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The Quasi-Experiment As A Tool For The Study of Public Law

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College of Charleston

The quasi-experiment design has been used sparingly by students of public law, yet, if properly utilized, it can complement and supplement knowledge gained through more traditional techniques.

One area of judicial research which seems particularly amenable to study by use of quasi-experimental design is that of impact of court decisions. The development of the system's framework for political analysis suggested a need to examine the linkages between the outputs of a political system and subsequent inputs which were hypothesized to exist in that system. The idea of a feedback link is central to the concept of the political system but has rarely been tested empirically.

This paper suggests that quasi-experimental design can be utilized to examine the linkage between the output of the Supreme Court—its decisions and opinions—and the attitudes of the American public. This design potentially could remedy the two major deficiencies of impact studies. The first deficiency is the lack of data. The second is that impact studies are limited to observable behavior.

Impact studies tend to be impressionistic or, at best, nonsystematic. The studies list variables which might affect the impact of a particular decision. Stephen Washy lists the case itself, the political, economic, and social situation, the geographic scope of the decision, the degree to which the government attempts to enforce the decision, the power and position of those affected, the characteristics and size of the local community, the dominant interests in the community, and the manner in which attitudes affect perception of what the Court has said.

Thomas Barth provides a second list which includes the nature and number of contending participants, the nature of the demands and issues, the existence of precedents, the policies of other branches and levels of government, the clarity or ambiguity of the decision, the enforcement requirements, and the existence of alternative sources of authority. He notes that

The attitudes of other policy-makers, the attentive public, and the general public are also significant. The impact of a decision will depend on who approves and who disapproves of the decision and the intensity of their opinion.

2 Stephen Washy, The Impact of the United States Supreme Court: Some Perspectives (Homewood, Ill.: Dorsey, 1970).
Identifying the variable is an important first step, but this determination does little more than suggest hypotheses to be tested. As Washy says,

> When we discuss factors or variables which affect or condition the implementation of Supreme Court decisions, we must realize that we do not have reliable data concerning the effect of those variables.¹

The second limitation of impact studies is that they deal with observable behavior. Impact and compliance are terms that are often used interchangeably. Michael Patrick uses compliance as a test for legitimacy. If individuals comply with a Court decision, then Patrick would argue that they view it as legitimate.⁵ This type of analysis overlooks a number of factors which could promote compliance but which may have little to do with a change in the individual's attitude toward or perception of the situation. The narrowness of this approach is suggested by Herbert Jacob who notes that

> Court actions . . . frequently strike at the core of people's personal behavior, their lifestyle, or fortunes. Such contact with government about personally significant matters is likely to color people's impressions of their government.⁶

For example, it is possible that the Court's decision in *Brown v. Board of Education*⁷ may have changed attitudes of blacks toward the political system.

> If we are ever to understand fully the impact of a Court decision, we must know the attitudes of individuals toward the Court and the issue areas as well as the changes in those attitudes as a result of the Court's decision.⁸ Attitudes relate to compliance.⁹ An understanding of how attitudes change will assist the student of judicial process to understand and possibly to predict the real impact of Court decisions in various issue areas.¹⁰

Frank Sorauf has noted that the mere existence of a Supreme Court decision should not be accepted as an accomplished fact. Its "interpretations and applications depend as much on the goals and involvement of the groups concerned as on the words of the decision itself."¹¹ This point is further amplified by William Beaney and Edward Beiser in their analysis of the school prayer decision. They say that

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⁵ Barth, "Perceptions and Acceptance . . . ," p. 319.
it seems obvious that students of our legal system should not be satisfied with an acceptance of the official theory that Court decisions, and particularly Supreme Court decisions that affect important public policy issues, are universally accepted as the law. It is grossly misleading and dangerous to treat law as a significant form of social control by concentrating on the rules handed down by courts. The realist persuasion in legal philosophy, if it has done nothing else, has warned us against ignoring the ways in which law affects or may leave untouched the daily lives of those to whom it ostensibly applies.

