PUBLIC OPINION AND THE DEATH PENALTY IN AUSTRALIA*

JONATHAN KELLEY
JOHN BRAITHWAITE
Research School of Social Sciences
The Australian National University

We examine correlates of public support for capital punishment using data from a large representative national sample of Australians. Personal fear of crime does not explain support for capital punishment, but rating crime fighting as a high national priority does. A finding that women are less supportive of the death penalty than men but more supportive of stiffer sentences raises significant theoretical issues for feminist criminology. Certain aspects of conservatism are unrelated to support for capital punishment, but others are important. Aspects that matter concern resentment toward outgroups, especially Aborigines and non-English-speaking migrants; this finding suggests that criminals can be viewed as yet another outgroup. We advance an elite leadership hypothesis; according to this argument, when political elites abolished capital punishment in the past, it was not in response to pressure from public opinion, but in spite of it. The act of abolition then shifted public opinion away from support for capital punishment. This important hypothesis, originally proposed by Zimring and Hawkins (1986), is supported by the Australian data, although the effect is much weaker than they proposed. The analysis suggests a number of new directions for future research.

The social factors underlying public support for capital punishment have never been studied in Australia; in other countries they have been examined only in terms of a limited range of demographic variables. This paper examines for the first time a variety of theoretically promising attitudinal predictors, examines the impact of standard demographic variables on Australians' support for the death penalty, and tests an elite leadership theory of support for capital punishment.

ATTITUDINAL CORRELATES OF SUPPORT FOR CAPITAL PUNISHMENT

In the North American literature, support for capital punishment is often linked to the personality characteristic of authoritarianism and to conservative attitudes generally (Boehm 1968;

* We wish to thank Barbara Bank, M.D.R. Evans, Ngaire Naffine, and Garth Pilkington for helpful suggestions.

JUSTICE QUARTERLY, Vol. 7 No. 3, September 1990

Comrey and Newmayer 1965; Gelles and Strauss 1975; Hamilton 1976; Jurow 1973; Rokeach and McClellan 1969; Rokeach and Vidmar 1973; Snortum and Ashear 1972; Taylor, Schepple, and Stinchcombe 1979; Tyler and Weber 1982; Vidmar and Dittenhoffer 1981; Vidmar and Ellsworth 1974). Results are mixed, however (see Bohm 1987; Singh and Jayewardene 1978). We suspect this is the case because conservatism is not a single homogeneous dimension but a complex of overlapping, yet distinct, elements that require separate treatment (see Kinder 1983: 393-97 and the literature cited there for North America, Kelley 1988 for Australia, and for international comparisons Jowell, Witherspoon and Brook 1989, Chs. 1, 3, 4). In this study we disaggregate conservatism into some of its main dimensions—party identification, economic conservatism, opposition to the welfare state, views on human nature, opposition to unions, attitudes to groups (Aborigines and non-English-speaking migrants in the Australian context)—and then estimate their separate effects on support for the death penalty.

Hostility to Outgroups

Rather than a general conservatism factor, a generalized hostility to outgroups may explain support for capital punishment. The idea is that criminals are an outgroup (Gelles and Strauss 1975) and that there is a general predisposition toward persecution of outgroups which includes support for capital punishment.

Pessimism about Human Nature

Clark, Cullen, and Mathers (1985) found a substantial (negative) relationship between support for the rehabilitation of criminals and support for capital punishment (see also Skovron, Scott and Cullen 1989). Another scale, measuring a classical versus a positive view of crime causation, was also strongly associated with support for capital punishment; those who located the cause of crime in the offender's will were more likely to agree with capital punishment than those who located the causes of crime in the social environment (Cullen et al. 1985). Although attitude items to tap support for rehabilitation and classicism-positivism are not available in the present study, we can measure the more general notion of "pessimism about human nature."

This construct has another important theoretical link—to the Marxist tradition. In the writings of Frederick Engels (1969) on crime and in the work of the Dutch Marxist Willem Bonger (1916), we see the idea that the selfishness ("egoism") engendered under capitalism—the way in which the propensity to take advantage of

others is built into capitalist relations of production—is manifested in the brutish way in which criminals treat others and criminals themselves are treated. Accordingly we hypothesize that a pessimistic view of human nature as selfish and brutish will predict support for the death penalty.

Political Conservatism

In the United States, Republicans generally have been more supportive of capital punishment than Democrats (Lipset 1989: 33; Vidmar and Ellsworth 1974), although the difference is not large. It is nonetheless plausible to suppose that this difference reflects a general affinity between political conservatism and punitiveness, rather than merely something peculiar to the U.S. party situation. It is at least equally worth testing whether other politically salient aspects of conservatism are linked to views on capital punishment. In Australia, as in other English-speaking countries, the key elements are economic conservatism (attitudes to government regulation, ownership, and control), attitudes to the welfare state (spending on pensions, unemployment benefits, and welfare), and attitudes to trade unions (Kelley 1988: 71-74; Kelley and McAllister 1985).

Christian Belief

Religious belief and church attendance cut across other aspects of conservatism. One might entertain an analysis based on Christianity as a conservative, authoritarian world view, intolerant of deviation from the law, which would lead to the prediction that Christians would be punitive in general and would support the death penalty in particular. Yet a reverence for human life also appears to be implicit in many elements of Christian theology (one element of Christians' strong opposition to abortion: Kelley and Evans 1988: 12-18), which would predispose them against capital punishment specifically. Thus there are plausible but opposing hypotheses about religion. Skovron et al (1989) found religiosity to be related negatively to support for the juvenile death penalty in one of their samples, but not in another (see also Skovron, Scott, and Cullen 1988: 161).

Mass Media

Criminology contains a strong intellectual tradition inspired by Stanley Cohen's (1973) work on folk devils and moral panics, specifically the role of the mass media in fueling a kind of blood lust for criminals in the general public: mass media degradation ceremonies that exaggerate and dramatize the evil of offenders

who are beyond redemption are said to play an important role in engendering retributive attitudes. The relationship between exposure to the mass media and support for capital punishment has not been explored empirically, however. We will make a preliminary attempt to do so.

Fear of Crime

Fear of crime is another attitude that one plausibly might expect to be associated with punitiveness in general and support for capital punishment in particular. In some studies it is so associated (Seltzer and McCormick 1987; Thomas 1977; Thomas and Foster 1975), but other North American studies have found little or no relation (Cullen et al. 1985; Stinchcombe et al. 1980; Taylor et al. 1979; Tyler and Weber 1982; Vidmar 1974; but see Langworthy and Whitehead 1986). American research suggests that there is little association between personal criminal victimization and attitudes to punitiveness generally (Cullen et al. 1985; Langworthy and Whitehead 1986; Taylor et al. 1979) or to capital punishment specifically (Cullen et al. 1985; Rankin 1979; Smith 1975; Tyler and Weber 1982). Nevertheless, the theoretical case for the importance of fear of crime is so strong that we cannot assume that the equivocal American results will be replicated in Australia.

