ISSUES IN USING SURVEY RESEARCH METHODS TO AID JURY SELECTION

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As a key element of the judicial process, the jury is fundamental to the achievement of justice. Traditionally, lawyers have striven to hone their skills in "reading" and communicating with jurors. Intensive questioning and observation have been essential in attempts to identify potential jurors' predispositions. Recently, however, there has been more emphasis on more systematic ways of "reading" jurors and their predispositions. Jury selection (Wenke, 1980), for example, has been aided by various social science research techniques (Nordberg, 1982). One popular approach has been to use simulated, or mock juries to determine how judgments are reached (Lenehan & O'Neill, 1981; Goldman & Marks, 1980; Foss, 1981; Sealy, 1981; Penrod & Hustie, 1979). Such simulation techniques, while useful in specific cases, have provided little generalizable information of use to practitioners (i.e., lawyers) in selecting juries. Given this problem, survey research has been employed in efforts to gain information about the opinions and attitudes of persons in the pool of potential jurors. Such studies usually focus upon opinions and attitudes that have direct bearing on the substantive issues in litigation. The purpose of pre-trial surveys is to examine predispositions among members of the pool of potential jurors in hopes of identifying discernible characteristics that are associated with such predispositions. The identification of these characteristics assists not only in jury selection, but also in the development of courtroom strategies.

This paper addresses the use of survey techniques in jury selection through examining one attempt to gauge both the predisposition of jurors and their knowledge of the legal issue in question. While this paper may be germane to the practitioner, its primary purpose is to add to the general knowledge of how potential jurors might view a case involving sophisticated legal abstractions. This type of case stands in sharp contrast to those involving emotionally charged crimes of violence with racial, ethnic, or religious overtones. While this research could potentially aid practitioners, a more important purpose is to determine whether the potential juror population includes knowledgeable, open-minded people able to weigh complex issues, in a fair and impartial manner. A secondary purpose of the research is to illustrate how pre-trial surveys can be used by lawyers and the judiciary to plan (or recognize) legal strategies used in a particular case.

Methods

In preparation for a large civil trial involving charges of violating federal antitrust, price-fixing statutes, a survey project was conducted among a potential juror population. This population was distributed over a wide geographical area that included urban, suburban, and rural sections. This 1980 random sample of 1,000 registered voters is used as a prototype data base. Employing the Waksberg (1978) variant of random digit dialing, the survey was conducted by supervised, professional interviewers. A range of questions was asked to ascertain attitudes toward price-fixing and attitudes and opinions regarding specific social issues and lifestyles. Additionally, a series of demographic questions concerning the personal background of each respondent was asked.

The opinion questions were subject to factor analysis. Using 28 questions, eight factors resulted in 51% of the total variance accounted for, with the first factor accounting for only 12% of the total variance. It was decided that the factor analysis could be safely considered to demonstrate that few common dimensions were present among these items. These items, along with the demographic variables, were entered into multiple regressions predicting responses to three crucial questions. These questions, used as dependent variables in the regressions, are respondent answers to questions requesting: (1) they assign probable guilt or innocence of companies indicted by the Federal government for price fixing on a scale of 1 (innocent) to 10 (guilty); (2) whether or not they thought a Federal indictment for price-fixing meant that the companies involved were definitely or probably innocent or guilty; and (3) whether or not the respondent understood the phrase "price-fixing."

The 10 point innocent-to-guilty scale (from definitely innocent to definitely guilty) is employed in the first regression. The second employs a 4 point scale from definitely innocent to definitely guilty. The third regression's dependent variable is a dicotomous measure of whether the respondents have any understanding of price-fixing (1), or if they did not (0). The responses to the 4-point guilt-innocence scale are also analyzed by multiple discriminant analysis to analyze possible non-linear association of the responses.

Findings

Table 1 summarizes the multiple regression analyses on the three dependent variables discussed above. The table illustrates the relative salience of demographic and attitudinal items as predictors of potential juror's predispositions toward probable guilt-innocence of companies indicted for price-fixing. It also demonstrates predictors of understanding the concept of price-fixing.