Arthur Miller's essay on the need for impact analysis of Supreme Court decisions urged the student of the judiciary to evaluate Court decisions to the extent that they further societal goals. He notes that the time has come to test the assumptions about the impact of the Court on political and social behavior. He argues that justices reach decisions not because the law compels it but rather because of their evaluation of the decision's impact. Given this fact, any study of

. . . constitutional law degenerates into theology and bare exegeses upon the sacred text of the Constitution unless and until it is tested by its consequences.

Theodore Becker has edited a book and Stephen Wasby has written a book which are good examples of the type of research being conducted in the impact area. Both deal with changes in overt behavior. The reader's attention is addressed to such questions as, are Bibles still read in school? do police follow the Miranda guidelines? and have state legislatures reapportioned? Wasby suggests that decisions can have either an individual, political, or economic impact. He does go further than Becker by suggesting that attitudes and expectations may be affected by Court decisions. These attitudes may be concerned with the substance of policy, the Court, or the political system, and they may be translated into political action. He quotes Charles Warren who in 1922 said that, "The impression made upon the public by the Court's decisions has often had as great an effect upon history as have the decisions themselves."
Perhaps the best example of the impact as compliance study is that by Frank Sorauf. He related the story of the released-time programs for religious education which followed the Court’s ruling in Zorach v. Clauson and then asked whether the growth of these programs was stimulated by the decision. He concluded that the Zorach decision was an accommodation to public demands and that as such

... has created a symbol and an endorsement — the Zorach precedent — that is at the moment reshaping and molding the very values which the Court will have to attend to in later decisions.

While his conclusion is well-taken, it was made without any basis in fact. We do not know what effect the Supreme Court has on formulating or changing values, and the impact studies provide little insight.

Ernest Jones has defined impact research as "tracing the consequences of decisional outcomes within legal process upon values and institutions in society." Wasby also made a gesture in the direction of studying the impact on attitudes but warns that "... until more data are available, we cannot easily move beyond an evaluation shaped largely by our perspectives and expectations about compliance." He recognized the fact that impact studies should be concerned with process as well as policy. There is more to impact than implementation. He suggests the need for before and after studies.

If we want to understand why an individual complies, i.e., why some Court decisions appear to have a greater impact than others, it might be helpful to understand the individual’s attitudes and the factors affecting a change in those attitudes. This can best be done with a quasi-experimental design in which exposure to the experimental variable is controlled by the researcher, though the experiment is not conducted under laboratory conditions.

**RESEARCH DESIGN**

Such a design was used for an impact study in the winter of 1972. The design was based on the Solomon Four-Group Model.

The research was conducted in the metropolitan area of Atlanta, Georgia. The subjects were students enrolled in fourteen introductory political science courses and one sociology course. The courses were taught at the following schools: Emory University (two classes), Georgia State University (four from the night program and five from the day program), Clayton Junior College

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24 Wasby, The Impact . . . , p. 16.
(two classes), and Kennesaw Junior College (two classes). These four schools were selected in order to insure a heterogeneous student sample. The sample originally contained nearly 900 students but many of these had to be dropped because they were absent either on one of the days that the experiment was conducted or one of the days that the questionnaire was administered. There are 377 students included in the analysis.

There were two experimental groups. Both received detailed explanations of the Court decisions in the issue areas being considered. The lectures discussed the reasoning of the Court and the logic of the decision. The lectures were confined to a presentation of the Court's point of view, and the lecturer attempted to refrain from any normative comments as to the wisdom or desirability of the decisions.

Experimental Group I was informed of the majority opinion in each case. Experimental Group II was informed of both the majority opinion and of any dissenting opinions. This allows one to compare the relative effectiveness of the Court in changing attitudes when it presents a single stimulus as opposed to when it presents conflicting or dual stimuli.

The treatment groups were randomly selected from the fifteen classes at the various institutions. Once the treatment group was selected, an effort was made to insure that the control group was comparable. Three classes were assigned randomly to each of the experimental groups. The other classes were assigned to the control group (see Table 1).