DEMOGRAPHIC VARIABLES

Gender Differences

Two contradictory hypotheses about gender can be advanced. The first is that women will feel more vulnerable to crime than men and therefore more fearful of it (Langworthy and Whitehead 1986; Braithwaite, Biles, and Whitrod 1982); as a consequence women will be more supportive of punitive measures against crime in general and supportive of capital punishment in particular (Miler, Rossi, and Simpson 1986).

The second hypothesis is that because women in patriarchal societies have the role of securing social integration in the family, values like rehabilitation, forgiveness, and repentance are more prominent among them; therefore they will be more supportive of reintegrative forms of social control than of punitive forms (J. Braithwaite 1989; Hagan, Simpson, and Gillis 1979). American data tend to support this hypothesis (Cullen et al. 1985; Skovron et al. 1989). Further, females are more likely to be both objects and instruments of more integrative forms of social control, whereas males are more likely to be both objects and instruments of more punitive forms (Hagen et al. 1979); for example, in schools males

will be more likely than females both to administer and to receive corporal punishment. So again, women should be less supportive of capital punishment. Thus we have opposing predictions about support for capital punishment among women.

Age

The first argument in the gender case also applies to age: old age increases the subjective sense of vulnerability to crime (Braithwaite et al. 1982; see also Appendix Table 3 below) and therefore might increase support for tough punishment and the death penalty. American data, however, do not support this hypothesis (Cullen et al. 1985; Skovron et al. 1989).

Place of Residence

In many nations there are substantial differences between urban and rural areas; urban areas have, among other things, generally higher rates of criminal victimization (van Dijk, Mayhew, and Killias 1989). Therefore one might well expect urban residents to be more punitive in general and more supportive of the death penalty specifically.

Marital Status

So far we have taken a very individualistic perspective, arguing that those especially vulnerable to, or fearful of, crime might be expected to be more punitive. Yet people are concerned not only with themselves but also with others, especially those near and dear to them. Married people have more such hostages to fortune—at least a spouse and often children as well—and we therefore might predict that they would be apprehensive about crime and more punitive toward criminals.

Social Status

One hypothesis is that persons in higher classes generally are more humane and less coercive (as reflected, for example, in their values and child-rearing practices: Kohn 1977: xxvi-xxxi, 91-107); however, they will be less punitive toward criminals and less supportive of the death penalty specifically. In the United States, however, class is unrelated to either punitiveness or attitudes to the death penalty (Davis 1982: 581; van Dijk et al. 1989: 42).

THE ELITE LEADERSHIP HYPOTHESIS

Capital punishment is an intriguing political issue because of the persistent conflict between what the public wants and what

the political elite does. Far from courting public opinion, as the cynical view of politics would have it (e.g., Sartori 1976), or adopting the position of the median voter, as would be rational in their own self-interest (Downs 1957), political elites of both left and right have openly spurned public opinion. Whenever the death penalty has been abolished, it has been against the wishes of the majority of the electorate (Zimring and Hawkins 1986). This phenomenon is not a rare aberration; nearly all Western industrial countries have abolished the death penalty in recent decades. Even in the exceptional case of the United States, 25 of the states that impose capital punishment have not actually executed anyone for more than 20 years (Culver 1989). It is difficult to think of a policy arena that poses a challenge to pluralist political theory so starkly, and so consistently across nations.

No one has explained satisfactorily why politicians of all political persuasions have defied public opinion so flagrantly. Yet whatever their reasons for abolishing the death penalty, the consequences of their actions raise important questions. Zimring and Hawkins (1986) offer an elite theory as an alternative to a pluralist analysis, arguing that political elites lead public opinion rather than following it:

> Once abolition is accomplished, the death penalty, though previously the subject of widespread debate, ceases to be a pressing public issue. Furthermore, after abolition support for the death penalty diminishes (Zimring and Hawkins 1986: 13).

If this statement is true, it is very important. It harks back to an older, less cynical generation of political theorists who saw politicians as leaders who make principled stands, rather than the modern view of politicians as cynical and self-interested, pandering to the latest poll results in hope of popularity and office. But is it true?

Zimring and Hawkins support their claims with striking but very limited evidence from the Federal Republic of Germany. A public opinion poll held in 1948 found 74 percent of the public in favor of the death penalty, but nonetheless it was abolished a year later. Public opinion then shifted against the death penalty; by 1980 support had fallen to only 26 percent. "In this context," argue Zimring and Hawkins (1986: 22), "public opinion is invariably led, not followed." Nor are Zimring and Hawkins alone in their claim: "In the case of capital punishment legislators lead from the front" (Buxton 1973: 244).

In broad historical terms, a case can be made that in the seventeenth and eighteenth centuries political elites, through word

and deed, aggressively legitimated horrific and frequent use of capital punishment (Foucault 1977). In contrast, the deeds and even the words of twentieth-century elites, if not delegitimating capital punishment, certainly convey comparative squeamishness toward it as a "final solution" to crime. Implicit in Zimring and Hawkins's view is the claim that abolition is a symbolic act of some significance in a historical process of delegitimation. Moreover, the evidence suggests that "elite leadership" is not limited to the capital punishment issue. For example, Paul Burstein demonstrated that antisegregation legislation consistently preceded declines in mass racism in the postwar period in the United States (1985).

If elite leadership encourages ordinary people to support abolition, then it is reasonable to expect in jurisdictions where the political elite abolished capital punishment earlier, the general public will be less supportive of the death penalty. The longer the period since abolition, the higher the proportion of the populace reared in a world where the "natural" order of things did not include the state's power to kill its citizens, and the more years citizens have of a status quo which delegitimates the state's authority to execute. Clearly, however, the kind of comparison Zimring and Hawkins (1986) make for Germany is an unpersuasive test of the hypothesis. The fundamental difficulty is that they attribute the changes to one event, namely politicians' abolition of the death penalty, but many other changes took place during the same period. Educational levels increased; dramatic economic and political change occurred; attitudes on a wide range of "moral" issues became more tolerant in the 1960s and 1970s. Views on the death penalty may well have shifted as part of these wider social and political movements.

One of the objectives of this article is to use some of the strategic advantages that arise from the historical pattern of abolition across Australian states to test the elite leadership hypothesis with more stringent statistical controls. First, however, we must summarize that history.

