaped dramatization of an edited trial transcript of a civil case under a National Science Foundation grant. Miller and Siebert, the principal investigators, are studying the effects of stricken testimony on jurors' verdicts and on perceptions of attorneys' credibility; the effect of videotape on jurors' retention of evidence; the effect of black-and-white versus color taping in relation to jurors' retention of information and on perceptions of witness credibility; and the differences, if any, in response of jurors to live and taped trials. Barton and Padawer-Singer at Columbia University have been studying the six- and twelve-member unanimous and nonunanimous criminal jury under a National Science Foundation grant. They are using a videotaped dramatization of a trial and showing it to 80 mock juries made up of actual jurors.

Forston (1968) utilized three methods of case presentation in his study of the differences in jury experimentation. He employed live mock trials, audiotaped trials and reading of edited transcripts. He concluded that although there were some differences among the methods and problems within each method, all three were viable alternatives in conducting jury research. Forston is currently attempting to use videotaped trials in jury research. This method seems to be more realistic than any of those previously used.

Kessler (1973a and 1973b) produced a two-and-one-half hour videotaped trial involving an automobile negligence case that had been settled out of court. The actual plaintiff and defendant agreed to portray themselves. Kulka and Kessler (1973) used an edited audiotape version of Kessler's (1973a and 1973b) videotaped trial along with slides (see chapter 4 in this volume). In this case a videotape would not have been workable to manipulate appearance of plaintiff and defendant in various conditions; therefore, an audiotape and slides were used.

Thus, the techniques used in jury research may depend on the resources available and the manipulation necessary. The use of a laboratory setting and student jurors is far less costly in time and money; but generalizability is limited, as in most communication studies, to the college population from which the sample was drawn.

Product and Process Research

Jury deliberation research has analyzed both product and process[3]. Most jury studies only examine the variables affecting the product of deliberations –i.e., verdicts (criminal cases) or verdicts and amount of damages (civil cases)–rather than evaluating variables affecting the process of deliberations –i.e., leadership, content and participation. The reasons for few process studies are that members of the bench and bar may be less interested in the process used by the jurors than the product reached[4], and that such studies involve more expense in both money and time for the researcher. Process studies involve the time for deliberations to take place, require the use of many subjects, and the necessity to record, transcribe and analyze deliberations. In addition, researchers (Kalven and Zeisel, 1966; Simon, 1967) have suggested that deliberations may not change the juror's initial verdict. Because of the expense and questionable value of process research, many product studies have been conducted.

Recently, more interest in studying process has arisen in both the general small group research and the specific area of jury research. Some instruments have been created to study the process of decision-making. Bales (1950 and 1970), a major contributor in the area of analyzing group interaction, has created a system for tabulation and evaluation of group discussions.[5] Simon (1967) used some content analysis of mock deliberations, but found less systematic analyses more productive. Forston (1968) and Kessler (1973a) created instruments to evaluate the specialized jury decision-making process.

One method of analyzing deliberations is to audiotape (James-Simon, 1959; Kessler, 1973b) or videotape (Forston, 1968) the deliberations and then content analyze them. Simon (1967) states that a formal content analysis was attempted, but was not very "fruitful or interesting." She suggests that a less systematic

technique of analysis through observation yielded a better understanding of the process (Simon, 1967: 132).[6]

THE WHATS OF JURY RESEARCH

Research on Deliberation Product

In the early days of group communication research there was a strong emphasis on the product rather than the process of group interaction. Various factors were shown to have some effect on group product, but no formal theory of group productivity has yet been developed. Cohesion (individuals liking for or attraction to a group), for example, may lead to a stronger social influence of a group and, therefore, greater conformity to group goals (Shaw, 1971). The type of communication network within a group has also been shown to effect group productivity to some extent. A centralized group network where everyone communicates only with the leader and with no one else in the group seems to be more productive when simple tasks are involved because extraneous information is eliminated. With difficult tasks, such restrictive networks may lead to errors and lower efficiency (Cartwright and Zander, 1968).

Group size has also been shown to affect productivity in some cases, because larger groups may have more trouble reaching consensus, cliques may form, quantity of ideas may increase and conflict resolution may become more difficult (Hare, 1952). There are conflicting results on the relationship of group size and time required for task completion (Taylor and Faust, 1952; South, 1927). Other research has found that as responsibility becomes more dispersed, larger groups were more willing to take risks than smaller groups (Teger and Pruitt, 1967; Bem et al., 1965).

Other studies have compared the product of the group working together with that of an individual working alone. Researchers have found the group superior in speed and accuracy over individuals in solving the problems (Triplett, 1897; Shaw, 1932; Taylor and Faust, 1952). As mentioned above, judges working alone end up with the same verdict as the jury approximately 80% of the time (Kalven and Zeisel, 1966).

Simon and Mahan (1971) have studied the juror's definition of "burden of proof" ("beyond a reasonable doubt" in criminal cases and "by a preponderance of the evidence" in civil cases) through constructing a probability scale. Student jurors, real jurors, and judges were asked to indicate on a 0.0–10.0 scale the probability of guilt of the defendant after listening to edited trials. While half or more of those in all three groups (students, jurors and judges) translated "beyond a reasonable doubt" into an 8.6 out of 10 chance of guilt, there was a disagreement on civil matters. Judges saw "by a preponderance of the evidence"

as a 5.5 probability, while both students and real jurors saw it as about a 7.5 probability. Thus, jurors and judges may disagree on the distinctions in the civil definitions of burden of proof used by the judge (Simon and Mahan, 1971: 325).

Examining general group literature can provide some perspective on the jury. But because the jury is a specialized group with a specialized task, valid conclusions about its productivity can be drawn only by studying its particular product. Some researchers have begun to assess the affect of various factors on the jury's product; but like the general small group data, many confounding variables may affect the study results and generalizability of results is limited.