**TABLE 1**

*Description of Groups*

<table>
<thead>
<tr>
<th>Group Name</th>
<th>Experimental Conditions</th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group 1</td>
<td>Informed of majority opinion of the court (single stimulus)</td>
<td>85</td>
</tr>
<tr>
<td>Experimental Group 2</td>
<td>Informed of majority and dissenting opinions (conflicting stimuli)</td>
<td>68</td>
</tr>
<tr>
<td>Control Group</td>
<td>Not informed of court decisions</td>
<td>224</td>
</tr>
</tbody>
</table>

During the first week of the winter quarter (January, 1972) all of the subjects received a self-administered questionnaire. Students completed the questionnaire during the regular class period. Each questionnaire had a cover letter explaining that the student's class had been chosen to participate in a public opinion study of student attitudes. The letter assured the student of
anonymity and stated that their answers would be used for statistical purposes only. The letter informed them that their answers would not be used by their instructor in any way. The questionnaire collected demographic data, party affiliation, and data on attitudes toward the Supreme Court. A conservatism scale, a political participation scale, and an opinion leadership scale were also included. The responses to these questions and scales served as the control variables for the study, and the treatment served as the independent variable. A description of the sample on the basis of these variables can be found in Table 2.

**TABLE 2**

Demographic Description of the Sample

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Frequency found in Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experimental</td>
</tr>
<tr>
<td></td>
<td>Group 1 (N = 85)</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>39</td>
</tr>
<tr>
<td>Female</td>
<td>46</td>
</tr>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>3</td>
</tr>
<tr>
<td>White</td>
<td>82</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
</tr>
<tr>
<td>Blue Collar</td>
<td>26</td>
</tr>
<tr>
<td>White Collar</td>
<td>59</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
</tr>
<tr>
<td>Protestant</td>
<td>56</td>
</tr>
<tr>
<td>Catholic</td>
<td>6</td>
</tr>
<tr>
<td>Jew</td>
<td>10</td>
</tr>
<tr>
<td>Non-Affiliate</td>
<td>10</td>
</tr>
</tbody>
</table>

The dependent variable was the amount of attitude change in the direction advocated by the Court. This questionnaire, therefore, gathered baseline attitudinal data in the issue areas in which the Supreme Court has recently ruled.

The issue areas examined in the study are prayers in school and reapportionment. In this way an emotional, value-laden issue (school prayer) could be contrasted with a technical, legalistic one (redistricting) to see if there is a different impact.

Two statements, one dealing with the drawing of congressional district lines and one dealing with the manner of election to the state house, were used to measure the respondent’s attitude toward the reapportionment issue. One
statement on the desirability of prayer in the schools was used to construct the third dependent variable.\textsuperscript{27}

The instrument was pretested in introductory political science courses the quarter preceding the experiment. Changes were made according to the results of the pretest.

The treatment was administered in the classroom as part of the subjects' normal instruction. There was no contrived setting. The treatment was administered to all classes by the same person in order to reduce the variability of the stimulus.

Initial questionnaires were not administered to two classes in order to complete the Solomon Four-Group Design. This design has the advantage of determining the effects of the testing and the interaction of the testing with the treatment. It increases the generalizability of the findings by testing for experimental validity.

The subjects were retested one week after the lectures. One class in the control group was retested each time an experimental group was retested. The same procedures used in the administration of the original questionnaire were used in the administration of the second questionnaire. Except for the cover page, the two questionnaires were identical.

