

## The Effects of Pretrial Publicity on Juror Verdicts: A Meta-Analytic Review

Nancy Mehrkens Steblay,<sup>1,3</sup> Jasmina Besirevic,<sup>1</sup> Solomon M. Fulero,<sup>2</sup>  
and Belia Jimenez-Lorente<sup>1</sup>

---

*The effect of pretrial publicity (PTP) on juror verdicts was examined through a meta-analysis of 44 empirical tests representing 5,755 subjects. In support of the hypothesis, subjects exposed to negative PTP were significantly more likely to judge the defendant guilty compared to subjects exposed to less or no negative PTP. Greater effect sizes were produced in studies which included a pretrial verdict assessment, use of the potential juror pool as subjects, multiple points of negative information included in the PTP, real PTP, crimes of murder, sexual abuse, or drugs, and greater length of time between PTP exposure and judgment. The effect was attenuated with student subjects, use of general rather than specific PTP information, certain types of PTP content, a post-trial pre-deliberation verdict, and specific types of crimes. Implications of these results are discussed, along with possible mechanisms that underlie the PTP effect.*

---

In legal cases that achieve community- or nationwide notoriety, the attendant publicity is often massive. Even prior to a trial, one need only mention a criminal defendant's last name (Sheppard, Manson, Simpson, McVeigh, Kaczynski) or nickname (Boston Strangler, Hillside Strangler, Son of Sam, Unabomber) to trigger recognition and recall of facts and innuendo about the case gleaned from media sources. In such cases, two constitutional guarantees—the First Amendment right of freedom of the press and the Sixth Amendment right to a fair trial—often collide.

The question of whether pretrial publicity (PTP) about criminal cases has an effect on the ultimate outcome of the resulting trial may appear to be a 20th century phenomenon, but it actually has a long history. As long ago as 1846, a New York legal writer (Note, 1846) stated that:

<sup>1</sup>Department of Psychology, Augsburg College, Minneapolis, Minnesota.

<sup>2</sup>Department of Psychology, Sinclair College, Dayton, Ohio (e-mail: sfulero@sinclair.edu).

<sup>3</sup>Correspondence should be directed to Dr. Nancy Steblay, Department of Psychology, Augsburg College, 2211 Riverside Avenue, Minneapolis, Minnesota 55454 (e-mail: steblay@augzburg.edu).

Ours is the greatest newspaper reading population in the world; there is not a man among us fit to serve as a juror, who does not read the newspapers. Every great and startling crime is paraded in their columns, with all the minuteness of detail that an eager competitor for public favor can supply. Hence, the usual question, which has now become almost a necessary form in empanelling a jury, "have you formed or expressed an opinion?" is virtually equivalent to the inquiry, "do you read the newspapers?" . . . . In the case of a particularly audacious crime that has been widely discussed it is utterly impossible that any man of common intelligence, and not wholly secluded from society, should be found, who had not formed an opinion (p. 198).

In the media-saturated modern world and with the rise of multiple forms of communication such as the Internet, this assertion is likely even more accurate. Of course, the crux of the long-standing controversy about PTP effects is not merely that a potential juror possesses information about the case. Instead, the question is whether the PTP will affect that juror's consideration of evidence and ultimate decision in the case he or she is selected to hear. Currently, courts attempt to gauge the likelihood that PTP has violated a defendant's rights and to apply appropriate judicial remedies to ameliorate a problem. For example, a high rate of community awareness of potentially prejudicial PTP and its possible link to prejudgment of defendant guilt is often the foundation for a change of venue motion.

Over the past 30 years, empirical studies have also attempted to determine whether PTP affects juror verdicts. As other scholars have noted, laboratory studies have been criticized for lack of external validity, while naturalistic studies of real jurors and cases have not been able to link directly PTP prejudgment effects with final juror verdicts (Carroll, Kerr, Alfini, Weaver, MacCoun, & Feldman, 1986; Fulero, 1987; Linz & Penrod, 1992). In addition, researchers have operationalized and presented PTP in different ways (for example, in writing or on video) and measured its effects using multiple methods (for example, through verdicts before or after deliberation). From a research perspective, these varied approaches are essential as a means to test the parameters of the PTP effect. However, the lack of unity complicates the task of a reader who hopes to ascertain the relationship between PTP and juror opinion.

What is common among the studies is the hypothesis that jurors exposed to negative pretrial publicity will produce higher percentages of guilty verdicts than jurors exposed to more neutral PTP. At first blush, the results appear less than cohesive. A quick tally of research outcomes indicates that of 44 empirical tests of the PTP hypothesis, 23 supported the hypothesis, 20 reported no significant difference at the traditional .05 level, and 1 produced a significant result in the opposite direction. It is likely that this apparent fragmentation of the research base is what has driven some researchers to opposing conclusions about the PTP effect (Carroll et al., 1986; Fulero, 1987).