The use of statistical models is one way of studying the jury's product. Zeisel (1971), in opposition to the Supreme Court decision on the constitutionality of the use of six-member juries in criminal cases (*Williams v. Florida,* 1970) used a statistical model to reach his conclusion that because six-member juries can be shown to differ in composition from twelve-member juries, the smaller jury does not offer a "jury of your peers" as guaranteed in the Constitution. There would be statistically less chance for a minority member, more variance in awards of damages, and fewer hung juries. Further, a change to small juries in criminal cases as in Britain, Zeisel contends, would lead to "fewer hung juries, more findings of guilt, and among them relatively fewer convictions for lesser included offenses" (Zeisel, 1971: 721) than with twelve-member juries in similar cases. He discusses a statistical model to support his theory of how deliberating juries might behave.

Walbert (1971), like Zeisel, bases his argument against the reduction of jury size on statistical models. He constructed a model based in part on small group research findings on group pressure to conformity (Walbert, 1971: 543) and suggests that in *Williams v. Florida* the Court's conclusion that six-member juries and twelve-member juries would return the same verdicts was "unsupportable" (Walbert, 1971: 553). Rather, Walbert suggests that "A proper treatment of representation, in conjunction with a description of the deliberation process, shows that the six-man jury convicts different persons" (Walbert, 1971: 554). Walbert cautions that much of his statistical model upon which he bases the above is from small group research on tasks other than jury deliberations and from the Broeder (1959) study on jury behavior. Walbert suggests that

> more experimentation might be desirable to further investigate the deliberation process . . . *[and the studies he cites to support his model on the prevalence of majority persuasion were]* . . . performed outside the actual trial context . . . and are not necessarily conclusive in jury situations . . . *[Walbert also assumes in his model]* . . . that each juror has some type of predilection that provides a basis for classification. Thus, the

> guilty-prone plus the innocent-prone jurors total 100 percent. . . . This assumption is not contradicted by any evidence, but it could be better corroborated [Walbert, 1971: 554, n. 60; italics added].

Walbert's model neglects the continuum of gradations of guilt a juror might feel and the different personality types which lead to different group dynamics within each jury. These statistical models give great insight into the probable occurrences within the jury, but analysis of deliberations can lead to more accurate conclusions about human interaction.

Many other methods have also been used to evaluate the effect of size on jury product. Pabst (1972 and 1973) examined the records of 147 civil jury trials in the District Court for the District of Columbia during 1971. The use of six-member juries was begun midyear, so an automatic comparison was possible. Unfortunately, there was no separation in the court's records of time spent during the trial and during the deliberations. The results of this study indicate "virtually no difference in voir dire or trial time, and only from 12 to 20 percent difference in overall juror manpower requirements" (Pabst, 1973: 6).

Powell (1971) argues that in order to compare accurately the deliberation time of the six- and twelve-member juries, both groups would need to see the same trial.

> This of course, would be virtually impossible, because precisely the same case would be unlikely to arise in two jurisdictions—one of which used twelve jurors and the other using fewer. Even if it did, the participants would be different, and therefore no accurate comparison could be made [Powell, 1971: 100, n. 80].

Some research has attempted experiments to minimize the problem suggested by Powell. Gordon (1968) presented a filmed dramatization of a trial to three juries each of six, nine and twelve students. He found no differences in the verdicts. All the juries that reached a decision favored the defendant. There were, however, two hung juries in the six-member condition, caused by female jurors who maintained their position in favor of the plaintiff. The researcher used a very small sample (n = 3), and this weakens the impact of his findings. Additionally, he evaluated only product aspects with little mention of process. Gordon (1968) found no significant differences in the deliberation times of student juries of six, nine, and twelve members. Ahern (1971) examined the question of jury size by having groups of four, eight, and twelve read the same sections from a law board preparation text. He found no significant differences among the verdicts of the different-sized juries.

The following four studies on jury size (Mills, 1973; Kessler, 1973b, Institute . . ., 1972; Bermant and Coppock, 1973) were cited in a recent

Supreme Court decision (*Colgrove v. Battin,* 1973) allowing the use of six-member juries in civil cases. The *Colgrove* decision, which referred to the following empirical studies, was a departure from the *Williams* case, which lacked any reference to empirical studies (see Kessler, 1973a: 714). But, researchers opposed to the use of six-member juries (Pabst, 1973; Zeisel and Diamond, 1974) have strongly criticized these studies for various procedural and methodological problems. As with all small group research, each piece of research cited in this chapter seems to be weak in some respect—whether it be the mathematical models which may be based on laboratory research of different group tasks, the methodological problems with arise in laboratory research, or the confounding factors possible in the analysis of actual trial data.

Mills (1973) studies the effect of jury size on verdicts and awards of damages by collecting data from Wayne County, Michigan, Circuit Court records during the six months before six-member juries were used (March 1, 1969—August 31, 1969) and a six-month period after six-member juries were used (March 1, 1971—August 31, 1971). There were 193 cases in the six-member sample and 292 cases in the twelve-member sample. Mills found no significant differences in verdicts, awards, or duration of trials between the two different-sized juries. But these results may have been confounded by two other court changes also instituted around the time when jury size was reduced. Mills indicates that a mediation board of two attorneys and a judge was instituted to be available for cases where probable liability is admitted and the sole question is amount of award. Mills states that

> this pretrial settlement activity in automobile negligence cases resulting from the availability of mediation may have influenced the nature of the cases reaching trial stage during the six-member jury sampling period [Mills, 1973: 681].

In addition, the discovery of insurance policy limits was permitted by a general court rule revision in April 1971. Zeisel and Diamond (1974) suggest that if the two procedures led to an increased proportion of settled cases (Mills documents this in at least the mediation board situation), and if "the largest cases are less likely to be settled . . .,[*then*] the average size of cases reaching trial [*in the six-member sample*] would be increased" (Zeisel and Diamond, 1974: 289; italics mine).