The design is represented in Figure 1. An “x” denotes the treatment; 0\textsubscript{1} and 0\textsubscript{3} denote the pretested groups; and 0\textsubscript{2}, 0\textsubscript{4}, 0\textsubscript{5}, and 0\textsubscript{6} denote the posttested groups.\textsuperscript{28}

\begin{figure}[h]
\centering
\begin{tabular}{lcc}
\hline
RO\textsubscript{1} & x & 0\textsubscript{2} \\
RO\textsubscript{3} & & 0\textsubscript{4} \\
R & x & 0\textsubscript{5} \\
R & & 0\textsubscript{6} \\
\hline
\end{tabular}
\caption{Experimental Design}
\end{figure}

\textbf{STATISTICAL TESTS}

Student’s t-test was the primary statistical test used to analyze the data. With it, one can determine whether the mean attitude change of the experimental groups differed significantly from the mean attitude change of the control group. Similarly, it can also be used to compare subgroups within each group. In order to use the t-test, the experimenter assumes that the dependent variable is interval level and that it is normally distributed. The t-test is, however, limited to comparisons between two groups.

\textsuperscript{27} The statements were:
\begin{itemize}
  \item a. It is not the business of the U. S. Supreme Court to tell a state that the manner in which it elects its representatives to the state House of Representatives is unconstitutional.
  \item b. It is all right for children in public schools to recite prayers in school.
  \item c. State legislatures should be able to decide for themselves the size of congressional districts within their states.
\end{itemize}

\textsuperscript{28} Campbell and Stanley, “Experimental . . . ,” pp. 22-25.
When it was necessary to analyze more than two groups, the analysis of variance technique was used. With this technique, the between group variance is measured against the within group variance. The within group variance is a reflection of error. Analysis of variance allows the experimenter to determine how much of the variance between groups can be attributed to the experimental variable. The same assumptions that are necessary to use the t-test are necessary to use the analysis of variance technique. 29

HYPOTHESES

This design allows the student of judicial impact to test several hypotheses suggested by the social psychology and political science literature in order to determine what impact, if any, Supreme Court decisions have on individual and group attitudes. The dependent variable in all of the hypotheses is attitude change in the direction advocated by the Court.

1. Attitude change will occur as a result of exposure to new information. 30
2. Females are more likely to be influenced by the Court than are males. 31
3. There will be no significant difference in attitude change among groups of different socio-economic status. 32
4. The decisions of the Supreme Court are likely to have a greater impact on blacks than on whites. 33
5. In matters of church and state, religious affiliation is related to the Court's impact on attitudes. 34

FINDINGS

The data in this study suggest the validity of the hypothesis that exposure to new information can produce a change in attitude. This appears to be true in both issue areas being considered — prayer in schools and reapportionment (See Table 3). The means presented in this table and those that follow (with the exception of Table 4) are the mean differences in the attitudes of the members of each group from time one to time two. Each individual's score at time two was subtracted from his score at time one, and an average was then obtained for each group. Thus, if the average score was higher at time one than at time two, the mean in the table is preceded by a plus sign; if the average score was

32 Barth, “Perception and Acceptance . . .,” p. 349.
### TABLE 3

*Exposure To New Information: Mean Changes In Experimental Groups Compared With Mean Changes In Control Groups*

<table>
<thead>
<tr>
<th>Group</th>
<th>Prayer</th>
<th>Congressional Districts</th>
<th>Manner of Election</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N = 85)</td>
<td>-.518</td>
<td>-.741</td>
<td>-.541</td>
</tr>
<tr>
<td>Control (N = 224)</td>
<td>-.116</td>
<td>-.036</td>
<td>-.027</td>
</tr>
<tr>
<td></td>
<td>t = 3.3038</td>
<td>t = 4.7892</td>
<td>t = 3.4132</td>
</tr>
<tr>
<td></td>
<td>(p&lt;.001)</td>
<td>(p&lt;.001)</td>
<td>(p&lt;.001)</td>
</tr>
<tr>
<td><strong>Group 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N = 68)</td>
<td>-.529</td>
<td>-.515</td>
<td>-.103</td>
</tr>
<tr>
<td>Control (N = 224)</td>
<td>-.116</td>
<td>-.036</td>
<td>-.027</td>
</tr>
<tr>
<td></td>
<td>t = -3.1042</td>
<td>t = -3.1449</td>
<td>t = -.4339</td>
</tr>
<tr>
<td></td>
<td>(p&lt;.001)</td>
<td>(p&lt;.02)</td>
<td>(n.s.)</td>
</tr>
<tr>
<td><strong>Groups 1, 2</strong> (N = 153)</td>
<td>-.523</td>
<td>-.641</td>
<td>-.346</td>
</tr>
<tr>
<td>Control (N = 224)</td>
<td>-.116</td>
<td>-.036</td>
<td>-.027</td>
</tr>
<tr>
<td></td>
<td>t = -4.0687</td>
<td>t = -5.9609</td>
<td>t = -2.4699</td>
</tr>
<tr>
<td></td>
<td>(p&lt;.001)</td>
<td>(p&lt;.001)</td>
<td>(p&lt;.02)</td>
</tr>
</tbody>
</table>