Fortunately, the review technique of meta-analysis provides the means to define, from a broader data base than the individual study, the presence or absence and magnitude of a PTP effect. The purpose of meta-analysis is to identify any underlying pattern across studies, damping the noise of extraneous error components among individual studies. In particular, statistical limitations of small samples may be overcome; the combination of many data sets and the examination of effect

size indicators provide the tools to uncover effects otherwise masked by low power. Additionally, meta-analysis may provide information regarding variables, methodological or theoretical, which moderate the examined effects. The usefulness of meta-analysis in general is thoroughly reviewed elsewhere (Rosenthal, 1991) and examples of meta-analysis applied to fundamental psycholegal questions are available (e.g., Steblay, 1992, on weapon focus, and Steblay, 1997, on lineup instruction bias). In the case of pretrial publicity effects, the most salient question for a meta-analysis is quite specific—Does PTP have an effect on juror judgment of a defendant? Beyond this, the data set may offer clues to the underlying mechanics of such an effect and the conditions under which it is most likely to occur. Thus, it might be possible to inhibit the negative impact of PTP in our criminal justice system. In this light, a meta-analytic review of the PTP effect may be a means to inform and guide legal policy and decision making.

Thus, the goals of this meta-analysis are (a) to determine the effect, if any, of negative pretrial publicity upon jurors' judgments of defendant guilt, (b) if such an effect occurs, to identify the conditions under which the PTP effect is most likely to occur, (c) to examine the impact of methodological variations in the research, and (d) to identify areas for future research.

## METHOD

### Sample

A computer search of the CD-Rom database PsycLIT provided an initial sample of studies relevant to the hypothesis. E-mail and an electronic listserve (PSYLAW-L) were used to contact researchers in an attempt to locate additional works, published or unpublished. In order to be included in the sample, the study must have provided a statistical test of the relationship between pretrial publicity and individual subjects' judgments about guilt or innocence of a defendant. The review includes both survey investigations and jury simulation experiments in which negative information about the defendant and crime was given to the subject prior to a trial. Operational definitions of PTP and control conditions were decided by the authors of the individual studies; thus type and levels of PTP presented to subjects varied across studies. The dependent measure (guilt or innocence of the defendant) was measured as a dichotomous choice in some studies and through a Likert-type scale (with endpoints of guilty and not guilty) in other studies. In three studies in which "not sure" was an option for respondents (Deluca, 1979; Simon, 1966; Simon & Eimermann, 1971), those responses were not included in the analyses.

Twenty-three articles were located (18 published and 5 unpublished), providing 44 tests of the hypothesis. The sample included work published between 1966 and 1997, representing 5,755 subjects. Sample sizes ranged from 37 to 535, with a mean of 130.79 (see Appendix).

### Study Characteristics

Methodological and theoretical variables were coded as part of the data set. Methodological variables included researcher, year of publication, source (published, convention paper, unpublished), number of hypothesis tests per study, sample size, type of study (survey of residents, experimental simulation), information provided to control group (no information, limited information about crime, limited information about both defendant and crime), origin of stimulus trial (real vs. fabricated), and origin of the PTP (real vs. fabricated). Variables of theoretical import included type of PTP information provided (confession, arrest record, etc.), PTP medium (newspaper, video, combined), PTP focus (general vs. specific to defendant), days of delay between PTP and juror decision, time of verdict (pretrial, posttrial before group deliberation, posttrial after group deliberation), and type of crime portrayed in the PTP. The dependent variable was the subject's judgment of the culpability of the defendant. Three of the authors independently read and coded each article. The coders then came together to check for oversights in the coding process. The variables coded were derived directly from the articles, with minimal interpretation necessary. Multiple coders were employed simply to assure that available information was recorded correctly. Thus ultimate agreement among coders was 100%.

### Statistics

Following the work of Rosenthal (1991), the Pearson correlation coefficient  $r$  was used as the measure of effect size. The mean effect size for a group of studies is referred to in subsequent discussion simply as  $r$ . A meta-analytic  $Z$  ( $Z_{ma}$ ) was calculated by combining  $Z$ -scores of individual tests of the hypothesis using the Stouffer method (Rosenthal, 1991). This method produces an overall probability level associated with the observed pattern of results. A fail-safe  $N$  ( $N_{fs}$ ) was calculated to estimate the number of additional tests averaging null results that would be needed in order to bring the significance level attained through the meta-analysis to a value larger than .05.

In individual studies for which precise  $r$  and  $Z$  calculations were not possible, conservative estimates were used. When authors reported no significant effect,  $r = 0.0$  and  $z = 0.0$  were used. When authors reported a significant effect with an imprecise  $p$  value, the most conservative estimate was employed (e.g.,  $p < .05$  became a one-tailed  $z = 1.65$ ).

## RESULTS

### Overall Test of the PTP Hypothesis

Forty-four tests of the hypothesis were first examined in an attempt to determine the overall status of the PTP effect, i.e., the hypothesis that negative PTP will increase judgments of defendant guilt. Judgment of guilt was compared between conditions in which subjects had experienced different levels of PTP. In support of

Table 1. Stem-and-Leaf Display of Effect Sizes

Stem	Leaf
1.0	
.9	
.8	
.7	6
.6	6
.5	
.4	9
.3	0,0,1,2,2
.2	0,1,1,1,2,3,5,6,7,9
.1	0,0,1,1,1,3,4,5,5,9
.0	,9
-.0	0,1,2,3,3,3,5,7,8
-.1	1,3,3,3,3
-.2	
-.3	2
-.4	
-.5	
-.6	
-.7	
-.8	
-.9	
-.10	

the hypothesis, the meta-analytic  $Z$  ( $Z_{ma}$ ) is 13.13,  $p < .0001$ , with subjects exposed to negative PTP more likely to judge the defendant guilty than subjects exposed to less or no negative PTP. The associated fail-safe  $N$  for this group of studies is 2,755, indicating that this large number of nonsupportive studies would be necessary to change the conclusions to nonsupport of the hypothesis. Twenty-eight of the tests allowed calculation of percentage of guilty verdicts within conditions: In the PTP condition, the percentage of guilty verdicts averaged 59%; in the control conditions, the mean was 45%.