ABOLITION OF CAPITAL PUNISHMENT IN AUSTRALIA

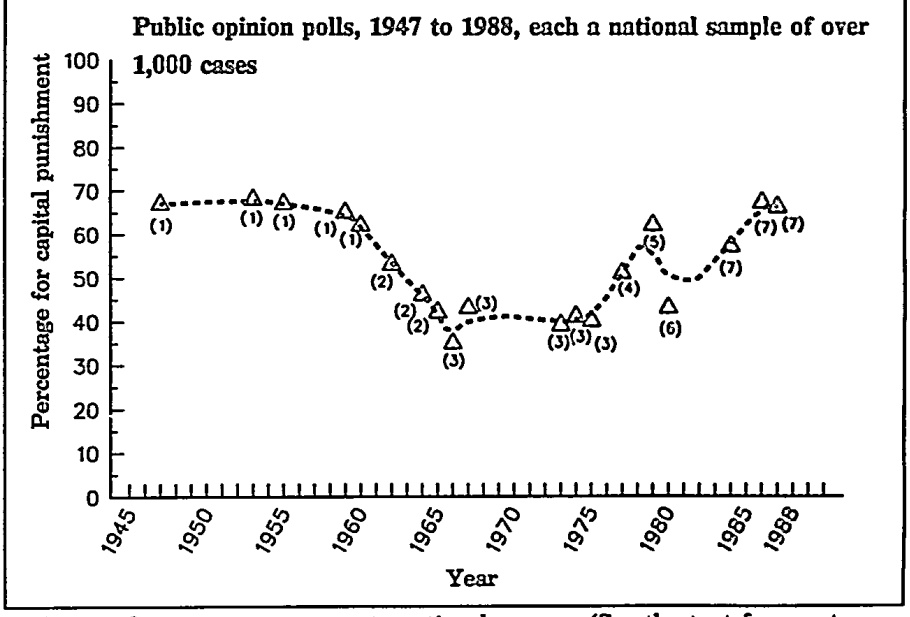
Most Australian jurisdictions abolished capital punishment between 1955 and 1976 (Table 1). Figure 1 shows that opinion polls indicated a substantial decline in public support for the death penalty to the mid-1960s, followed by stability until the mid-1970s. Polls taken since then suggest some revival of support for capital punishment over the next decade. Overall, the trends suggest the same U-curve that one sees in the American poll results; the only difference is that the American U-curve started its upward rise

Table 1. Number of Executions Carried Out in Australian Jurisdictions since 1880.

Year	1880s	1890s	1900s	1910s	1920s	1930s	1940s	1950s	1960s	1970s	1980s	Last execution
New South Wales	26	67	12	5	2	4	1	(abol 1955)	—	—	—	1940
Victoria	14	19	5	5	2	5	1	3	1	(abol 1975)	—	1967
Queensland	19	12	16	3	(abol 1922)	—	—	—	—	—	—	1913
Western Australia	4	9	18	7	5	2	—	2	4	—	(abol 1984)	1964
South Australia	2	4	4	4	4	—	2	3	1	(abol 1976)	—	1964
Tasmania	5	1	—	2	1	1	1	—	(abol 1968)	—	—	1946

Source: Adapted with permission from Potas and Walker (1987)

Figure 1. Support for Capital Punishment in Australia



Each triangle represents a separate national survey. (See the text for exact question wording.) The trend is a moving average; the blip near 1980 is probably due to changes in question wording.

about a decade earlier, in the mid-1960s (Finckenauer 1988; Wallace 1989: 56-57).

It is difficult, however, to say anything precise about the Australian results because the wording of the questions varies significantly. These variations matter, as can be seen from the mixed results for the three studies conducted in the later 1970s—numbers 4, 5, and 6 in Figure 1 (see generally Williams, Longmire, and Gulick 1988). Each study uses different wording. Nonetheless, these are the best data available, and the broad trends are likely to be approximately correct.

The question wording for the polls summarized in Figure 1 is as follows:

> (1) In your opinion, should a man convicted of brutal murder be hanged or not?
>
> (2) If someone is convicted for murder, what should be the penalty?
>
> (3) Do you think the penalty for murder should be hanging, life imprisonment, or something else?
>
> (4) Would you approve or disapprove of the reintroduction of death penalty for this type of crime?
>
> (5) Do you want to see the death penalty kept or abolished?
>
> (6) In your opinion, should the penalty for murder be death or imprisonment?

(7) Favor or oppose . . . the death penalty for persons convicted of murder.

Questions 1, 2, 3, 4, and 6 are taken from 15 Morgan/Gallup polls (all national samples of 1,000 cases or more); 5 comes from Don Aitkin's Australian Political Attitudes survey (a national sample of 2,016). Question 7 is taken from three successive National Social Science Surveys held in 1984 (N=3,012), 1986 (N=1,528), and 1987 (N=1,663); all are representative national samples. The results reported in Figure 1 are the percentages favoring the death penalty; the rest (not explicitly shown) are opposed or have no opinion; the "no opinion" group averages about 10 to 15 percent of the total.

METHODS

Sample

This analysis is based on the first round of the National Social Science Survey, a representative random sample of 3,012 people aged 18 and over throughout Australia collected in 1984.

Data were collected in face-to-face interviews in urban areas (localities of 10,000 or more) and by a mail questionnaire in rural areas (because of the great cost of face-to-face interviews there) and then were merged into a single data set. The urban data, based on an area probability sample, were collected by a respected private firm, Reark Research. In all, 2,197 interviews were collected. The response rate was 58 percent, a satisfactory figure for a lengthy attitudinal survey in modern conditions. Indeed, this response is substantially better than in the most recent cross-national surveys on crime (van Dijk et al. 1989: Annex A), which obtained a completion rate averaging 41 percent in 14 nations. The rural subsample was drawn at random from the electoral rolls (enrollment is compulsory) and therefore is a simple random sample of citizens; noncitizens are necessarily omitted (although included in the urban survey), but are few in rural areas. The mail questionnaire was identical to the urban interview schedule save for the necessary differences between a paper-and-pencil layout and a face-to-face interview. We sent four separate follow-up mailings, one to everyone (a week after the questionnaire was first sent out), and three at various intervals thereafter to those who had not yet answered. In the end, the completion rate was a very satisfactory 59 percent, as high as for the face-to-face interviews. There were 815 respondents in all. The urban and the rural subsamples were merged into a single file. Comparison with the census suggests that the sample is representative of the Australian population as a whole; comparison with subsequent national samples

conducted entirely by mail shows that method (mail versus interview) makes no difference (see Kelley and Dean 1988: xxi-xxii). The data are available for re-analysis from the Social Science Data Archive, the Australian National University, Canberra (Study SSDA 423).

Measurement of Variables

The key dependent variable is a standard question on support for the death penalty (see Table 2). In the regression analyses, it is convenient (without loss of generality) to score answers on a "points out of 100" basis: respondents who strongly support the death penalty receive a score of 100; those who oppose it 75 points; the undecided 50; those opposed 25; and those strongly opposed 0 points. This scoring system differs only cosmetically from Likert-type scoring (1 to 5) and produces identical standardized coefficients (R^2, standardized regression coefficients, and the like), but it makes *metric* regression coefficients more easily interpretable. Thus, for example, we will find that education reduces support for capital punishment by an amount corresponding to a standardized regression coefficient of −.18 (according to either "points out of 100" scoring or Likert scoring), the equivalent of 2 points out of 100 (on the "points out of 100" system) or .08 out of 5 (on the Likert system). The "two points out of 100" reading is intuitively easier to understand. Furthermore, it can be glossed gracefully as a "2 percent" decline (although "two points out of 100" is more strictly accurate). It is worth noting that an analogous regression analysis using a dichotomized version of the death penalty item (scored "strongly support" or "support" = 1; undecided = 0.5; "opposed" or "strongly opposed" =0) leads to exactly the same substantive conclusions (further details are available on request).