Although the actual case used by Kessler (1973a) for her videotaped recreation was actually settled out of court in the plaintiff's favor, all sixteen juries either found for the defendant or were unable to arrive at a verdict.[7] Zeisel and Diamond (1974) criticize this study's use of what they termed a one-sided case, which led to a preponderance of defendant verdicts. The cause of the discrepancy between the actual out-of-court settlement for the plaintiff and

the verdicts of the student juries for the defendant may have been the result of several factors. The defendant's demeanor appeared to be more informal and, therefore, more appealing to student jurors than was the plaintiff's demeanor on the witness stand. (See Kulka and Kessler, 1973, for the follow-up study of effect of appearance on verdicts.) Also, the defendant's counsel was a more eloquent speaker than was the plaintiff's counsel. A further explanation might be that the defendant's insurance company might have been willing to settle this case rather than risk losing in court. Zeisel and Diamond (1974) also suggest that initial vote distribution (there were six twelve-member juries and only four six-member juries at the five-sixths majority needed for verdict before deliberations began) may have accounted for the six-member juries deliberating somewhat longer in the Kessler study.

A 1972 New Jersey study (Institute . . ., 1972) states that nonunanimous verdicts (five-sixths majority) were found in 20.2% of six-member juries and 45.0% of twelve-member juries. The experimenters caution, however, that because the option of using a six-member or twelve-member jury was available, the twelve-member juries were requested in more difficult cases than were six-member juries (Institute . . ., 1972: 7). The study stated that 50% of the six-member juries completed deliberations in 55 minutes, while 50% of the twelve-member juries required 75 minutes. But six-member and twelve-member juries deliberated as long when damages ran over $10,000 (Institute . . ., 1972: 29). This study presents a distorted view because the twelve-member juries were requested for complicated cases which would take longer to deliberate under any circumstances. (See Zeisel and Diamond, 1974: 284-286, and Pabst, 1973, for a discussion of the problems in this study.)

Bermant and Coppock (1973) examined 128 Workmen's Compensation Act cases heard by 33 six-member and 95 twelve-member juries in the State of Washington during 1970. Like the New Jersey study, lawyers chose the jury size. Of the 128 cases, there was no significant difference between plaintiff or defendant decisions between the two different-sized juries; in fact, the proportions were virtually identical (Bermant and Coppock, 1973: 595). The authors suggest the increased use of six-member juries, "if we may properly assume that the assignment of jury size was essentially random in respect to the merits of the cases" (Bermant and Coppock, 1973: 595). Their surveys of the records revealed no "obvious interaction" of kind of case and size of jury used. Zeisel and Diamond (1974: 283-284) criticize this study for lack of random assignment of cases to the two different-sized conditions.

Bermant and Coppock emphasize that the similarity in verdicts they indicated in the study does not assure similarity of process for "as Wiehl and others have suggested, members of small panels may feel greater individual responsibility

than members of large panels" (Bermant and Coppock, 1973: 596). Wiehl (1968: 35, 40), however, does not analyze the process of decision-making, and the authors suggest that experiments in social psychology "will answer the question of the process involved."

After two Supreme Court decisions (*Williams v. Florida,* 1970, and *Colgrove v. Battin,* 1973), the issue of the use of six-member and twelve-member juries is yet to be resolved. Barton and Padawer-Singer are presently studying the issue of size and unanimous versus nonunanimous verdicts by evaluating 80 mock juries that are deliberating the reenactment of a criminal case. The House of Representatives is still undecided on the size issue (Hearings on H.R. 8285, 1974).

Other issues have also been investigated in studying the jury's product. One part of the Chicago Project was Simon's (1967) study of the relationship between judge's instructions on insanity and the jury's verdict. Two audiotaped edited trials, one of a house-breaking case and the other of an incest case, were played to 98 mock juries, each varying instructions on how to treat insanity (M'Naghten rule, Durham rule, or no rule; see Simon, 1967: 66-77, for jurors' reaction to these rules). The jurors were all selected randomly from real jury pools.[8] The results showed a definite effect caused by the varying of instructions. The juries hearing the M'Naghten rule had lower acquittal rates than the juries who heard the Durham rule or the no rule version. The latter two versions were close in their higher rates of acquittals due to insanity than either was to the M'Naghten version. This study combined the analysis of both jury product and process since the deliberations were also analyzed.

Other experimenters have researched the effect of the one-sided versus two-sided message variable. Studies of this type compare the relative persuasibility of presenting one-sided arguments as opposed to presenting both sides of the issue to the receiver. The results of these studies suggest that two-sided jury arguments possess a significant advantage over one-sided presentations. (See Rosnow and Robinson, 1967: 71-99, and Lawson, 1970, for discussion of this area of research.)

One major area in communication research that lends itself to legal comparisons is the "primacy-recency" controversy. Studies of these phenomena generally compare the persuasiveness of arguments heard first (primacy) with those arguments heard last (recency) by the receiver. Lawson (1969), who surveys much of the literature upholding the primacy effect, states that there is a direct correlation between the primacy effect and prior information on the topic. If facts are first received by the juror during the prosecutor's (or plaintiff's) and then the defendant's presentation of the evidence, and prior to the persuasive or inferential communication (during the defendant's and then

the prosecutor's closing arguments), then the primacy effect of the communication will increase. Lawson contends that because prior opinions may be formed by the jury during the factual periods, a stronger *primacy* effect will occur when the persuasive speeches of closing statements begin, thus giving the defendant a decided advantage. The wide variance in experimental results might be attributed to the fact that the researchers viewed the jury process differently. For instance, Lund (1925) and Hovland et al. (1957) saw primacy effects favoring the prosecutor who speaks first during the opening statement and witness examinations. Lawson (1969), however, saw these sections only as factual and not persuasive in nature. He saw a primacy effect in favor of the defendant who speaks first during the closing statements which are, he feels, the only real examples of persuasion in the trial process.