A mean effect size of  $r = .16$  was obtained (positive  $r$  and  $Z_{ma}$  values indicate greater levels of guilty verdicts). Three studies (Hoiberg & Stires, 1973; Moran & Cutler, 1991; Ogloff & Vidmer, 1994) did not provide necessary data for precise calculations for all statistics; thus, as noted above, conservative estimates were used. With these estimates eliminated from the pool, the overall figures change minimally,  $Z_{ma} = 12.21$ ,  $r = .16$ .

An additional consideration is the potential for nonindependence of multiple tests from the same laboratory. It is possible that similarity in temporal and procedural factors may produce a heightened correlation of results. To provide a corrected weighting for multiple tests, a single  $r$  and  $z$  value for each of 26 independent investigations was calculated, averaging across multiple tests within each study. Again, this had minimal impact on the overall  $Z$  value,  $Z_{ma} = 11.95$ , and produced a slightly higher  $r$  of .20.

As the stem-and-leaf plot (see Table 1) illustrates, the distribution of effect sizes around the mean of .16 is relatively normal (95% CI: -.13 to + .46; 99% CI: -.23 to +.55). However, there are clearly outliers in the data set and variability (a range in  $r$ s from -.22 to .76 and confidence intervals which include zero.). A test

**Table 2. Guilty Verdicts—Effect Sizes for Pretrial Publicity Versus Control Group**

Moderator variable	Effect size ( <i>r</i> )	$Z_{ma}^a$	$N^b$
Research design			
Survey	.39	10.16	5
Simulation	.14	10.30	39
Subjects			
Residents	.30	13.21	15
Students	.08	4.50	23
Both	.16	5.84	6
Time of verdict			
Pretrial	.28	12.47	17
Posttrial, predeliberation	.10	5.86	20
Posttrial, postdeliberation	.15	5.79	5
Delay between PTP and verdict			
Zero (immediate)	.16	10.36	29
1 day	-.11	-2.77	2
1 week	.11	.92	1
More than 1 week	.36	10.58	7
PTP content			
Multiple components	.22	14.71	29
Motorcycle gang member	.15	1.64	1
Low-status job	.15	2.27	1
Heinous crime	.13	1.19	1
Confession	.10	.60	1
Prior record	.08	1.62	3
Information re: related crime	.07	.61	1
Weak inadmissible defendant statement	.02	.30	1
Race of defendant	.00	.05	1
Negative character	-.01	-.64	2
Mistaken acquittal related case	-.01	-.14	1
Strong inadmissible evidence	-.03	-.45	1
"Victims' rights agenda"	-.03	-.23	1
Control condition			
No information about crime/defendant	.12	3.64	8
Information about crime only	.08	1.31	9
Limited information (crime/defendant)	.25	14.71	21
Dissimilar case	.07	.61	1
Stimulus materials			
Real PTP	.29	10.49	11
Fictitious PTP	.12	8.82	27
PTP specificity			
Specific to defendant	.17	13.11	39
General	.09	2.33	5
PTP Medium			
Newspaper	.15	8.88	32
Video	.16	3.01	3
Both	.23	10.52	9
Type of crime			
Drug use	.32	2.33	1
Sexual abuse	.28	5.28	3
Murder	.26	9.42	10
Multiple crimes	.18	6.68	9
Rape	.15	3.72	3
Embezzlement	.13	1.43	3
Armed robbery	.10	5.30	8
Disorderly conduct	.08	2.57	5
Personal injury	-.11	-2.77	2
Data source			
Published	.18	13.60	36
Unpublished	.09	1.92	8

<sup>a</sup> $Z_{ma} > 1.65$  is significant at .05 level.

<sup>b</sup>When  $N$ s do not add to 44, this indicates that assigning data to separate conditions within some studies was not possible.

of homogeneity reveals substantial variability as well,  $\chi^2(43) = 409.38, p < .05$ . Subsequent analyses attempted to explore moderator variables which might determine conditions under which the PTP effect is most pronounced or constrained. In these analyses the pool of all 44 tests of the hypothesis was considered.

### Moderator Variables

Results of moderator variable analysis are reported in Table 2. Using the mean  $r$  of .16 as an anchor point, we discuss subsets of studies with notably elevated or attenuated effects below.

#### *Survey Versus Simulation Design*

The largest effect size,  $r = .39$ , was recorded for a series of studies by two teams of researchers (Costantini & King, 1980/81; Moran & Cutler, 1991) in which a survey strategy was used to test the relationship between PTP and juror decision making in legal venues for real cases. These researchers contacted jury-eligible residents of communities in which crimes had occurred, assessed each subject's degree of knowledge on a specific case, and compared those subjects with high PTP recollection to those with low information. Perceived culpability of the defendant correlated significantly with PTP knowledge. The 95% CI around  $r$  of .39 is  $-.45$  to  $+1.23$ ; 99% CI:  $-.71$  to  $+1.49$ . This interval calculation is affected strongly by the small sample size of 5; the range of actual effect sizes is from .22 to .66. These 5 tests of the hypothesis generated a significant  $Z_{ma}$  of 10.16,  $N_{fs} = 186$ .