### TABLE 4

*Exposure To New Information: Mean Value of Pretested Experimental and Control Groups Compared With Mean Value of Non Pretested Experimental and Control Groups*

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Prayer</th>
<th>Congressional Districts</th>
<th>Manner of Election</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest (N = 85)</td>
<td>3.094</td>
<td>3.541</td>
<td>3.812</td>
</tr>
<tr>
<td>Non Pretest (N = 24)</td>
<td>2.542</td>
<td>2.958</td>
<td>3.542</td>
</tr>
<tr>
<td>t = 2.0504 (p&lt;.05)</td>
<td>t = 2.4219 (p&lt;.02)</td>
<td>t = 1.296 (n.s.)</td>
<td></td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest (N = 224)</td>
<td>2.536</td>
<td>2.768</td>
<td>3.281</td>
</tr>
<tr>
<td>Non Pretest (N = 17)</td>
<td>2.353</td>
<td>2.824</td>
<td>3.188</td>
</tr>
<tr>
<td>t = .7010 (n.s.)</td>
<td>t = -.2230 (n.s.)</td>
<td>t = .3427 (n.s.)</td>
<td></td>
</tr>
</tbody>
</table>
lower at time one than at time two, the mean in the table is preceded by a minus sign.

In most instances, the differences between the groups for this hypothesis are significant at the 0.001 level. It should also be noted that with one exception the hypothesis is sustained for the subjects who were exposed to opposing stimuli in the form of Court dissents (Group 2) as well as those who were exposed only to the positive stimulus of the majority opinion (Group 1).

The single exception occurs on the variable labeled "manner of election" in the group that was exposed to the dissenting opinions as well as to the majority opinions. This variable, like the congressional district variable, was designed to measure attitude change on the issue of redistricting. The change on the congressional district variable is significant but only at the 0.02 level. This may mean that the dissenting opinions in the reapportionment cases were more convincing than in the prayer cases and as such enabled the students to determine for themselves whether or not to accept the communication and to change their attitudes on this one issue.

The two experimental groups were combined so that an analysis could be made of all subjects exposed to the experimental stimulus. When the two groups were combined, all differences between experimental and control groups were significant.

The minus signs indicate that the shift was in the direction advocated by the Court. The statements in the questionnaire were worded so that a higher response at time two indicated a shift to the Court's point of view (see footnote 27). When the time two score was subtracted from the time one score, a minus mean was obtained for each group. This pattern holds not only for this hypothesis but also for those that follow.

The design of the experiment allows one to examine the possible bias introduced by the questionnaire and the interaction of the questionnaire and the treatment. Table 4 shows that the initial questionnaire had little effect on the response to the posttest. There was no significant difference between the means of the control group which had the pretest and the means of the control group which did not. The means presented in Table 4 are the average response at time two for the pretested groups. There was only one testing for the non-pretested group.