A further problem with the experimental data surveyed by Lawson (Lund, 1925; Hovland et al., 1957; Lana, 1964) was that they pertain to laboratory studies unrelated to the legal research area, which Lawson believes are not directly comparable to the jury process. However, some researchers have demonstrated the effect of *both* primacy and recency on persuasion of jurors (Weld and Danzig, 1940). Another experimenter challenged the primacy effect in jury trials on the ground that prior commitments rather than order of presentation affect the juror's decisions (Stone, 1969). Other studies showed recency effects (Wallace and Wilson, 1969; Wallace, 1970). Some researchers contend that

> a major difficulty in reconciling the inconsistencies in the current literature is attributable to the fact that the same experimental design and procedure have seldom been repeated [Wallace and Wilson, 1969: 311].

Zeisel (1973) discusses an experiment to analyze the variance in damage awards in civil cases around the country. The research (to be reported in Kalven and Zeisel's forthcoming text on the civil jury) involved summaries of reports of five actual personal injury cases. In order to assess the different amounts of damages that the plaintiff in each case might receive, three insurance adjusters in large, medium and rural cities in the West, Midwest, South, and East gave their professional opinion on what a jury in their region would award. The results indicate a large variation around the country. Higher than average claims would be awarded in the western and eastern large cities, while lower claims would be awarded in the southern and midwestern rural areas. These results correlated highly with the average per capita income of the area.[9]

Some studies currently in progress are evaluating the product of deliberations. Zeisel (1973) mentions an investigation at the University of Chicago under a National Science Foundation grant studying the effects of peremptory chal-

lenges of jurors on jury verdicts. In this study two mock juries and one real jury observe cases in the Federal District Court for Northern Illinois. The real jury is made up of jurors who have undergone the usual voir dire challenges, the second jury (mock) is made up of jurors excused in voir dire by both sides; and the third jury (mock) had no challenges allowed. The problem here may be one of motivation. Zeisel and Diamond (1974) report that it might be wise to keep the juries from knowing which one is the real one because,

> despite all precautions, a real jury in a criminal case is less likely to convict than a mock jury of the same size sitting in the courtroom with the real jury. It would seem that the real jury has a more demanding concept of "proof beyond a reasonable doubt" [Zeisel and Diamond, 1974: 291, n. 47].

Here again we see the possibility of variables confounding the complex area of jury research.[10]

The above summary of product research leads to no unified theory of either the generalized area of small group research or of the specialized jury research. Basically, the literature is conflicting, replications are sparse, and much of the research is subject to confounding variables. Although the importance of jury deliberations may be contested, many of the studies focusing on product have also examined the process of group interaction, which is the subject of the next section of this chapter.

Research on Deliberation Process

Much of the recent research on the small group has centered on the factors which affect the interaction within a group. But process research as well as product research results must be viewed with care because different tasks have been used in each study, thereby making generalizability difficult. The following review of leadership, content, and participation research results will provide some insights into the process area.

The most numerous and varied studies on the small group have analyzed group leadership. A leader may be defined as the member who controls or directs a group. Leadership may occur within a group in two ways, either through assignment or emergence; and even when there is an assigned leader, various members may compete for control. Researchers have indicated that three basic styles of leadership may occur: autocratic, democratic, or laissez-faire (Lewin et al., 1939). While a strong dominant leader (autocrat) may cause low morale and hostility (Lewin et al., 1939), less time may be needed for solution and fewer errors may occur (Shaw, 1955). The democratic leader may encourage more original thought and group interaction (Lewin et al., 1939); while a laissez-faire leader may be like no leader at all, and other members of the group

may take on the leadership role. Situational aspects, such as goals and individual members' needs and expectations, may determine type of leadership needed within a group (Cartwright and Zander, 1968). For instance, a group which is task-oriented may require a more task (goal)-oriented leader than a group which has a socioemotional (i.e., concern for personal feelings of members) orientation. Group size may also affect the leadership style. The larger the group, the more leadership skill is needed to coordinate the interaction (Hare, 1952). If there is no appointed leader, members with leadership potential may informally vie with each other until a leader emerges.

The concept of leadership within the jury deliberation process may be defined in two ways: the formal leadership of the foreman and the opinion leadership. Although these positions may be held by the same person, some research indicates that the foreman, the person selected by the other jurors to announce the verdict, may not be the most influential member of the group. Hawkins (1960) reports from observation of mock jury deliberations that the foreman participated a great deal at first by rereading the judge's instructions, and so on; but as the deliberation progressed, the foreman's participation more approximated the group's norm. Nevertheless, some foremen were very active throughout, while others tried to stay out of the discussion entirely (Hawkins, 1960: 26, 27). This observation might be compared with the general group literature dealing with the various styles of leadership (democratic, autocratic, laissez-faire) which possibly depend on the personality of the leader.[11]

Of great interest, also, is the method of foremen selection. Hawkins (1960) found that the first person to be nominated would be chosen either by acclamation or by absence of dissent, and that people seldom sought the position actively. On occasion, however, the person who began the discussion of who would be foreman was, in fact, selected. Criteria such as sex (see chapter 4 by Stephan for discussion of the effect of personal and demographic traits) and prior jury experience seemed to be a factor. People who sat at the ends of the table were very often chosen—three times as often as by chance occurrence (Hawkins, 1960: 22, 23).

Group size may not affect the amount of leadership demanded by the group (Kessler, 1973b), but further analysis of this issue would be of value in view of the small group research which suggests that group size may affect leadership. This question of what type of person controls or guides the jury is an area for more experimental study. If, in fact, deliberation may serve to change jurors' opinions in some cases, then the person who guides this change becomes the critical member for study.

In addition to leadership, the situational aspects of a group may affect the content of what is discussed during the interaction process. As groups increase in

size, more ideas may be discussed until there is a point of diminishing returns (Hare, 1952). Not all of a group's time is spent discussing the assigned task, and studies have shown that socioemotional nontask-related issues take up some of a group's time. The amount of time spent on task versus socioemotional issues may depend both on group goals and on individual members' needs (Cartwright and Zander, 1968).