The multiple regression concerning guilt or innocence using the 10-point scale measures illustrate that variety of demographic and attitudinal variables predict potential juror's predispositions. For example, the strongest demographic predictor of "probably innocent" responses was for the respondent to specify "Jewish" as their religion. Concerning behavioral and attitudinal predictors, those people whose favorite television program is CBS's Sixty Minutes tended to make innocent judgments. Those respondents disagreeing with the premise that

price-fixing is a frequent occurence tended to express innocent judgments, as did those people who disagreed that antitrust violators should be jailed, or those who were not suspicious on learning that competitors did favors for each other. Those respondents who disagreed with the statement that the federal government should stay out of business affairs, that Italians are more likely to be involved in crime, or who were not suspicious of competitors lunching together, tended to offer guilty assessments. Respondents' employed as managers or female also tended to make probably guilty judgements. The overall R^2 is a moderate .26.

The second multiple regression in Table 1 employs a 4 point scale: (1) definitely innocent; (2) probably innocent; (3) probably guilty; to (4) definitely guilty. In this regression, the R^2 of .29 was slightly higher than that for the 10 point scale. Rather surprisingly, many of the signs of the demographic and attitudinal predictions were the opposite of those found for the 10 point scale. Perhaps this is indicative of respondents misunderstanding the 10 point scale. For the 4 point scale, it was found that respondents who were not suspicious of competitors lunching together or being close social friends, or who disagreed that Italians were involved in crime, were likely to make an assessment of innocence. Female respondents, and those who are managers, tended to select the innocent response. Those professing no religious preference were likely to express a guilty response.

Multiple regressions for the third item, concerning whether or not respondents understood what price-fixing meant, are also given in Table 1. However, the R^2 of .10, and especially the adjusted R^2 of .02, indicate an inability to predict who might understand what price-fixing actually means. For example, only a few questions show much promise in predicting the understanding of the term price-fixing. For example, response on an item concerning whether or not the respondent would be suspicious if competing firms discussed prices was found to be predictive of understanding price-fixing. Those who responded "not suspicious" were very likely to not understand or misunderstand the concept. In addition, females are less likely to understand what price-fixing means. On the other hand, those respondents who voted for Jimmy Carter for president or whose favorite television show was Sixty Minutes tended to understand what price-fixing meant.

In an additional analysis, a multiple discriminant analysis was performed on the 4 point scale. This was done to see if responses to the guilty or innocent questions were subject to non-linearity. In Table 2, the means, total structure coeffi-cients, group centroids, eigenvalues, canonical correlations, and classification results of the multiple discriminant analysis are presented.

The means for the innocent to guilty categories in table 2 illustrate probable non-linearity in the association of responses to this guilt predisposition scale and the demographic and attitudinal discriminating variables. For example, those who agree that "antitrust violators should be jailed" tend to answer definitely guilty. Similarly, those who agree that Italians are involved in crime, and that price-fixing is a serious problem, are inclined to respond definitely guilty. Those respondents suspicious of competitors lunching together or being close social friends are likely to respond definitely guilty. Respondents who voted for Reagan are unlikely to respond definitely guilty. Respondents who voted for Carter, were black, and or did not attend high school tended to respond definitely guilty. Indicators of non-linearity of responses to this item were also found in such patterns as college graduates being more likely to respond probably--rather than definitely--guilty or innocent. The same was found where older respondents tended to answer definitely innocent or guilty.

The total structure coefficients show the first function to be dominated by the 10 point scale questions and virtually all other items tended to be negative. The second discriminant function shows non-linearity where the group centroid for definitely innocent and probably guilty are essentially identical. This function shows strong correlations with such items as unions are good, Italians are involved in crime, and voted for Reagan, while negative correlations were found for variables measuring suspicion of competitors who divide up their customers or who are close friends, females, voted for Carter, attend church monthly, or being black. The third discriminant function isolates those variables indicative of responding definitely innocent. Key correlations are agreement with items concerning (1) government should stay out of business, (2) competitors lunching together or discussing prices is suspicious behavior, and (3) Italians are disproportionately involved in crime. Other key correlations involved voting for Reagan, being a college graduage, attending church monthly, not being employed as a manager or being black.

The classification results show that 90% of the definitely innocent category was correctly predicted, 58% for probably innocent, 55% for probably guilty, and 68% for definitely guilty. Overall, 57% were correctly classified by the multiple discriminant analysis.