When the means of the pretested experimental group were compared to the means of the experimental group which was not pretested, significant differences were found in two of the three variables. Since these significant differences did not appear in the control groups, one can assume that these differences were not a function of instrumentation but of the varied make-up of the groups. For example, the difference in means on the issue of prayer in schools may be attributed to the fact that there were no Catholics or Jews in the group which was not pretested.
CONCLUSION

Space limitations preclude a full discussion of the data. In summary, the data suggest that while exposure to new information may produce a change in attitude, that change is not related to the demographic characteristics of the individual or group in question.

The characteristics of the recipient apparently have little impact on his receptivity to the communication. This suggests that the message of Court decisions cannot be written for a subgroup of the population because everyone reacts similarly. These conclusions are, however, based on a sample of college students so that there may be no real demographic differences among them. The differences which do exist may be overridden by the similarities.

These findings also suggest that the Court has a potential for influence if proper channels of communication are established. Even if these findings based on a sample of college students overstate the case for the general population, the data do indicate that the potential is available for the Court to at least establish an environment which is not hostile to its decisions. The data suggest that there is a linkage between policy and public support and between policy and public opinions.

Samuel Krislov has recognized the problems that the Court has in communicating its decisions to the public. He says, "The legal technicalities, the modes of procedure, and the self-imposed limits on propriety in discussing their own work all play a role in making the justices little understood by the public." He notes also that the Court gets a bad press because reporters are generally unprepared and unable to interpret Court decisions. These data support the arguments that he makes for more extensive and more accurate reporting of Supreme Court decisions.

Walter Murphy and Joseph Tanenhaus have also recognized the necessity of communication Court decisions to the general public. They argue that

It is thus quite apparent that, all else remaining constant, carrying knowledge of the Supreme Court's specific work and constitutional responsibilities to the potentially accessible inattentive public would have little appreciable effect on the ratio of positive to negative diffuse support. All that could be substantially altered is the proportion of the total population likely to accept Court legitimation of regime change. This, we hasten to add, would be no mean achievement.

This design had avoided a number of methodological problems which have plagued other impact studies. Survey research has been the primary tool used to conduct impact studies. Respondents were asked to recall events which

35 Tables are available from the author.
followed a Court decision. For example, a study dealing with the impact of *Miranda v. Arizona*\(^{38}\) asked defendants if they had been informed of their procedural rights.\(^{39}\) This reliance on recall raises some questions about the accuracy of the responses. The respondents may also hope for a new appeal on the basis of their answers.

Many studies have asked respondents if they follow Supreme Court guidelines.\(^{40}\) It is unrealistic to expect truthful answers in this situation.

Another problem with impact studies is that they often try to infer causality. Sorauf, for example, suggested that the decision in *Zorach v. Clauson*\(^{41}\) contributed to increased enrollment in release time programs.\(^{42}\) He failed to consider any number of other factors which may have contributed to the increase attendance. This type of inference can be made more easily with an experimental design that allows for the control of other factors except the exposure to new information.

Most impact studies are done at one point in time.\(^{43}\) If comparisons cannot be made before and after the decision, little can be concluded about the effect of the decision itself. Even those studies done at two points in time may be invalidated by events which the researcher cannot control. Subjects may be affected by factors other than Court decisions. This quasi-experimental design avoids that danger by using control groups and experimental groups. When there is no change in the control groups, the change in the experimental groups can be attributed to the treatment.

This design is not without its methodological shortcomings. The sample is not representative, and thus it is not possible to generalize on the basis of these data. Secondly, though every effort was made to insure that the stimulus was the same for every experimental group, it is possible that there was some variance in the presentations.

Thirdly, these data do not permit us to claim that the shifts in attitude produced as a result of exposure to Supreme Court decisions will remain for any length of time. The second questionnaire was administered one week after the subjects were exposed to the stimulus. Ideally, the same subjects should be retested at a later point in time.

Nonetheless, this paper does take a first look at the impact of decisions on attitudes and thus contributes to our understanding of Supreme Court decisions and their political role in affecting change in the political system.

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\(^{40}\) Barth, "Perceptions and Acceptance . . . ."


\(^{42}\) Sorauf, "The Impact . . . ."