Lawyers usually try to anticipate and, therefore, gear their remarks to influence the issues to be discussed by the jury during deliberations. The first researchers actually to hear the jury (mock) deliberate were James-Simon (1957) and Strodtbeck et al., (1957). Since then researchers have attempted to study the content through audiotape, videotape, actual observations, and post-deliberation questionnaires. As a result of these studies, conflicting data exists on the competence of the jury to discuss the issues of the trial (see Erlander, 1970, for detailed discussion of this research). Judges' instructions, for instance, may cause confusion among the jurors. Forston (1970), observing videotaped mock deliberations, found that jurors have great trouble in understanding judges' instructions. O'Mara (1972), using postdeliberation questionnaires and real jurors, found jurors were influenced by the judge's demeanor and tried to return a verdict that might please him. The instructions "clarified their task and the law" and refreshed their memories. However, the judge's language also served to confuse the jurors if they did not understand it. Kessler (1973b) questioned student jurors and found boredom and confusion resulting from the instructions. In examining deliberations, Kessler found confusion over contributory negligence. For example, some student jurors were discussing "comparative negligence" instead. Broeder (1959) also found jurors constructing their own laws at times, regardless of the instructions. Simon (1967) analyzed the audiotaped mock deliberations and found that jurors carefully review all the evidence and rely on the record, although she also found (1959) that 50% of the jurors' time was spent discussing personal experiences. Kessler (1973b) noticed jurors spending some time in discussion of the irrelevant issues of plaintiff's and defendant's insurance (see also Kalven, 1964, for discussion of this) and the lawyers' advocacy skills. More study of what are the key issues discussed by jurors, and how fully jurors understand the law which they are expected to apply to the facts of the case, would be areas for further analysis through mock jury deliberation analysis and postdeliberation questionnaires of real jurors.

Group member participation also depends upon the situational aspects of the group and the various personality types involved. Small group research suggests that as group size increases, individual member participation decreases (Hare, 1952; Willems, 1964). Further, a person in the minority may be less likely to express his views when in a larger group as the number of unanimous majority

members is greater (Asch, 1951; Gerard et al., 1968). However, a minority member is more likely to express his views if he has an ally (Asch, 1951), and a larger group might afford a greater probability of finding such an ally. The ability of the minority to hold its position may be directly related to the number in the minority (Hawkins, 1960: 159). Personal aspects such as perceived competence of self and of the majority may affect the conformity behavior of the minority member (Costanzo et al., 1968; Hollander, 1960).

When there is a deviant group member, such as a minority jury member, group research indicates that there will be more initial communication toward the deviate, especially if he greatly deviates from the group, or there seems to be a chance of changing his mind. If the group is unable to bring the deviate into the fold, he may be totally excluded from the group by decreasing the amount of communication toward him (Cartwright and Zander, 1968: 45). In mock juries observed by Kessler (1973a and 1973b), even though a jury might have been at a verdict (nonunanimous five-sixths needed in this study), in all cases the majority asked the minority members to express the reasons for deviating and attempted to bring them back into the majority camp. This aspect of minority or deviate participation thus may become important in nonunanimous verdicts, and critical when a unanimous verdict is required (see Zeisel, 1973, and Simon and Marshall, 1972, for discussion of unanimous verdicts).

Hawkins (1960) discussed various methods for gaining unanimity within the jury: voting, switching, informal announcements, and direct persuasion. Voting is a critical aspect of deliberations since the objective is to find consensus (Hawkins, 1960: 50). The group may all be in agreement initially and the vote may indicate this. Switching involves all members of one faction converting to the majority decision. Informal announcements may lead to the opinion change of uncertain members. Direct persuasion may be focused on a minority member as a means of getting him to switch his decision.

When juries divide into coalitions or splinter factions, where all jurors are openly aligned, there may be a high correlation between the number in the minority and the duration of the argument (Hawkins, 1960: 114). Once a movement of jurors began from one side of the debate to the other, that movement either continued or there was a stalemate, but never a regression (Hawkins, 1960: 158). If the finding previously discussed that most juries (about 90% according to Kalven, 1958) arrive at a verdict before deliberations begin, then the effect of the minority member in the other 10% is an important area for study. The power of the minority member or members to sway the majority may mean the winning or losing of the case (see Simon and Marshall, 1972; Kalven and Zeisel, 1966, for discussion of this point).

Zeisel (1971: 719) states that the Supreme Court misinterpreted *The*

American Jury (1966) in *Williams v. Florida* case (1970) when it quoted, "jurors in the minority on the first ballot are likely to be influenced by the proportional size of the majority aligned against them" (*Williams v. Florida,* 1970: 101, n. 49—citing Kalven and Zeisel, 1966, 462-463, 488-489). He emphasizes the importance of the probability of getting more minority jurors in a larger (twelve-member) jury. Zeisel states that the Asch (1951) research suggests the need for an ally to stand up for a minority view, and Zeisel suggests that there is a statistically greater chance for that ally to occur in the larger jury. This should be examined against the Asch (1951) and Gerard et al. (1968) conclusions that a lone minority member may be more likely to follow the majority opinion when group size increases.

Zeisel also suggests the problems of nonunanimous verdict in conjunction with his analysis of smaller juries. He contends that enacting a nonunanimous rule is another manner of reducing jury size,

> for a majority verdict requirement is far more effective in nullifying the potency of minority viewpoints than is outright reduction of a jury to a size equivalent to the majority that is allowed to agree on a verdict [Zeisel, 1971: 722].

The minority view will more easily stand, he states, in a unanimous jury of ten than a nonunanimous twelve-member jury where ten jurors must concur.