It is also useful in several contexts to distinguish a *generally* punitive stance toward criminals from support specifically for the death penalty. We measure general punitiveness by a standard question on support for stiffer sentences for criminals (Table 3). The idea is that punitiveness measures a more general predisposition: for jail rather than fines or community service; for longer sentences rather than shorter; and, in the extreme, perhaps for death rather than imprisonment. Many hypotheses in the literature concern general punitiveness as much as the death penalty specifically. For example, arguments about conservatism, the authoritarian personality, and outgroup hostility all imply links to punitiveness in general; the death penalty is only one instance of the general pattern. Therefore it is best to test both the general

Table 2. The Capital Punishment Question

"I am going to read out some things the government might do. Some people are in favor of them and others oppose . . . . The death penalty for persons convicted of murder?"

(100)	Strongly in favor	29%	
(75)	In favor	28%	
(50)	Undecided	16%	
(25)	Opposed	17%	
(0)	Strongly opposed	9%	
	(No answer)	1%	
	Total	100%	(N=3012)
	Mean[a]	63	

Source: 1984 National Social Science Survey

a Mean was computed by scoring "strongly in favor" as 100 points, "in favor" as 75, etc. This scoring, of course, was not shown to respondents to the questionnaire.

prediction and the specific prediction about the death penalty: unless both predictions hold, the theory must be in doubt. Other predictions, however, notably the elite leadership hypothesis, are specific to the death penalty and need not hold for punitiveness in general. Indeed, they may be in doubt unless they *fail* to hold for punitiveness in general (see the discussion of the elite leadership hypothesis in the "Regression Models" section below, particularly the discussion of "Factor X").

The details of the independent variables included in the analysis are summarized in Appendix Table 1 together with the wording of items and response categories used in attitude scales. Inter-item correlations and reliabilities on all attitudes scales are included in Appendix Table 2. Some items are reversed in scoring to ensure that all items in a scale have the same sense. For example, this reversal ensures that a high score on the first question on trade unions—about "confidence"—and a high score on the third question—"too much power"—both indicate hostility to unions, rather than one score's indicating hostility and the other support. This procedure is standard and necessary (e.g., Lin 1976: 183-185). Furthermore, in some scales (for example, the Christian belief scale) all items are reversed, purely for clarity of presentation. The procedure merely reverses the sign of the regression coefficient (for example, it changes the Christian belief coefficient from +.01 to −.01 in Equation 3). We chose the reversals so that most scales are scored with conservative high and liberal low; thus the results are easier to follow. Appendix Table 3 presents a correlation matrix, means, and standard deviations for all variables in the analysis. This table also shows that these variables present no serious problems of multicollinearity.

Table 3. The Sentencing Question

"Giving stiffer sentences to people who break the law?"

(100)	Strongly in favor	38%	
(75)	In favor	40%	
(50)	Undecided	16%	
(25)	Opposed	4%	
(0)	Strongly opposed	2%	
	(No answer)	1%	
	Total.	100%	(N=3012)
	Mean[a]	77	

Source: 1984 National Social Science Survey

a Mean was computed by scoring "strongly in favor" as 100 points, "in favor" as 75, etc. This scoring was not shown to respondents to the questionnaire.

Abolition scale. Testing the elite leadership hypothesis requires coding of whether the respondent lives in a state that abolished capital punishment long ago or more recently. Even so there are many plausible but different ways of operationalizing the concept of abolition. The simplest focuses on the legislative act of abolition, but reliance on this point alone would be unwise and has raised objections. For example, 15 years elapsed between the last execution in New South Wales (the largest Australian state) and formal abolition. De facto abolition may be just as important as *de jure* abolition, or more important. Further, one can make an equally strong case that the *number* of executions over a given period is the critical consideration, if only because the number greatly influences coverage in the mass media. Similarly, a good case can be made for the number of executions *per capita* because each execution in a small community would have more impact than an execution in a large one.

Rather than relying on any one of these approaches, it is better to average all four to obtain a more comprehensive measure. Table 4 shows that these four ways of operationalizing the independent variable are highly intercorrelated; in the absence of any definitive rationale for preferring one measure over the others, we formed a scale giving equal logical weighting to each. Specifically, the scale is a simple additive (Likert) scale summing the date of *de jure* abolition in respondent's state of residence (divided by its standard deviation, 18.6 years), plus date of last execution in the state (divided by its standard deviation, 18.1 years), plus number of executions since 1940 in the state (divided by its standard deviation, 2.4), plus executions per capital since 1920 in the state (divided by its standard deviation). By dividing each component by its standard deviation, we give each one equal weight in

Table 4. Correlations Among Measures of Government Abolition of the Death Penalty for Six Australian States

Abolition Measures	Correlations 1	2	3	4
1. Year of abolition	1.00			
2. Year of last execution	.97	1.00		
3. Number of executions since 1940	.81	.90	1.00	
4. Executions per capita since 1920	.72	.59	.65	1.00

The abolition scale used in subsequent analysis is the average of (1), (2), (3), and (4), with each weighed by the inverse of its standard deviation to give equal logical weight to each. Reliability (Spearman-Brown) is .93.

the final scale. Separate analyses considering each component separately rather than the combined scale lead to results very similar to those obtained by using the scale.

Regression Models

The models, given in Equations 1 to 3 below and in Table 5, are estimated by ordinary least squares regression. The variance explained ranges from 6 percent (for demographic and class variables alone) to 25 percent (for all three sets of variables). A parallel analysis of support for stiffer sentences is also given.

Total effects versus direct effects. We estimate three models. The first includes the demographic and class variables, which we assume are causally prior to the attitudinal and behavioral variables:

$$\text{Death penalty} = a + b_1 \times \text{Sex} + b_2 \times \text{Age} + b_3 \times \text{Rural} + b_4 \times \text{Metro} + b_5 \times \text{Married} + b_6 \times \text{Education} + b_7 \times \text{Status} + b_8 \times \text{Income} + e_1 \quad \text{(Eq. 1)}$$

This equation gives the *total* effects of demographic and class variables, including those which operate indirectly through attitudes; this is the appropriate estimate for demographic effects (Alwin and Hauser 1975). The second equation gives the total effects of the attitudinal and behavioral variables, net of demography and class, and is the appropriate estimate of their influence:

$$\text{Death penalty} = a + b_1 \times \text{Sex} + b_2 \times \text{Age} + b_3 \times \text{Rural} + b_4 \times \text{Metro} + b_5 \times \text{Married} + b_6 \times \text{Education} + b_7 \times \text{Status} + b_8 \times \text{Income} + b_9 \times \text{Party Id} + b_{10} \times \text{Econ Cons} + b_{11} \times \text{Unions} + b_{12} \times \text{Soc Serv} + b_{13} \times \text{Aborig} + b_{14} \times \text{Migrants} + b_{15} \times \text{Hum Nature} + b_{16} + \text{TV} + b_{17} \times \text{Christian B} + b_{18} \times \text{Church Att} + b_{19} \times \text{Abolition Scale} + e_2 \quad \text{(Eq. 2)}$$