The remaining 39 tests of the hypothesis employed experimental simulation designs in which subjects were exposed to controlled amounts of PTP and then asked to render a verdict. These tests generated an lesser effect size of  $r = .14$  (95% CI:  $-.17$  to  $+.45$ ; 99% CI:  $-.27$  to  $+.55$ ), but still a significant  $Z_{ma} = 10.30$ ,  $N_{fs} = 1488$ .

Given the greater effect strength and consistency of the survey samples, additional analyses attempted to determine if salient components of the survey technique (e.g., subject pool, time of verdict) strengthened the PTP effect in the survey research. Table 3 documents this exploration of factors, listing effect sizes for key

Table 3. Survey Data Set Impact on Primary Moderators

Moderator	Effect size $r$	
	Complete data set	Simulation studies only ( $N$ )
Delay: 7+ days	.36	.28 (2)
Subject pool: residents	.30	.25 (10)
Time of verdict: pretrial	.29	.24 (12)
PTP source: real PTP	.28	.19 (6)
Control group: limited information	.25	.21 (16)
Medium: both video and print	.23	.09 (5)
PTP content: multiple components	.22	.19 (24)

moderator variables with and without survey tests included in the analyses. Effect sizes were somewhat larger in survey studies for each factor: the longer delay between exposure to PTP and decision, a subject pool of community residents, the timing of the verdict (pretrial), real PTP including multiple components of negative information in both video and print, and the strategy of employing a low-information control group. These features also appear to generate effects in simulation studies, but to a lesser extent. The exception was the subgroup of studies which used combined print and video PTP. In the full data set,  $r$  was .23; for simulation studies alone, the effect size was only .09.

### *Subjects*

A greater effect size was obtained when the subject pool drew from potential jurors (community residents),  $r = .30$ , than when studies employed students ( $r = .08$ ). As shown in Table 3, those studies which employed both residents and students fell midway between the other groups ( $r = .16$ ).

### *Time Sequence*

Two issues of time are relevant as moderators. First, the point at which a verdict was requested was investigated. An effect size of .28 with a  $Z_{ma}$  of 12.47 was produced in the 17 tests which requested an individual verdict from subjects prior to viewing any trial information. Subjects who provided verdicts after viewing a trial, either before or after deliberation, produced significant results also, but with smaller effect sizes ( $r = .10$  and  $r = .15$ , respectively). A second issue is the length of delay between exposure to PTP and subsequent decision about the defendant. A longer delay (more than one week) between PTP exposure and juror judgment was associated with the larger effect size for this moderator ( $r = .36$ ).

### *PTP Content*

As can be seen in Table 2, there is substantial variability in effect sizes across different operational definitions of PTP content. However, there was a somewhat stronger effect generated by PTP conditions which included multiple points of information about the crime and defendant ( $r = .22$ ). Twenty-nine tests of the hypothesis included multiple components, typically a combination of information regarding crime details, arrest information, a confession, prior record, and/or incriminating evidence. If the remaining 15 tests (each of which focused on just one type of PTP) are grouped, they produce only a minimal effect size ( $r = .07$ ), but a significant  $Z_{ma} = 2.96$ . The impact of combined PTP is perhaps also reflected in the 11 tests which provided real PTP to subjects; this group generated a larger effect size ( $r = .29$ ) than did studies with fictitious PTP ( $r = .12$ ).

Also related to the PTP content issue is the specificity of PTP information. Most tests (39 in all) exposed subjects to specific information about the defendant and crime, resulting in an  $r$  of .17. There was a drop in effect size for the 5 additional tests which intentionally tested the impact of general rather than specific PTP information. Overall the effect of general PTP was small ( $r = .09$ ), yet still statistically significant. There was quite a bit of variability among these 5 tests. At the two extremes, Polivy, Jack, Lyon, Laird, and Ogloff (1996) generated an  $r$  of .30 using a TV documentary about a sex-abuse case which was a separate but similar crime to the case judged by the subjects. In contrast, Kovera (1994) found an  $r$  of  $-.03$ , using general prosecution PTP information (a discussion of rape victims' rights) followed by juror decisions about a different acquaintance rape case.

### *Medium*

The greatest effect size for medium was produced through a combination of video and printed materials ( $r = .23$ ). A lesser effect size was found for video alone ( $r = .14$ ) or print alone ( $r = .16$ ). However, as noted above, if the survey tests (in this case, 4) are removed, the effect is quite small,  $r = .09$ , suggesting that the combination of video and print is not by itself a key moderator variable.

### *Type of Crime*

One of the survey tests (Moran & Cutler, 1991) produced the greatest effect size ( $r = .32$ ) in a drug case. With this exception, cases involving murder or sexual abuse consistently generated greater effect sizes across both simulation and survey designs.

### *Control Information*

In the 21 tests which defined the control as low levels of information about the crime, the effect size was greater ( $r = .25$ ) than in the 8 tests for which the control condition was defined as an absence of information ( $r = .12$ ). In the 21 tests in the former group, studies were included in which several sorts of PTP information were provided (e.g., the defendant's prior record, a confession, and incriminating evidence). Thus the stronger effect may have been generated by the relatively greater strength of the PTP information.