The size of the jury may also affect whether or not a minority-thinking member speaks at all. In a larger group, even though there may be a greater probability of getting more minority members, there may be a smaller percentage of minority participation as silent minority members may feel that others have already mentioned their ideas or feel that the number of majority members against them is too great (Kessler, 1973a and 1973b). The quantity and quality of a minority member's contributions may also depend on the forcefulness of his personality. Some people just naturally talk more in any group (see chapter 4 for further discussion of the effect of demographic and social traits that affect jury interaction).

Jury size and the requirement of unanimous or nonunanimous verdicts may affect the impact of minority members on the process of deliberations. Debate on these issues is currently going on both in the scientific literature (Zeisel, 1971; Kessler, 1973a and 1973b; Zeisel and Diamond, 1974) and in the Congress (Hearings on H.R. 8285).

The importance of persuasion within deliberations has been studied by Hawkins (1960). Deliberations may take place in unity or in factions, or through a combination of both types. A deliberation in unity leads to collective group opinion and a vote may not occur until the end. A jury divided into factions may vote quickly, and advocacy might arise to support the opposing views

(Hawkins, 1960: 106-107). Furthermore, Hawkins found a difference in the persuasive techniques that are required in arriving at a verdict in a civil action and in the awarding of damages. A verdict necessitates an "either/or" decision (i.e., plaintiff or defendant); and, therefore, jurors might use straight persuasion to gain other jurors' support for their side. A continuum may develop (i.e., $5,000; $10,000; $15,000) in deciding damages for the plaintiff, and bargaining and compromise may take place within the deliberations to arrive at an equitable settlement (Hawkins, 1960: 58-59).

Much of the process research discussed in this section is subject to criticism on many counts. First, many different tasks have been used in the small group and jury research, making generalizations difficult. In the jury area, for instance, some studies have examined civil cases (Kessler, 1973a and 1973b; Hawkins, 1960) while others have examined criminal cases (James-Simon, 1957). Since these are different tasks for a jury, generalizability to both types of juries is difficult. Further, many of the process studies have analyzed student jury deliberations (e.g., Kessler, 1973b) or mock real juries (e.g., Simon, 1967). Since it is illegal, no researchers have analyzed real juries deliberating. Thus, the realism of the analyzed deliberations may be in question. Further, the specific manner of evaluating deliberations is rather sketchy. No highly developed system of content analysis of the jury's verbal and nonverbal interaction yet exists; thus, many of the research conclusions rely on general observations. A more structured and reliable system must be developed.

DIRECTIONS FOR FURTHER JURY RESEARCH

As demonstrated by the above review, it is difficult to state a formalized theory of jury or even small group behavior (see Shaw, 1971: 360, for discussion of the problems of theory development in the small group area). There appears to be a paucity in the number of researchers who are willing to sustain and develop specific areas of research in order to unify the findings into a theoretical whole; the Chicago Project was an exception. The very nature of jury research, like all group research, requires the analysis of both group product and process. Questions of the effect of minority member participation, jury size, nonunanimous verdicts, judges' instructions, among others, must be more fully examined. However, members of the bench and bar are primarily concerned with results of deliberations and, therefore, the product studies would be of most interest to them.

If social psychology is defined as the study of how individuals behave in social situations, jury research must emphasize this dynamic process of individual behavior in the jury situation, in addition to the product, in order to

gain a clearer picture of how juries operate. The area of sociolegal research has begun to enter the world of the jury and, hopefully, this century will see the development of a complete theory of jury deliberations.

NOTES

1. Although the actual deliberations cannot be recorded, jurors may be questioned after deliberations in order to find out what went on during the deliberations.

2. After the Kansas controversy, a federal law [18 USC § 1508] was enacted which prohibited the recording of, listening to, or observing of actual grand or petit jury deliberating or voting.

3. Productivity is an ambiguous term with several possible definitions. It may be the quality of the product or the quantity, judged by number of units produced or the speed of solving one problem or a combination of these aspects. The jury's product is specialized and may be defined as speed in reaching a verdict, ability to reach a verdict as opposed to being a hung jury, or finding of unanimous or nonunanimous verdicts. The quality of a verdict is rather difficult to define. In a criminal action, for instance, it might be difficult to assess the correctness of a guilty or nonguilty verdict. In a civil action the damages which might be awarded to the plaintiff might be a possible factor for evaluation of the jury product. Process in small group research usually means the manner in which group members interact. In jury research it specifically means the way jurors relate to each other in their attempt to reach a verdict.

4. However, when a judge writes an opinion in a trial without a jury or as a result of deciding an appeal, both the lawyers who tried or argued the case and the lawyers who look to the case as precedent are as concerned with the process of decision-making as with the decision itself. Because jury deliberations cannot be used as precedent, perhaps there is less legal interest in the process; but it could still be profitable to know, for instance, what issues were considered, what points were most persuasive, and what types of individuals were the most powerful persuaders, when trying a similar case. Research on mock jury deliberations could provide this insight into the decision-making process. This type of research is superior to postdeliberation questioning of jurors, since actual participants may be biased sources of information about the group process.

5. Furthermore, Holsti (1969) offers an excellent discussion of how content analysis is best accomplished in general research. His theories may be applied to the analysis of jury interaction.

6. In addition to verbal analyses, nonverbal evaluations are also possible. Some studies of group behavior have created systems to evaluate the nonverbal communication of group interaction in order to more fully understand group process (Mehrabian, 1969). No jury studies have yet applied this methodology, but future studies may develop such a system. Kessler is presently working on such a methodology.

7. There were two six-person hung juries (i.e., unable to decide by the five-sixths margin required in Michigan). An additional six-person jury settled publicly, while two jurors privately (on the postdeliberation questionnaire) were still for the plaintiff. There was one hung jury in the twelve-person condition: seven jurors in favor of the plaintiff and five for the defendant. This was the only jury in either condition with a majority of mamebers in favor of the plaintiff.