There may be some reason to be concerned about predictions using these equations since 24% of the probably innocent response group were classifies as "probably guilty" and 23% of the probably guilty response group were classified as "probably innocent." The respondents who gave definitely innocent or definitely guilty responses had the highest rate of accurate prediction among the response categories. This finding suggests that individuals in these groups can be identified by common background and attitudinal characteristics. In this case it appears that respondents in these extreme categories may not have an openmind concerning the price-fixing issue.

Discussion

This analysis has attempted to address questions concerning the predictive power of applied survey research and its potential use by legal practicioners for assistance in selecting juries for court cases. The primary emphasis has been to determine what opinions and demographic characteristics would be indicative of open-mindedness in a juror, and whether such a person understands abstract legal technicalities. The analysis illustrates that open-mindedness, as

indexed by respondent predisposition toward guilt or innocence in a particular case, can be accurately predicted by a set of demographic and attitudinal variables. Obviously such predictive information would be useful to both prosecution and defense lawyers choosing among potential jurors in a jury pool. Expecially useful would be the demographic characteristics identified that can be ascertained by observation or during examination of jurors. More importantly, however, the analysis also demonstrates that the understanding of complex legal abstractions such as price-fixing cannot be predicted as precisely. The finding suggests that while lawyers and the judiciary can use pretrial survey data to choose jurors in terms of their predispositions toward guilt or innocence, they would have greater difficulty in using survey data to predict understanding of legal abstractions. This finding coupled with the demonstrated prediction of predisposition toward guilt or innocence has implications for the secondary focus of the paper: how lawyers might use survey research in planning trial strategy. If the level of understanding of the legal issue in question is low among the pool of potential jurors, then lawyers should pursue a trial strategy that chooses impartial or pro-client's innocence (or guilt) during jury selection and concentrate a defense (or prosecution) on educating the jury selected about the legal issue under contention. The aim of such juror education being the creation of an impression (definition) of the legal concepts under litigation that is favorable to the position espoused by the lawyer. However, if the level of understanding of the issue under litigation is found to be high in the jury pool then such a strategy would be inappropriate. The data and analysis also suggest that survey research can be applied by lawyers not only to discover the level of understanding of the issues under litigations, but what the specific nature of possible misunderstanding might be in the potential jury pool.

Conclusion

This research has potentially important implications for both applied survey analysis and basic research concerning citizen involvement as jurors in the legal process. Undoubtedly there are a number of demographic and opinion items that would assist a lawyer in selecting a jury of open-minded individuals or persons with a predisposition toward guilt or innocence. Should survey research be used for these purposes? By whom? For whom? Should opposing counsul and the courts have access to survey research used for jury selection purposes or to prepare for a trial? If the practice of pretrial surveys became widespread, should it be a "right" of the indigent? These are questions that practicioners of survey research and the judiciary must decide. Of greater importance, perhaps, is the implication that many potential jurors do not understand certain legal concepts in the antitrist field, and that this ignorance seems to be widespread in the population of potential jurors. Given this finding and the concept "jury of peers" inherent in our legal system, how does one find "peers" who understand complex legal issues and should survey research be used in this process?