The third model adds variables measuring attitudes to crime itself, which are assumed to be causally dependent on demography, class, attitudes, and behavior. It gives the appropriate estimates of the effects of attitude to crime (Alwin and Hauser 1975):

$$\text{Death penalty} = a + b_1 \times \text{Sex} + b_2 \times \text{Age} + b_3 \times \text{Rural} + b_4 \times \text{Metro} + b_5 \times \text{Married} + b_6 \times \text{Education} + b_7 \times \text{Status} + b_8 \times \text{Income} + b_9 \times \text{Party Id} + b_{10} \times \text{Econ Cons} + b_{11} \times \text{Unions} + b_{12} \times \text{Soc Serv} + b13 \times \text{Aborig} + b_{14} \times \text{Migrants} + b_{15} \times \text{Hum Nature} + b_{16} + \text{TV} + b_{17} \times \text{Christian B} + b_{18} \times \text{Church Att} + b_{19} \times \text{Abolition Scale} + b_{20} \times \text{Natnl Priority} + b_{21} \times \text{Fear Crime} + b_{22} \times \text{Stiff Sentence} + e_3 \quad \text{(Eq. 3)}$$

The equations predicting support for stiffer sentences (Equations 1A, 2A, and 3A) are the same as Equations 1, 2 and 3 above, with "death penalty" replaced by "stiff sentence" (and, of course, "stiff sentence" omitted from the right-hand side of Equation 3).

The three equations reflect our assumptions about causal order and follow the usual logic in calculating total effects. We assume that the demographic and background variables of Equation 1 (age, sex, etc.) are fixed so come first in causal order. Thus we assume, for example, that age and sex might influence one's attitudes but that one's attitudes cannot influence one's age or sex. On this assumption, the (total) effect of age or sex is to be found from Equation 1—i.e., from an equation that entirely ignores the attitudes which may be influenced by age and sex (Alwin and Hauser 1975)—and not from Equation 2, nor from Equation 3, which gives the direct (rather than the total) effect of age or sex (which generally will be smaller). These results are reported in Table 5, Columns 2 and 3 (with further details in Appendix Table 4, Columns 1 and 5).

We also assume that broad social conservatism attitudes included in Equation 2 (namely party identification, economic conservatism, attitudes to unions, and so forth, up to and including the abolition scale) are causally prior to views specifically on crime (crime as a national priority, fear of crime, and punitiveness in sentencing). Thus, for example, we assume that conservative attitude may lead one to fear crime, but not vice versa. On this assumption, the appropriate estimates of effects of attitudes on views of the death penalty are given by Equation 2 (reported in Table 5, Columns 2 and 3). This is plausible, if debatable, but of little practical consequence. If, instead, we made no assumption about the causal priority of social conservatism, the appropriate estimates would be from Equation 3 rather than Equation 2. As Appendix Table 4 shows, this procedure would lead to virtually identical conclusions (compare Columns 2 with 3 and 6 with 7).

On the basis of our assumptions about causal order, the appropriate estimates of attitudes to crime (national priority, punitiveness, and fear) are given by Equation 3 (reported in Table 5, Columns 2 and 3). These also would be the appropriate estimates

Table 5. Influences on Support for the Death Penalty and Support for Stiffer Sentences: Correlations and Metric Partial Regression Coefficients from Equations 1, 2, and 3 in the Text

	Support for Death Penalty		Stiffer Sentences
	Correlation (1)	Metric Regression Coefficient (2)	Metric Regression Coefficient (3)
Demography and Class (Equation 1)			
1. Sex (female=1, male=0)	−.07	−4*	4*
2. Age (years)	.07	0	0
3. Rural residence (rural=1, else=−0)	.05	3	0
4. Metropolitan residence (metro=1), else=0)	−.07	−1	−1
5. Married (now married=1, else=0)	.08	5*	5*
6. Education (years)	−.20	−2*	−1*
7. Occupational status (0 to 1)	−.16	−9*	0
8. Income ($1000s)	.00	0	0
Social and Political Attitudes (Equation 2)			
9. Party identification (0 to 1)	−.09	0	−1
10. Economic conservatism (0 to 1)	.11	7	−2
11. Anti-union attitudes (0 to 1)	.20	19*	15*
12. Lower spending on social services (0 to 1)	.20	21*	8*
13. Sympathy for Aboriginals (0 to 1)	−.20	−8*	−6*
14. Sympathy for non-English-speaking migrants (0 to 1)	−.26	−24*	−5*
15. Pessimism about human nature (0 to 1)	.16	17*	14*
16. Watch TV (hours per day)	.10	1*	1*
17. Christian belief (0 to 1)	−.04	0	5*
18. Church attendance	−.10	−1*	0
19. Abolition Scale (0 to 1)	.05	5*	0
Attitudes to Crime (Equation 3)			
20. Crime a national priority (0 to 1)	.23	19*	29*
21. Fear of crime (0 to 1)	−.02	0	0
22. Stiffer sentences (0 to 1)	.37	40*	—
Percent of variance, R^2 (Equation 3)	—	25%	14%

Source: National Social Science Survey, 1984. N=3,012.
See Appendix Table 4 for details on each equation separately; see the methods section for technical issues. Coefficients in Lines 1 to 8 are from Equation 1; Lines 9 to 19 are from Equation 2; and Lines 20 to 22 from Equation 3.
* Regression coefficient statistically significant at $p<.05$, two-tailed.

if we made absolutely no assumptions about causal order save, of course, that attitudes toward the death penalty depend on the other variables in the analysis in Equation 3 (and analogously toward punitiveness in Equation 3A). Comparison of the three equations shows that our assumptions on causal order make little practical difference to the conclusions (compare Appendix Table 4, Columns 1, 2, and 3 or, analogously, Columns 5, 6, and 7).

Testing the elite leadership hypothesis. We tested the elite leadership hypothesis using Equation 2. This equation estimates the effect of the state governments' abolition of capital punishment on individual residents' attitude toward capital punishment, controlling for differences in 18 demographic and attitudinal variables. Thus it adjusts for differences among states in population composition (e.g., age, education, income, urban versus rural) and in political and social attitudes (e.g., conservatism, religiosity, politics, attitudes toward outgroups). The assumption is that if people living in early-abolition states have different views on the death penalty from people with *exactly* the same demographic characteristics and exactly the same political and social attitudes who happen to live in later-abolition states, this difference can be attributed to their state government's abolition of capital punishment.

The size of the difference due to abolition can also be calculated from the same regression equation (Equation 2, using Appendix Table 4, Column 2). This can be done in a number of ways (Jones and Kelley 1984), but here is one particularly clear method: Suppose we imagine two hypothetical people, both exactly average in age, education, income, and other demographic characteristics and both exactly average in social and political attitudes (Variables 1 to 18 in Equation 2). Suppose the first person lives in a state that abolished the death penalty a generation ago (30 years), held its last execution the year preceding abolition (31 years ago), and has held no executions since. We can use the coefficients of Equation 2 to estimate this person's (probable) view of the death penalty by substituting these values in the equation, multiplying, and adding. Then suppose the second person lives in a state that still imposes the death penalty, both de jure and *de facto*, and has executed criminals at a "normal" rate, both in number and per capita; we take the "normal" rate of executions in an Australian state to be the rate actually found before abolition in Western Australia (the last Australian state to abolish capital punishment). Again using Equation 2, we then can calculate this second person's probable view of the death penalty. The difference between the first and

the second person's views on the death penalty, estimated in this way, gives a clear estimate of the likely effect on public opinion, a generation later, of a government's abolishing the death penalty. For convenience (and without loss of generality), we have recalibrated the abolition scale (whose metric, like that of other additive scales, is essentially arbitrary) so that its regression coefficient reflects the difference we have just described. Thus the coefficient of 5 (Appendix Table 4, Line 19, Column 2), to be discussed later, shows that abolition reduces public support for the death penalty by 5 percent over the course of a generation.