8. Strodtbeck, 1962, originally used this methodology to study civil juries.

9. Kulka and Kessler have also found this effect in running a replication of an earlier study (Kulka and Kessler, 1973). Student jurors in a large city (Chicago) tended to award higher damages in the same personal injury case than student jurors in a small midwestern town (Ann Arbor, Michigan). These studies, like many others, look solely at product rather

than process. In these cases juries were not used to evaluate the difference. However, the stimulus used in all cases was the same. It might be interesting to rerun such a study using mock juries from the jury pools around the country and evaluate the damages awarded and the major issues considered in each situation to see if factors other than income levels affect the awards.

10. Zeisel and Diamond (1974: 291) suggest the possibility of controlling this problem of mock-versus-real jury effect by simultaneously trying a series of real cases before six-member and twelve-member juries. The lawyers and court would know whether the six-member or twelve-member jury had been selected, but the juries would both feel it was their real responsibility.

11. A study of the effect of autocratic, democratic or laissez-faire foremen and their effect on the deliberation process would make an interesting study. Mock juries could deliberate on the same videotaped trial, and the leadership styles of the foremen and the resulting group process could be analyzed.

REFERENCES

AHERN, J. (1971) "Communication in juries: a study of decision-making in different sized groups." Presented to the Speech Communication Association Convention, San Francisco, December.

Ann Arbor News (1971) "Criminal trials put on videotape." (November 17): 5.

ASCH, S. E. (1951) "Effects of group pressure upon the modification and distortion of judgments," in H. Guetzkow (ed.), Groups, Leadership and Men. Pittsburgh: Carnegie Press.

AUGELLI, J. (1972) "Six-member juries in civil actions in the federal judicial system." Seton Hall Law Review 3 (Spring): 281-294.

BALES, R. F. (1970) Personality and Interpersonal Behavior. New York: Holt, Rinehart & Winston.

--- (1950) Interaction Process Analysis: A Method for the Study of Small Groups. Reading, Mass.: Addison-Wesley.

BEM, D. J., M. A. WALLACH, and N. KOGAN (1965) "Group decision-making under risk of aversive consequences." Journal of Personality and Social Psychology 1: 453-460.

BERMANT, G. and R. COPPOCK (1973) "Outcomes of six and twelve-member jury trials: an analysis of 128 civil cases in the state of Washington." Washington Law Review 48: 593-596.

BROEDER, D. W. (1959) "The University of Chicago jury project." Nebraska Law Review 38: 744-760.

CARTWRIGHT, D. and A. ZANDER [eds.] (1968) Group Dynamics: Research and Theory (third ed.). New York: Harper & Row.

Chicago Tribune (1974) "Use of videotape growing in courtroom." (July 18) 4A: 3.

Colgrove v. Battin (1973) 413 U.S. 149.

COSTANZO, P. R., H. T. REITAN, and M. E. SHAW (1968) "Conformity as a function of experimentally induced minority and majority competence." Psychonomic Science 10: 329-330.

Daily Herald-Telephone (1974) "Trial to be taped." (June 24).

ERLANDER, H. S. (1970) "Jury research in America: its past and future." Law and Society Review 4: 345-370.

FORSTON, R. F. (1972) "Research in jury structure and function." Presented to Speech Communication Association, Chicago, December.

--- (1970) "Judge's instructions: a quantitative analysis of jurors' listening comprehension." Today's Speech 18 (November): 34-38.

--- (1968) "The decision-making process in the American civil jury: a comparative methodological investigation." Ph.D. dissertation, University of Minnesota.

GERARD, H. B., R. A. WILHELMY, and E. S. CONOLLEY (1968) "Conformity and group size." Journal of Personality and Social Psychology 8: 79-82.

GORDON, R. (1968) "A study in forensic psychology: petit jury verdicts as a function of the number of jury members." Ph.D. dissertation, University of Oklahoma.

HARE, A. P. (1952) "Interaction and consensus in different sized groups." American Sociological Review 17: 261-267.

HAWKINS, C. (1960) "Interaction and coalition realignments in consensus-seeking groups: a study of experimental jury deliberation." Ph.D. dissertation, University of Chicago.

Hearings on H.R. 8285 (1974) Before the Subcommittee on Courts, Civil Liberties, and the Administration of Justice of the House Committee on the Judiciary, Ninety-second Congress, Second Session.

HOLLANDER, E. P. (1960) "Competence and conformity in the acceptance of influence." Journal of Abnormal and Social Psychology 61: 365-369.

HOLSTI, O. R. (1969) Content Analysis for the Social Sciences and Humanities. Reading, Mass.: Addison-Wesley.

HOVLAND, C. I., E. H. CAMPBELL, and T. BROCK (1957) "The effects of 'commitment' on opinion charge following communication," in C. I. Hovland et al. (eds.), The Order of Presentation in Persuasion. New Haven, Conn.: Yale University Press.

Institute of Judicial Administration, Inc. (1972) "Comparison of six- and twelve-member civil juries in New Jersey Superior and County Courts." (mimeo)

JAMES-SIMON, R. (1959) "Status and competence of jurors." American Journal of Sociology 69: 563-570.

--- (1957) "Jurors' reactions to definitions of legal insanity." Ph.D. dissertation, University of Chicago.

KALVEN, H., Jr. (1964) "The dignity of the civil jury." Virginia Law Review 50: 293-313.

--- (1958) "The jury, the law and the personal injury damage award." Ohio State Law Journal 19: 158-178.

--- and H. ZEISEL (1966) The American Jury. Boston: Little, Brown.

KESSLER, J. B. (1974) "Techniques of jury research." Presented to Central States Speech Association, Milwaukee, April.

--- (1973a) "An empirical study of six- and twelve-member jury decision-making processes." University of Michigan Journal of Law Reform 6: 712-734.

--- (1973b) "A content analytic comparison of the six- and twelve-member jury decision-making processes." Ph.D. dissertation, University of Michigan.