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Table 1

Multiple Regressions of Opinions about Innocence or Guilt

With Selected Attitudinal and Demographic Variables

VARIABLES	UNSTANDARDIZED COEFFICIENTS			STANDARDIZED COEFFICIENTS		
	Guilty (10 pts)	Guilty (4 pts)	Price-Fixing Under-stood	Guilty (10 pts)	Guilty (4 pts)	Price-Fixing Under-stood
Attitudinal Variables						
Unions Good	.09		.008	.03		.01
Law Strictly Enforced	-.01	-.04		-.004	-.05	
Local Bus. Not Likely Cheat	.04	-.04	.02	.01	-.04	.01
Anti-Trust Violator to Jail	-.22	-.005	.02	-.05	-.005	.02
Govt. Stay Out of Business	.20	-.05	-.03	.06	-.05	-.04
Important Bible	-.13	.03	.01	-.04	.04	.01
Italians in Crime	.20	-.10	-.01	.04	-.08	-.01
Frequency Price-Fixing	-.28			-.08		
Price-Fixing Serious Problem		-.05	-.01		-.05	-.01
Hard Fixing Prices	.13	-.05	-.06	.03	-.04	-.06
Competitors: Reciprocate Favors	-.25	-.005	-.005	-.07	-.005	-.006
Lunch Together	.17	-.10	-.004	.05	-.11	-.006
Warn Angry Customers	.02		-.006	.007		-.008
Not Try Other's Customers	.04	.006	.01	.01	.008	.02
Swap Customers	-.04	.004	-.02	-.01	.006	-.03
Divide-Up Customers	-.06	-.02	-.009	-.02	-.02	-.01
Prices Nearly Identical	-.06	-.04	-.02	-.02	-.04	-.03
Discuss Prices	-.01	.06	-.08	-.005	.07	-.12
Higher Prices to Competitors	.01	-.05	.02	.005	-.06	.03
Close Social Friends	.08	-.11	-.02	.02	-.09	-.02
Indicted Companies Guilty	1.66		.02	.45		.02
Indicted Companies Guilty		.12	-.01		.43	-.07
Demographics						
Female	.38	-.09	-.14	.08	-.07	-.14
Married	-.13	-.06	.03	-.03	-.05	.03
Employed Full-Time	.11	-.04	.008	.02	-.03	.008
Housewife	.11	.02	.05	.02	.01	.03
Manager	.79	-.21	.06	.08	-.08	.03
Sales	-.15	.05	-.07	-.01	.02	-.03
Voted for Reagan	.49	-.08	.05	.10	-.06	.05
Voted for Carter	.44	-.06	.07	.09	-.05	.07
Religion:						
None	-.81	.25	-.08	-.08	.10	-.04
Catholic	-.30	.06	-.04	-.04	.03	-.02
Jewish	-1.40	.15	-.14	-.09	.04	-.04
Baptist	-.35	-.01	-.09	-.08	-.007	-.09
Methodist	-.37	.06	-.08	-.06	.04	-.06
Presbyterian	-.59		-.18	-.06		-.08
Episcopal	-.57	.18	-.11	-.05	.06	-.04
Attend Church:						
More Than Weekly	-.38	.10	-.009	-.06	.06	-.007
Monthly	-.26	.04	-.02	-.05	.02	-.02
Never	-.14	.05	.03	-.02	.03	.02
Interest in Current Events	.28	-.04	.07	.04	.08	.04
Favorite TV:						
News	.17	-.08	.04	.02	-.04	.02
60 Minutes	-.26	.009	.08	-.04	.005	.06
Football	.37	-.11	.03	.05	-.06	.02
Sports	.51	-.05	-.03	.06	-.02	-.02
Enjoy Reading	-.10	-.03	.02	-.02	-.02	.02
Regular TV News Viewer	-.12	.03	.05	-.02	.02	.04
Union Member	-.25	.03	-.04	-.03	.02	-.02
Black		-.02	.06		-.01	.05
Constant	.87	3.39	.74			
R^2	.26	.29	.10	.26	.29	.10
Adjusted R^2	.20	.23	.02	.20	.23	.02
S.E.E.	2.02	.53	.49			