### *Remedies for PTP Effects*

Other studies in the PTP literature specifically address remedies to PTP problems (summarized by Studebaker & Penrod, 1997). The appropriate question for this data set is whether the PTP effect changes when a PTP remedy is experienced as part of the experimental scenario. The impact of trial evidence and jury deliberation has been addressed earlier in the analyses (Time Sequence). One additional

study (Dexter, Cutler, & Moran, 1992) employed voir dire in an attempt to eliminate the PTP effect. Subjects who underwent the voir dire produced a PTP effect size of  $r = .10$ ; the effect size for the non-voir dire condition was .13. In another study (Davis, 1986), a continuance of 1 week was used. This study produced an effect size of  $r = .01$  for subjects who experienced the delay and  $r = -.07$  for subjects without the 1-week delay. Finally, Sue, Smith, and Gilbert (1974) found that the PTP effect was larger with judicial instructions,  $r = .25$ , than without,  $r = .13$ . Thus, the findings are mixed from this small set of studies.

### Additional Dependent Measures

#### *Jury Verdict*

Only 4 studies (6 tests) included jury verdicts, producing  $r = .15$ . A  $Z_{ma}$  could be calculated from just 4 of these tests,  $Z_{ma} = 2.26$ . The small effect is consistent with individual juror verdicts (.16) and postdeliberation effects (.15); however, these data must be interpreted with some caution. The effect sizes range from .00 to .37; also, in one of the contributing studies (Kramer, Kerr, & Carroll, 1990) not all the relevant data, only those statistically significant, are reported.

#### *Continuous Versus Dichotomous Dependent Measures*

Data analyses thus far have included dependent measures which are either dichotomous (guilty, not guilty) or continuous (a Likert-type scale). If the continuous measures (10 tests from 7 studies) are evaluated apart from the dichotomous measures, the effect size remains approximately the same,  $r = .17$ , as the remaining 34 tests,  $r = .16$ .

### Summary

Pretrial publicity has a significant effect on subjects' judgments regarding the guilt of the defendant, as evidenced by results in both laboratory studies and community survey research. The effect size overall is small; however, it climbs to .39 in the survey sample. Greater effect sizes were produced in studies which included a pretrial verdict assessment, use of the potential juror pool as subjects, multiple points of negative information included in the PTP, real PTP, crimes of murder, sexual abuse, or drugs, and greater length of time between PTP exposure and judgment. The effect was substantially attenuated with student subjects, use of general rather than specific PTP information, certain types of content (e.g., race), the post-trial pre-deliberation timing of the verdict, and specific types of crime (personal injury, disorderly conduct.)

## DISCUSSION

### PTP Effects

The data support the hypothesis that negative pretrial publicity significantly affects jurors' decisions about the culpability of the defendant. Jurors exposed to publicity which presents negative information about the defendant and crime are more likely to judge the defendant as guilty than are jurors exposed to limited PTP. As noted in the Introduction, initial observation of the data set showed mixed results as to the effect of PTP. It appears now with closer analysis that some of the nonsupportive results may simply have been due to lack of statistical power. The PTP effect, particularly in simulation studies, is relatively small; thus, without adequate sample size a statistically significant result would not be obtained.

The data indicate a small average effect size,  $r = .16$ , with the range across studies including zero and negative as well as positive effect sizes. The substantial heterogeneity of effect sizes demands that PTP effects be considered in the context of many moderator variables. Nonsupportive findings in past individual studies may have been due in part to the manner in which the independent and/or dependent variables were operationalized. The present analyses clearly link effect size variability to moderator variables of research strategy, PTP content, type of crime, and timing of the dependent measure. It would be advisable for researchers to continue investigation of moderators in PTP effects.

The data set addresses PTP effects on juror judgments at three points in the decision process. Of particular importance in change of venue motions is the jurors' prejudgment of the defendant at pretrial; the data show the greatest PTP effect at this point in time. Note that the presence of even a small effect contradicts our legal presumption of innocence. The second point of measurement (posttrial but before jury deliberation) still revealed a significant impact of PTP, though with a reduced effect size. The third and final point—the final and postdeliberation verdict—is the ultimate issue in any case. Here, the data support the existence of continued PTP effects at this crucial time.

The strongest effects are obtained in studies which are parallel in many features to the experience of real jurors. Survey tests of the hypothesis have examined the opinions of residents from communities in which crimes have occurred; such investigations have found that residents who recall greater amounts of PTP information are also more likely to prejudge the defendant as culpable for the crime compared to those residents who recall lesser amounts of information. The importance of this finding derives from its naturalistic research setting, which generates confidence that PTP has a noted effect on opinions in the real environment in which court cases are decided.

One weakness of survey techniques, the lack of control for response bias, has been recently addressed by Moran and Cutler (1997). In their two 1991 venue surveys, both included in this review, a bogus item was included on each survey in order to examine the tendency for respondents to report knowledge of any crime story that seems plausible. They found that the correlation between exposure to media and prejudgment of guilt was unchanged when respondents who endorsed

the bogus item were removed from analysis, casting doubt on the argument that simple response bias could explain the PTP effect.

While the survey technique provides strong evidence of PTP effects on prejudgment of the defendant, this research format does not link prejudgment to final verdict. The correlational nature of survey studies also presents the problem of lack of control over confounding variables. However, the research technique which does offer such control, the experimental method, provides additional confirming evidence that the PTP effect occurs and that jurors' prejudgments may carry through to their verdicts. Thus, the combination of data in this meta-analysis has demonstrated a convergence of the evidence across method to the conclusion that pretrial publicity has a significant impact on juror decision making.