This estimate is correct only if Equation 2 controls for all other variables that both differ between abolitionist and nonabolitionist states and influence public attitudes to the death penalty. Given the very wide range of variables in the equation (and what we know of Australian history), we think this assumption may be plausible. Yet it is not certain: there could conceivably be an unknown "Factor X," found disproportionately in early- (or late-) abolitionist states, that accounts for the difference. For example, the late-abolitionist states might have had a disproportionate concentration of "fire and brimstone" Protestant sects with punitive attitudes toward sin that carried over to secular punishment as well. Our analysis of attitudes toward stiffer sentences for criminals, however, gives some assurance that no such "Factor X" is likely (Equations 1A, 2A, and 3A, shown in Appendix Table 4, Columns 5, 6, and 7). If there were a "Factor X," presumably it also would alter attitudes to sentencing: in our example, the "fire and brimstone" Protestants would be harsh on criminals generally, not only on murderers. Yet in fact no such evidence for "Factor X" emerges: early-and late-abolition states do *not* differ in their attitudes to sentencing (Appendix Table 4, Line 19, Column 6). This negative finding greatly strengthens our conclusion that abolition—and not some unknown "Factor X"—influences attitudes to the death penalty.

RESULTS

Following the logic of these models, we consider first the effects of the demographic and class variables on support for the death penalty, then the effects of the attitudinal and behavioral variables, and then the elite leadership hypothesis.

Demographic and Class Variables

Gender. Women are less supportive of the death penalty than men, but the difference is small: about four percentage points less

supportive after other demographic and class variables are controlled (Table 5, Line 1, Column 2). Thus the theory that being a woman increases fear of crime and that this fear increases support for capital punishment is not confirmed. This finding is consistent with American results (Cullen et al. 1985; Skovron et al. 1989).

The results cast doubt on our second gender theory as well. The death penalty results (Line 1, Column 2) are consistent with the theory linking the traditional female role with a preference for socially integrative forms of social control rather than punitive or outcasting forms. That theory, however, also predicts that women would be less supportive of stiff sentences for criminals, but in fact the opposite is true: women support stiffer sentences than men (Line 1, Column 3). Thus something about being a woman makes one less willing to take a life in punishment for crime but at the same time more punitive in other ways (and that something has no relation to fear of crime: see Line 21, Columns 2 and 3). This is an interesting puzzle for future research.

Age. We found no support for the argument that age increases vulnerability to crime, and fear of crime, and so increases support for punitiveness and the death penalty (Table 5, Line 2, Columns 2 and 3). In fact, the old are no different from the young, once other demographic differences (e.g., in education) are taken into account.

Place of residence. In spite of the manifestly different victimization experiences of urban and rural residents, and the many other differences between urban and rural places, place of residence makes no significant difference either to attitudes toward the death penalty or to punitive sentencing (Table 5, Lines 3 and 4, Columns 2 and 3). We found a small zero-order correlation (Column 1)—with rural residents more favorable to the death penalty—but this is due entirely to differences in education and other demographic characteristics.

Marital status. Being married makes one slightly more supportive of the death penalty and punitive sentencing (Table 5, Line 5, Columns 2 and 3). The difference is not large, (about 5 percent) but is statistically significant. It stands in contrast to a Canadian study that found no significant effect (Vidmar 1974) and is a little surprising, because married Australians are markedly less likely than the unmarried to be victims of crime (Braithwaite and Biles 1980). It may be that a concern for spouse and children, rather than for oneself, is the motivation.

Social status. Although income has no effect on support for the death penalty, occupational status, as hypothesized, reduces support significantly (Table 5, Line 7). Better-educated people are less supportive of the death penalty, each additional year of education reduces support by around 2 percent (Line 6, Column 2). Thus a secondary school graduate (12 years of school) would be 6 percent less favorable to the death penalty than someone who left with the minimum nine years of schooling (three extra years of school, so $3 \times 2 = 6$). Someone with a four-year university honors degree would be a further 8 percent less favorable ($4 \times 2 = 8$). For punitiveness in general (Column 3) only education matters; the more educated are less favorable to stiff sentences than the less educated. In this sense, Australia is like most developed countries but unlike the United States, where class is unrelated to punitiveness in general or the death penalty in particular (Davis 1982: 581; van Dijk 1989: 42).

Attitudinal Influences

We have seen that the demographic and class variables traditionally considered in analyses of the death penalty do not go very far toward explaining who does, and who does not, support it; altogether they explain only 6 percent of the variance (Appendix Table 4, last line, Column 1). Attitudinal predictors are more promising; most theoretical discussion emphasizes the general concept of conservatism. We have disaggregated conservatism into half a dozen separate components. Some turn out to be important and others not; thus our use of separate measures rather than a single global index is justified (Table 5, second panel).

Political conservatism. Whereas the U.S. experience suggests a general (if slight) affinity between political conservatism and support for the death penalty, in Australia the picture is mixed. First, supporters of the conservative parties (the Liberal Party and National Party coalition partners) are no different from Labor supporters, once other demographic and attitudinal variables are taken into account (Line 9, Column 2). This result is different from those of American polls, perhaps because election campaigns in which the parties have different policies on capital punishment, as in the United States, have not occurred in Australia, where all political parties in all states have opposed the death penalty.

Similarly, economic conservatism—one of the principal ideological cleavages in Australian politics—is not generally significant (Table 5, Line 10, Column 2). Other politically salient ideological

divisions are significant, however. Anti-union sentiment and opposition to spending on social services are both associated with support for the death penalty and for stiffer sentences (Lines 11 and 12, Columns 2 and 3). One possible interpretation is that these are forms of conservatism associated with dislike of outgroups—the poor, those on welfare, and criminals. The forms of political conservatism unrelated to outgroups—such as economic policy and party preference—are unrelated to views on capital punishment.

Hostility to outgroups. A more direct test of this interpretation uses data on two other outgroups—Aborigines and non-English-speaking migrants (Table 5, Lines 13 and 14, Column 2). Indeed, we find that persons sympathetic to these outgroups tend strongly toward opposition to the death penalty. In the extreme, there is a drop of eight percentage points in support between respondents with minimal sympathy for Aborigines and those who are maximally sympathetic. Even more striking is the 24 percent difference between minimum and maximum scores on sympathy for migrants. The effects on support for stiffer sentences are less striking but are in the same direction (Column 3). Overall the hypothesis that general sympathy for outgroups leads to opposition to capital punishment receives strong support.