Table 2

Multiple Discriminant Analysis of Opinions about Innocence or Guilt

With Selected Attitudinal and Demographic Variables

VARIABLES	MEANS					Univariate F	P	TOTAL STRUCTURE COEFFICIENTS FUNCTIONS		
	Def. Inno.	Prob. Inno.	Prob. Guil.	Def. Guil.	Total			#1	#2	#3
Attitudinal Variables										
Unions Good	2.45	2.24	2.36	2.06	2.31	3.17	.02	-.03	.36	-.03
Local Bus. Not Cheat	2.80	2.87	2.84	2.61	2.84	2.73	.04	-.13	.16	.20
Anti-Trust Violator to Jail	2.15	2.28	2.16	2.04	2.19	3.68	.01	-.18	-.08	.22
Govt. Stay Out of Business	2.35	1.98	1.97	1.96	1.98	1.02	.38	-.05	.01	-.27
Importance Bible	2.15	2.20	2.19	2.04	2.18	.58	.63	-.05	.10	.10
Italians in Crime	2.90	3.05	3.02	2.67	3.00	6.37	.00	-.19	.26	.35
Price-Fixing Serious Problem	2.10	2.23	2.03	1.83	2.08	3.59	.01	-.18	-.08	.17
Heard of Price-Fixing	1.60	1.44	1.36	1.32	1.39	2.34	.07	-.14	-.09	-.12
Competitors:										
Lunch Together	3.10	2.45	2.29	2.05	2.34	8.23	.00	-.27	.01	-.34
Warn Unhappy Customers	2.70	2.41	2.32	2.20	2.35	2.17	.09	-.14	-.001	-.14
Divide-Up Customers	2.30	2.10	1.94	2.02	2.00	2.22	.08	-.10	-.21	-.14
Prices nearly Identical	2.70	2.54	2.39	2.39	2.44	2.36	.07	-.13	-.17	-.09
Discuss Prices	2.50	2.03	1.98	2.10	2.01	1.61	.18	-.04	-.11	-.33
Higher Prices to Comp.	1.90	1.75	1.73	1.41	1.72	2.73	.04	-.14	.19	.03
Close Social Friends	1.50	1.51	1.36	1.32	1.40	4.56	.00	-.19	-.20	.05
Indicted Companies Guilty	3.15	4.56	6.10	8.15	5.73	59.64	.00	.79	.12	-.01
Know Price-Fixing Meaning	.40	.51	.51	.49	.51	.19	.90	.00	.01	.13
Demographics										
Female	.40	.58	.52	.63	.55	1.31	.27	.01	-.21	.13
Married	.60	.57	.57	.46	.56	.59	.62	-.06	.10	.03
Employed Full-Time	.80	.72	.70	.59	.70	1.17	.32	-.10	.08	-.008
Housewife	.10	.09	.12	.07	.11	.71	.55	.02	.17	.02
Manager	.20	.06	.06	.00	.06	2.05	.11	-.11	.14	-.22
Voted for Reagan	.30	.36	.40	.15	.37	3.55	.01	-.08	.32	.21
Voted for Carter	.40	.42	.34	.68	.39	6.61	.00	.09	-.48	-.17
Religion:										
None	.00	.03	.06	.07	.05	1.09	.35	.10	.08	.05
Catholic	.20	.09	.11	.07	.10	.53	.66	-.03	.09	-.15
Jewish	.00	.02	.02	.00	.02	.35	.79	-.03	.06	.12
Presbyterian	.00	.04	.06	.02	.05	.87	.46	.02	.16	.14
Episcopal	.00	.04	.03	.00	.03	.89	.45	-.07	-.002	.18
Attend Church:										
More Than Weekly	.10	.11	.16	.12	.14	.98	.40	.05	.17	.04
Monthly	.00	.26	.20	.32	.22	2.55	.06	-.03	-.27	.24
Interested In Current Events	.90	.93	.93	.83	.92	1.98	.12	-.08	.21	.17
Favorite TV:										
News	.20	.13	.11	.15	.12	.55	.65	-.02	-.11	-.15
60 Minutes	.10	.16	.17	.05	.16	1.56	.20	-.05	.20	.18
Football	.20	.14	.11	.10	.12	.80	.49	-.08	-.07	-.08
Sports	.10	.04	.08	.05	.07	1.19	.31	.04	.20	-.09
Union Member	.00	.07	.08	.17	.08	1.87	.13	.13	-.12	.03
Black	.30	.25	.18	.44	.22	5.75	.00	.05	-.45	-.24
No High School	.00	.04	.03	.15	.04	5.65	.00	.12	-.23	-.04
College Graduate	.08	.21	.21	.08	.20	2.28	.08	-.06	.22	.26
Age	40.62	37.57	37.91	44.37	38.28	3.51	.02	.14	-.14	.26

GROUP CENTROIDS

	#1	#2	#3
1) Definitely Innocent	-1.80	.24	-1.70
2) Probably Innocent	-.74	-.32	.10
3) Probably Guilty	.22	.23	.02
4) Definitely Guilty	1.76	-.85	-.25

EIGENVALUES | .44 | .11 | .05

CANONICAL CORRELATIONS | .55 | .32 | .22

PREDICTED GROUP (%)

	(N)	Def. Inn. %	Prob. Inn. %	Prob. Guil. %	Def. Guil. %
1) Def. Inno.	10	90	0	10	0
2) Prob. Inno.	191	13	58	24	5
3) Prob. Guilty	407	6	23	55	17
4) Def. Guilty	41	2	7	22	68
Don't Know/No Ans	181	14	33	42	12

Percent Correctly Classified = 57%