### **Legal and Policy Implications**

A decade ago, Carroll et al. (1986) and Fulero (1987) took opposing stances regarding the state of the PTP literature. The position of Carroll et al. was that social science literature had not shown PTP effects on juror verdicts and thus was of little help to policy makers and those in the legal system: "it is surprising that so little is known" (pp. 189-190). Fulero (1987), in a rejoinder, disagreed: "the body of research taken as a whole demonstrates an adverse effect of pretrial publicity on jurors" (p. 260). Fulero proposed that empirical evidence bound for court must reach a critical threshold level: the available research must show "to a reasonable degree of scientific probability" that PTP adversely affects jurors (p. 262). The results of this meta-analysis clearly offer statistical evidence that the body of PTP research now meets this criterion.

From a legal and policy perspective, the important question now is what might be done to safeguard the rights of a defendant in a case where documented negative PTP appears to be a significant problem. The data in this project have not addressed directly the remediation of PTP effects; the few data sets available here suggest that proposed remedies of brief continuance of the case, expanded voir dire, judicial instruction, trial evidence, or jury deliberation do not provide an effective balance against the weight of PTP. Studebaker and Penrod (1997) have published a more complete review of the remediation literature and arrived at a similar conclusion: that PTP effects survive attempts at jury selection, continuance, judicial instruction, trial evidence and jury deliberation.

Change of venue and foreign venue thus appear to be the most logical solutions given appropriate cases, as they are both designed to avoid the use of jurors who have been exposed to problematic levels of PTP. However, judges have been resistant to granting venue changes, no doubt due to the expense and inconvenience of moving a trial or importing jurors. These solutions may nonetheless be the best way to avoid PTP effects.

### **Underlying Mechanisms: A Proposal for Further Research**

The impact of PTP on a juror's decision has been the focus of PTP research, leaving the underlying foundation for the effect less well understood. The negative

impact of PTP is assumed to stem from PTP-generated juror beliefs. Elements of negative publicity retained over time become a basis for a later judgment of defendant culpability. The pretrial assessment of juror verdict tests most directly for juror beliefs stemming from PTP, uncomplicated by trial information or jury deliberation. Based on the data, we know that at this point in time PTP effects are strongest.

The components of PTP most strongly associated with guilty verdicts square reasonably well with established principles of persuasion and memory (McGuire, 1985). For example, serious crimes produced stronger PTP effects than less sensational events, likely due to subjects' greater attention to captivating stimuli. Multiple indicators of a defendant's "guilt" (confession, prior record, incriminating evidence) produced an increased effect on juror judgments of guilt, perhaps due to the more comprehensive and convincing nature of the information. The increased effect seen in studies which employed real PTP may have derived partially from such persuasive appeals as well. It is also possible that memory prompts from other content elements in the real-life news clips, such as the mention of locations or names familiar to the message recipient, helped to maintain memory (Costley, 1988). It is likewise reasonable to assume that distinctive information provided by specific, versus general, PTP is more easily retrieved when the juror is asked to consider a specific defendant (Tulving & Thomson, 1973). Thus, the moderator variables emerging from this meta-analysis are consistent with basic principles of social cognition. These PTP characteristics provide a context for a juror to encode and retain an image of a culpable defendant.

A further elaboration of how PTP and memory interact is provided by a line of recent work on the "story model" (Bennett & Feldman, 1981; Hastie, Penrod, & Pennington, 1983; Pennington, 1981; Pennington & Hastie, 1981, 1986, 1988, 1990, 1991, 1992). This model provides a context for understanding the persistence of PTP effects, suggesting that negative publicity provides not just isolated fragments of information, but a belief framework about defendant culpability. This biased schema then directs the juror's attention and provides a filter through which subsequent evidence is perceived (Moore, 1989). To the extent that a PTP framework affects how evidence is later integrated into a juror's story construction, it should exert an impact on verdict (Olsen-Fulero, Fulero, & Wulff, 1989; Fulero, Olsen-Fulero, & Wulff, 1991). Mullin, Imrich, and Linz (1989) discovered such effects of pretrial publicity on juror stories of rape collected after a mock rape trial. Indirect support for the story model is seen in the current meta-analytic data through the persistent PTP effect throughout trial proceedings and jury deliberation.

The next step for researchers is to test directly for a predicted memory and belief differential between experimental conditions, by deliberately tracking memory for PTP and story construction over time. Olsen-Fulero and Fulero (1997) suggested that we can use the story model to understand inconsistencies in effects also, e.g., when PTP interacts with aspects of individual cases to generate schemas and effects specific to each case. This investigation of inconsistencies within experimental groups would be useful as well.

Table 4. Effect Sizes by Study

Author	Date	<i>N</i>	Effect size <i>r</i>
Costantini & King	1980/81	692	.22
			.66
Davis	1986	224	.49
			-.03
DeLuca	1979	87	.03
			.10
Dexter, Cutler, & Moran	1992	68	.11
			.19
Greene & Wade	1988	80	.13
			.07
Hoiberg & Stires	1973	312	.08
			.11
Hvistendahl	1979	85	.15
			.19
Kovera	1994	80	.00
			-.03
Kramer & Kerr	1989	449	.10
			.14
Kramer, Kerr, & Carroll	1990	702	.21
			.05
Moran & Cutler	1991	535	-.03
			.32
Nelson	1972	100	.27
			.30
Ogloff & Vidmer	1994	58	.32
			.21
Otto, Penrod, & Dexter	1994	227	.21
			.02
Otto, Penrod, & Hirt	1990	358	.03
			.15
Padawer-Singer & Barton	1975	120	-.03
			.01
Polvi et al.	1996	154	-.22
			.23
Reidel	1993	84	.29
			.30
Simon	1966	106	-.01
			.25
Simon & Eimermann	1971	61	.03
			.26
Sue, Smith, & Gilbert	1974	202	.20
			.31
Sue, Smith, & Pedroza	1975	132	.31
			.76
Tans & Chaffee	1966	150	