Pessimism about human nature. Those with a pessimistic view of human nature tend to favor the death penalty (Table 5, Line 15, Column 2). As we move from the lowest to the highest scores on the scale measuring pessimism about human nature, support for the death penalty increases 17 percent (and support for stiffer sentences increases 14 percent; see Column 3). Therefore it may be, as Bonger (1916) would say, that when people believe other people are brutes, they will treat them as brutes—or possibly pessimists do not believe that criminals can be reformed, only controlled. Further, it may be (although our data do not speak to it) that when we treat other people as brutes they actually become brutes. Ultimately, an analysis of the attitudes that underpin support for the death penalty and an analysis of the policy consequences of the death penalty may come together in some such framework.

Mass media. In keeping with criminological theory about the mass media, people who watch a lot of television tend to support capital punishment and stiffer sentences for criminals (Table 5, Line 16, Columns 2 and 3). Although small, the difference is statistically significant after all other variables are controlled; controls for

class are critical here (V. Braithwaite 1981; see also Appendix Table 3). For every hour per day of television watched, support for capital punishment (and for stiffer sentences) increases by one percentage point.

Christian belief. Religious belief has no effect on support for the death penalty but significantly reduces support for stiffer sentences (Table 5, Line 17, Columns 2 and 3). Church attendance reverses these results: churchgoers are less supportive of the death penalty, but have the same views as everyone else about stiffer sentences (Line 18, Columns 2 and 3).

Fear of crime. Fear of crime and rating crime as a high national priority are virtually uncorrelated ($r = .03$) and so cannot be interpreted as components of a more general construct of crime salience in Australia (cf. Stinchcombe et al. 1980; see Appendix Table 3). Respondents who rate crime as a high national priority are noticeably sympathetic to the death penalty and noticeably more punitive (Table 5, Line 20, Columns 2 and 3). Fear of crime, however, does not increase punitiveness or support for capital punishment (Line 20, Columns 2 and 3).

The Elite Leadership Hypothesis

In keeping with the elite leadership thesis, respondents who live in states that abolished the death penalty earlier are less supportive of the penalty now (Table 5, Line 19, Column 2). We can use the regression analysis to estimate the effect of living in a state that abolished the death penalty a generation (30 years) earlier than another state. This variable increases opposition to the death penalty by five percentage points, after the other variables are controlled. This difference is statistically significant after all of the other variables in the model are controlled ($t=3.42$, $p<.001$). As described in the methods section, we obtain this estimate by using the metric regression coefficients to calculate the mean support for the death penalty of people with average backgrounds and typical attitudes on other matters who come from a typical nonabolitionist state: 66 percent would support the death penalty. We then compare this support with support projected from the regression equation for people who are similarly average in all other respects, but who come from a state that abolished the death penalty a generation ago: only 61 percent of such people would support the death penalty.

This is certainly a nontrivial effect, and one of very few clearly documented examples of elite actions' successfully changing public opinion on a matter of concern to ordinary people. Zimring and Hawkins's elite leadership thesis appears to be correct: political elites indeed can shape public opinion on a familiar and emotional topic.

Even so, the elite's impact is not large: 5 percent over a generation. In contrast, in their discussion of the German data, Zimring and Hawkins implicitly attribute a change of 48 percent in a generation, almost 10 times the Australian figure. Because Zimring and Hawkins's analysis is flawed (for reasons discussed earlier), and flawed in a way that would lead them to exaggerate greatly the influence of abolition, we believe that our methodology produces a more precise estimate. Although this effect is significant, our lack of time series data means that we have only a limited test of the elite leadership hypothesis; essentially, we tested only one static prediction derived from a dynamic model.

The elite leadership conclusion is buttressed, nevertheless, by the parallel analysis with support for stiffer sentences as the dependent variable (from Equation 2A). Abolishing capital punishment has absolutely no effect on support for stiffer sentences for criminals (Table 5, Line 19, Column 3). In this case a nonfinding strengthens a finding: if the elite leadership theory is right, then abolition of the death penalty should affect public support for the death penalty but not for other kinds of punishment on which the elite do not show leadership. On the other hand, if differences between states on the death penalty are an artifact of other differences (unknown and unmeasured in our model), we would expect to see similar apparent effects on the sentencing measure. That we do not see such spurious effects suggests that the elite leadership hypothesis is correct.

DISCUSSION

Five issues from this research are of such significance as to merit deeper investigation: 1) The symbolic versus the instrumental aspects of public support for capital punishment; 2) what "a female voice" on criminal justice might mean; 3) the role of the media in reproducing and shaping retributive beliefs; 4) the influence of the general personality trait of outgroup hostility on attitudes toward the death penalty; and 5) elite leadership and opposition to the death penalty.

Fear of crime (as found also in some of the American work discussed in the introduction) is irrelevant to the explanation of support for either the death penalty or stiffer sentences. Belief

that fighting crime is a national priority, on the other hand, bears a strong relationship to both. This finding may mean, at least in the Australian cultural context, that self-interested concerns and personal fears may have very different effects from aspirations for the political system. Hence one can feel personally safe from crime, never have been a victim of crime, and yet feel that punishing crime is enormously important as an other-regarding political aspiration. Further, it can happen that other-regarding political beliefs can be much more significant than matters of more direct self-interest. Future work could well explore whether citizens' preferences for criminal justice policy is a domain where symbolic concerns predominate over self-interested concerns (see Scheingold 1984; Tyler and Weber 1982).

Women were much more fearful of crime than men; yet they were less supportive of the death penalty. We were inclined to interpret this finding as support for the notion that women prefer socially integrative forms of social control to punitive or outcasting forms. Inconsistent with this interpretation, however, was the finding that women more than men supported stiffer sentences for criminals. One possibility for future work to reconcile these conflicting results is the finding of Cullen, Cullen, and Wozniak (1988) that surprising numbers of people support the idea of sending criminals to prison for rehabilitation. Is it possible that many women favoring long prison terms intend not retribution but integration—as a stronger guarantee of rehabilitation? Gilligan (1982, 1987) suggests that the different voice in which women speak is an "ethic of care." If there is a "female voice" that supports a caring prison system which rehabilitates while it protects our loved ones, we can make sense of women's tendency to agree to longer prison terms than men while being more opposed to capital punishment. There will be rewards for addressing the neglected agenda of hearing a female voice on criminal justice policy and interpreting what that voice might mean (Daly 1989).

A third issue that warrants more attention is the small but statistically significant effect of watching television. The media violence debate has been concerned with the effect of television on violence by criminals, not with its effects on punitive attitudes to criminals (cf. Gelles and Straus 1975: 599; Scheingold 1984: 62-64). Television does communicate the message that violence is everywhere; heavy viewers are more likely to heed this message (Gebner and Gross 1976).

Fourth, we found that resentment toward outgroups is the aspect of conservatism that most strongly explains support for capital punishment. The interpretation is that criminals are just

another outgroup—like blacks and migrants—to be targeted for punitive state control.