KULKA, R. and J. B. KESSLER (1973) "The influence of physical attractiveness on decisions of simulated jurors." Presented to the Speech Communication Association Convention, New York, November.

LANA, R. E. (1964) "Familiarity and the order of presentation of persuasive communications." Journal of Abnormal and Social Psychology 62: 314-320.

LAWSON, R. (1970) "Relative effectiveness of one-sided and two-sided communications in courtroom persuasion." Journal of General Psychology 82: 3-16.

--- (1969) "The law of primacy in the criminal courtroom." Journal of Social Psychology 77: 121-131.

LEWIN, K., R. LIPPITT, and R. K. WHITE (1939) "Patterns of aggressive behavior in experimentally created social climates." Journal of Social Psychology 10: 271-299.

LUND, F. H. (1925) "The psychology of belief. IV. The law of primacy in persuasion." Journal of Abnormal and Social Psychology 20: 183-191.

MEHRABIAN, A. (1969) "Some referents and measures of nonverbal behavior." Behavior Research Methods and Instructions 1: 203-209.

MILLER, G., D. BENDER, T. FLORENCE, and H. NICHOLSON (1974) "Real versus reel: what's the verdict?" Journal of Communications (Summer).

MILLS, L. R. (1973) "Six-member and twelve-member juries: an empirical study of trial results." University of Michigan Journal of Law Reform 6: 671-711.

New York Times (1971) "TV cameras used in Michigan court." (November 26): 5, 24.

--- and L. H. HOOK (1961) "The social dimensions of a twelve-man jury table." Sociometry 24: 397-415.

STRODTBECK, F., R. JAMES, and C. HAWKINS (1957) "Social status in jury deliberations." American Sociological Review 22 (December): 713-719.

TAYLOR, D. W. and W. L. FAUST (1952) "Twenty questions: efficiency in problem-solving as a function of size of group." Journal of Experimental Psychology 44: 360-368.

TEGER, A. I. and D. G. PRUITT (1967) "Components of group risk taking." Journal of Experimental Social Psychology 3: 189-205.

TRIPLETT, N. (1897) "The dynamogenic factors in pacemaking and competition." American Journal of Psychology 9: 507-533.

WALBERT, D. F. (1971) "The effect of jury size on the probability of conviction: an evaluation of Williams v. Florida." Case Western Reserve Law Review 22 (April): 529-554.

WALLACE, W. (1970) "Primacy and recency warnings and order effects on persuasive communications." Ph.D. dissertation, University of Alabama.

--- and W. WILSON (1969) "Reliable recency effects." Psychological Reports 25, 1: 311-317.

WELD, H. P. and E. R. DANZIG (1940) "A study of the way in which a verdict is reached by a jury." American Journal of Psychology 53 (October): 518-536.

WELD, H. P. and M. ROFF (1938) "A study of the formation of opinion based upon legal evidence." American Journal of Psychology 51: 609-628.

WIEHL, L. L. (1968) "The six-man jury." Gonzaga Law Review 4 (Fall): 35-44.

WILLEMS, E. P. (1964) "Review of research," in R. Barker and P. V. Gump (eds.) Big Schools, Small Schools. Stanford, Calif.: Stanford University Press.

Williams v. Florida (1970) 399 U.S. 78.

ZEISEL, H. (1973) "Reflections on experimental techniques in the law." Journal of Legal Studies 2: 107-124.

--- (1971) "... And then there were none: the diminution of the federal jury." University of Chicago Law Review 38 (Summer): 710-724.

--- and S. S. DIAMOND (1974) "Convincing empirical evidence on the six-member jury." University of Chicago Law Review 41: 281-295.

O'MARA, J. J. (1972) "The courts, standard jury charges–findings of pilot project." Pennsylvania Bar Journal 120 (January): 166-175.

PABST, W. R., Jr. (1973) "What do six-member juries really save?" Judicature 57, 1: 6-11.

--- (1972) "Statistical studies on the costs of six-man versus twelve-man juries." William and Mary Law Review 14: 326-336.

POWELL, D. M. (1971) "Reducing the size of juries." University of Michigan Journal of Law Reform 5 (Fall): 87-108.

ROSNOW, R. L. and E. J. ROBINSON (1967) Experiments in Persuasion. New York: Academic Press.

SHAW, M. (1932) "A comparison of individuals and small groups in rational solution of complex problems." American Journal of Psychology 44: 491-504.

SHAW, M. E. (1971) Group Dynamics: The Psychology of Small Group Behavior. New York: McGraw-Hill.

--- (1955) "A comparison of two types of leadership in various communication sets." Journal of abnormal and social psychology 50: 127-134.

SIMON, R. J. (1967) The Jury and the Defense of Insanity. Boston: Little, Brown.
--- (1963) "Mental patients as jurors." Human Organization 22: 276-281.
--- and L. MAHAN (1971) "Quantifying burdens of proof: a view from the bench, the jury and the classroom." Law and Society Review (February): 319-330.
SIMON, R. J. and P. MARSHALL (1972) "The jury system," pp. 211-233 in S. S. Nagel (ed.) The Rights of the Accused in Law and Action. Beverly Hills, Calif.: Sage Criminal Justice System Annuals, Vol. I.
SOUTH, E. B. (1927) "Some psychological aspects of committee work." Journal of Applied Psychology 11: 348-368, 437-464.
STEPHAN, C. (1975) "Selective characteristics of jurors and litigants: their influence on juries' verdicts," ch. 4 in R. J. Simon (ed.) The Jury System in America: A Critical Overview. Beverly Hills, Calif.: Sage Criminal Justice Systems Annuals, Vol. IV.
STONE, V. (1969) "A primary effect in decision making by jurors." Journal of Communications 19: 239-247.
STRODTBECK, F. (1962) "Social process, the law and jury functioning," in N. Evan (ed.) Law and Sociology.