Finally, the story model approach provides a vehicle to reflect on PTP remedies. PTP-induced schemas may have potent elements which conflict with those dictated by law and which are highly resistant to instructions to forget or ignore them (Smith, 1991, 1993). As the justice system works to address negative publicity effects, consideration should be directed toward the means to temper a juror's PTP-influenced schematic approach to trial evidence. Other avenues of research are also necessary. In particular, we note that at least one aspect of the current data—that survey studies had stronger PTP effects than experimental simulations—may be difficult to explain

in the story model context and thus merits further scrutiny. The field research may simply present a more intense experience, thus a larger effect size; however, this notion must be explored and tested. We know that the PTP effect exists. We encourage others interested in this phenomenon to continue the investigation, with specific attention to the underlying mechanisms of the effect and its remedies.

## APPENDIX

Table 4 lists the studies and effect sizes.

## ACKNOWLEDGMENTS

Portions of this manuscript were presented at the American Psychology-Law Society Meeting, March 1998, Redondo Beach, California. The authors thank the researchers of the individual studies, who generously provided their data for this meta-analysis. We also thank Kris Carlson for her work in the early stages of data gathering.

## REFERENCES<sup>4</sup>

- Bennett, W. L., & Feldman, M. S. (1981). *Reconstructing reality in the courtroom: Justice and judgment in American culture*. New Brunswick, NJ: Rutgers University Press.
- Carroll, J. S., Kerr, N. L., Alfini, J. J., Weaver, F. M., MacCoun, R. J., & Feldman, V. (1986). Free press and fair trial: The role of behavioral research. *Law and Human Behavior*, 10, 187-201.
- \*Costantini, E., & King, J. (1980/81). The partial juror: Correlates and causes of prejudice. *Law and Society Review*, 15, 9-40.
- Costley, C. L. (1988). Meta-analysis of involvement research. *Advances in Consumer Research*, 15, 554-562.
- \*Davis, R. W. (1986). Pretrial publicity, the timing of the trial, and mock jurors' decision processes. *Journal of Applied Social Psychology*, 16, 590-607.
- \*DeLuca, A. J. (1979). *Tipping the scales of justice: The effects of pretrial publicity*. Unpublished master's thesis, Iowa State University, Ames, IA.
- \*Dexter, H. R., Cutler, B. L., & Moran, G. (1992). A test of voir dire as a remedy for the prejudicial effects of pretrial publicity. *Journal of Applied Social Psychology*, 22, 819-832.
- \*Greene, E., & Wade, R. (1988). Of private talk and public print: General pretrial publicity and juror decision making. *Applied Cognitive Psychology*, 2, 123-135.
- Fulero, S. M. (1987). The role of behavioral research in the free press/fair trial controversy: Another view. *Law and Human Behavior*, 11, 259-264.
- Fulero, S., Olsen-Fulero, L., & Wulff, K. (1991, June). *Stability and structure of mediating story variables in rape juror decision making*. Paper presented at the American Psychological Society convention, Washington, D. C.
- Fulero, S., & Penrod, S. (1990). The myths and realities of attorney jury selection folklore and scientific jury selection: What works? *Ohio Northern Law Review*, 17, 229-253.
- Hastie, R., Penrod, S., & Pennington, N. (1983). *Inside the jury*. Cambridge MA: Harvard University Press.
- \*Hoiberg, B., & Stires, L. (1973). The effect of several types of pretrial publicity on the guilty attributions of simulated jurors. *Journal of Applied Social Psychology*, 3, 267-275.
- \*Hvistendahl, J. K. (1979). The effect of placement of biasing information. *Journalism Quarterly*, 56, 863-865.

<sup>4</sup>An asterisk denotes a study included in the meta-analysis.

- \*Kovera, M. (1994). *The media and allegations of sexual misconduct: The effect of agenda-setting on appraisals of credibility*. Unpublished doctoral dissertation, University of Minnesota, Minneapolis, MN.
- \*Kramer, G. P., & Kerr, N. L. (1989). Laboratory simulation and bias in the study of juror behavior: A methodological note. *Law and Human Behavior, 13*, 89–100.
- \*Kramer, G. P., Kerr, N. L., & Carroll, J. S. (1990). Pretrial publicity, judicial remedies, and jury bias. *Law and Human Behavior, 14*, 409–438.
- Linz, D. & Penrod, S. (1992). Exploring the First and Sixth Amendments: Pretrial publicity and jury decision making. In D. K. Kagehiro & W. S. Laufer (Eds.), *Handbook of psychology and law* (pp. 3–20). New York: Springer-Verlag.
- McGuire, W. J. (1985). Attitudes and attitude change. In G. Lindzey & E. Aronson (Eds.), *Handbook of Social Psychology* (pp. 233–346). New York: Random House.
- Moore, A. J. (1989). Trial by schema: Cognitive filters in the courtroom. *UCLA Law Review, 37*, 273–341.
- \*Moran, G., & Cutler, B. L. (1991). The prejudicial impact of pretrial publicity. *Journal of Applied Social Psychology, 21*, 345–367.
- Moran, G., & Cutler, B. L. (1997). Bogus publicity items and the contingency between awareness and media-induced pretrial prejudice. *Law and Human Behavior, 21*, 339–344.
- Mullin, C., Imrich, D., & Linz, D. (1989, August). *The effects of date-rape information and prejudicial and nonprejudicial pretrial publicity on jury decision making in a sexual assault case*. Paper presented at the American Psychological Association meeting, New Orleans, LA.
- \*Nelson, M. D. (1972). *Free press-fair trial: The effects of "sensational" and "non-sensational" pretrial news stories and of a judge's admonition upon "juror" and "non-juror" guilt assessment*. Unpublished doctoral dissertation, Stanford University, Stanford, CA.
- Note. (1846). Trial by jury in New York. *Law Reports, 9*, 193–201.
- \*Ogloff, J. R. P., & Vidmar, N. (1994). The impact of pretrial publicity on jurors. *Law and Human Behavior, 18*, 507–525.
- Olsen-Fulero, L., & Fulero, S. (1997). Common sense rape judgments: An empathy-complexity theory of rape juror story making. *Psychology, Public Policy, and the Law, 3*, 402–427.
- Olsen-Fulero, L., Fulero, S., & Wulff, K. (1989, August). *Who did what to whom? Modeling rape jurors' cognitive processes*. Paper presented at the American Psychological Association convention, New Orleans, LA.
- \*Otto, A., Penrod, S., & Dexter, H. (1994). The biasing impact of pretrial publicity on juror judgments. *Law and Human Behavior, 18*, 453–462.
- \*Otto, A., Penrod, S., & Hirt, E. (1990) *The influence of pretrial publicity on juror judgments in a civil case*. Unpublished manuscript.
- \*Padawer-Singer, A., & Barton, A. H. (1975). The impact of pretrial publicity on jurors' verdicts. In R. J. Simon (Ed.), *The jury system in America: A critical overview* (pp. 123–139). Beverly Hills, CA: Sage.
- Pennington, N. (1981). *Causal reasoning and decision making: The case of juror decisions*. Unpublished doctoral dissertation, Harvard University, Cambridge, MA.
- Pennington, N., & Hastie, R. (1981, August). *Juror decision making: Story structure and verdict choice*. Paper presented at the American Psychological Association convention, Los Angeles, CA.
- Pennington, N., & Hastie, R. (1986). Evidence evaluation in complex decision making. *Journal of Personality and Social Psychology, 51*, 242–258.
- Pennington, N., & Hastie, R. (1988). Explanation-based decision making: Effects of memory structure on judgment. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 14*, 521–533.
- Pennington, N., & Hastie, R. (1990). Practical implications of psychological research on juror and jury decision making. *Personality and Social Psychology Bulletin, 16*, 90–105.
- Pennington, N., & Hastie, R. (1991). A cognitive theory of juror decision making: The story model. *Cardozo Law Review, 13*, 519–557.
- Pennington, N., & Hastie, R. (1992). Explaining the evidence: Tests of the story model for juror decision making. *Journal of Personality and Social Psychology, 62*, 189–206.
- \*Polvi, N., Jack, L., Lyon, D. Laird, P., & Ogloff, J. (1996). *Mock juror's verdicts in a child sexual abuse case: The effects of pretrial publicity*. Paper presented at American Psychology-Law Society Conference, Hilton Head, S.C.
- \*Riedel, R. (1973). Effects of pretrial publicity on male and female jurors and judges in a mock rape trial. *Psychological Reports, 73*, 819–832.
- Rosenthal, R. (1991). *Meta-analytic procedures for social research*. Newbury Park, CA: Sage.
- \*Simon, R. J. (1966). Murder, juries, and the press. *Trans-Action, 1966* (May-June), 64–65.
- \*Simon, R. J., & Eimermann, T. (1971). The jury finds not guilty: Another look at media influence on the jury. *Journalism Quarterly, 48*, 343–344.

- Smith, V. L. (1991). Prototypes in the courtroom: Lay representations of legal concepts. *Journal of Personality and Social Psychology, 61*, 857-872.
- Smith, V. L. (1993). When prior knowledge and law collide: Helping jurors use the law. *Law and Human Behavior, 17*, 507-536.
- Stebly, N. M. (1992). A meta-analytic review of the weapon-focus effect. *Law and Human Behavior, 16*, 413-424.
- Stebly, N. M. (1997). Social influence in eyewitness recall: A meta-analytic review of lineup instruction effects. *Law and Human Behavior, 21*, 283-297.
- Studebaker, C. A., & Penrod, S. D. (1997). Pretrial publicity: The media, the law and common sense. *Psychology, Public Policy and Law, 3*, 428-460.
- \*Sue, S., Smith, R. E., & Gilbert, R. (1974). Biasing effects of pretrial publicity on judicial decisions. *Journal of Criminal Justice, 2*, 163-171.
- \*Sue, S., Smith, R. E., & Pedroza, G. (1975). Authoritarianism, pretrial publicity and awareness of bias in simulated jurors. *Psychological Reports, 37*, 1299-1302.
- \*Tans, M., & Chaffee, S. (1966). Pretrial publicity and juror prejudice. *Journalism Quarterly, 43*, 647-654.
- Tulving, E., & Thomson, D. M. (1973). Encoding specificity and retrieval processes in episodic memory. *Psychological Review, 80*, 352-373.