The fifth issue warranting further work is the elite leadership hypothesis. The United States, like Australia, offers enormous variation in the timing of political elites' successes and failures in overcoming popular support for capital punishment. As in Australia, there is enormous variation in legal abolition (and in de jure retention with de facto disuse). Capital punishment was abolished in Michigan and Wisconsin in the middle of the last century and in Minnesota early in this century (Culver 1989). The elite leadership hypothesis predicts that these states will show less support for capital punishment after conservatism and other relevant variables are controlled. As for the future, some issues arise in the American context which do not arise in Australia. Although the American legal system has become increasingly willing to sentence offenders to death, it continues to be incapable of executing the sentence. Thus the numbers waiting on death row have swollen to the point where consummation of these sentences would require "a bloodbath more extensive than our criminal justice system has produced in this century" (Cheatwood 1985: 464). Do American political and judicial elites want the stains of such a bloodbath on their hands? And if they wash their hands of it, will there be a "bloodbath reaction" from the American public (Wallace 1989)? In the American context, as in the Australian, the elite leadership hypothesis promises to be both retrospectively and prospectively worthy of study.

REFERENCES

Alwin, D.F. and R.M. Hauser (1975) "The Decomposition of Effects in Path Analysis." *American Sociological Review* 40: 37-47.

Boehm, Virginia R. (1968) "Mr. Prejudice, Miss Sympathy, and the Authoritarian Personality: An Application of Psychological Measuring Techniques to the Problem of Jury Bias." *Wisconsin Law Review* 1968: 734-50.

Bohm, Robert M. (1987) "American Death Penalty Attitudes: A Critical Examination of Recent Evidence." *Criminal Justice and Behavior* 14: 380-96.

Bonger, Willem (1916) *Criminality and Economic Conditions*. Boston: Little, Brown.

Braithwaite, John (1989) *Crime, Shame and Reintegration*. Melbourne: Oxford University Press.

Braithwaite, John and David Biles (1980) "Overview of Findings from the First Australian National Crime Victims Survey." *Australian and New Zealand Journey of Criminology* 13: 41-51.

Braithwaite, John, David Biles, and Ray Whitrod (1982) "Fear of Crime in Australia." In Hans Joachim Schneider (ed.), *The Victim in International Perspective*. Berlin: Walter de Gruyter, pp. 220-8.

Braithwaite, Valerie (1981) "Parent Observed Behaviours of Pre-School Television Viewers." *Australian Journal of Psychology* 33: 375-82.

Burstein, Paul (1985) *Discrimination, Jobs and Politics: The Struggle for Equal Employment Opportunity in the U.S. since the New Deal.* Chicago: University of Chicago Press.

Buxton, R. (1973) "The Politics of Criminal Law Reform: England." *American Journal of Comparative Law* 21:230-44.

Cheatwood, D. (1985) "Capital Punishment and Corrections: Is There an Impending Crisis?" *Crime and Delinquency* 31: 461-79.

Cohen, Stanley (1973) *Folk Devils and Moral Panics.* St. Albans: Paladin.

Comrey, A. and J. Newmayer (1965) "Measurement of Radicalism-Convervatism." *Journal of Social Psychology* 47:357-69.

Cullen, Francis T., Gregory A. Clark, John B. Cullen, and Richard A. Mathers (1985) "Attribution, Salience and Attitudes toward Criminal Sanctioning." *Criminal Justice and Behavior* 12:305-31.

Cullen, Francis T., John B. Cullen, and John F. Wozniak (1988) "Is Rehabilitation Dead? The Myth of the Punitive Public." *Journal of Criminal Justice* 16: 303-17.

Culver, John H. (1989) "State Politics and the Death Penalty: From Furman to McCleskey." *Journal of Crime and Justice* 12:1-20.

Daly, Kathleen (1989) "Criminal Justice Ideologies and Practices in Different Voices: Some Feminist Questions About Justice." *International Journal of the Sociology of Law* 17: 1-18.

Davis, James A. (1982) "Achievement Variables and Class Cultures: Family, Schooling, Job and Forty-Nine Dependent Variables in the Cumulative GSS." *American Sociological Review* 47:569-86.

Downs, A. (1957) *An Economic Theory of Democracy.* New York: Harper & Row.

Engels, F. (1969) *The Condition of the Working Class in England in 1844.* Harmondsworth: Penguin.

Finckenauer, James O. (1988) "Public Support for the Death Penalty: Retribution as Just Deserts or Retribution as Revenge?" *Justice Quarterly* 5: 81-100.

Foucault, M. (1977) *Discipline and Punish: The Birth of the Prison.* London: Allen Lane.

Gelles, Richard J. and Murray A. Straus (1975) "Family Experience and Public Support of the Death Penalty." *American Journal of Orthopsychiatry* 45: 496-613.

Gerbner, George and Larry Gross (1976). "Living with Television: The Violence Profile." *Journal of Communications* 26: 173-97.

Gilligan, Carol (1982) *In a Different Voice.* Cambridge: Harvard University Press.

Gilligan, Carol (1987) "Moral Orientation and Moral Development." In E. Kittay and A. Diamond (eds.), *Women and Moral Theory.* Totowa, NJ: Rowman and Littlefield, pp. 19-33.

Hagan, John, J.H. Simpson, and A.R. Gillis (1979) "The Sexual Stratification of Social Control." *British Journal of Sociology* 30: 25-38.

Hamilton, V.L. (1976) "Individual Differences in Ascriptions of Responsibility, Guilt and Appropriate Punishment." In G. Bermant, C. Nameth, and N. Vidmar (eds.), *Psychology and the Law.* Lexington, MA: Lexington Books, pp. 239-64.

Jones, F.L. and Jonathan Kelley (1984) "Decomposing Differences between Groups." *Sociological Methods and Research* 12: 323-43.

Jowell, Roger, Sharon Witherspoon, and Lindsay Brook (eds.) (1989) *British Social Attitudes: Special International Report.* London: Gower.

Jurow, George L. (1971) "New Data on the Effect of a 'Death Qualified' Jury on the Guilt Determination Process." *Harvard Law Review* 84: 567-611.

Kelley, Jonathan (1988) "Political Ideology in Australia." In Jonathan Kelley and Clive Bean (eds.) *Australian Attitudes: Social and Political Analysis from the National Social Science Survey.* Sydney: Allen & Unwin, pp. 58-77.

Kelley, Jonathan and Clive Bean (eds.) (1988) *Australian Attitudes: Social and Political Analysis from the National Social Science Survey.* Sydney: Allen & Unwin.

Kelly, Jonathan, Robert G. Cushing, and Bruce Headey (1987) *Australian National Social Science Survey,* 1984. Canberra: Social Sciences Data Archives, The Australian National University.

Kelly, Jonathan and M.D.R. Evans (1988) "Should abortion be legal? Australian's opinions and their sources in ideology and social structure" in Jonathan Kelly

and Clive Bean (editors) *Australian Attitudes; Social and Political analyses from the National Social Science Survey.* Sydney: Allen and Erwin.

Kelley, Jonathan and Ian McAllister (1984) "Immigrants, Socio-Economic Attainment, and Politics in Australia." *British Journal of Sociology* 35: 387-405.

——— (1985) "Class and Party in Australia: Comparison with Britain and the USA." *British Journal of Sociology* 36: 383-420.

Kinder, Donald R. (1983) "Diversity and Complexity in American Public Opinion." In Ada W. Funifler (ed.), *Political Science: The State of the Discipline.* Washington, DC: American Political Science Association, pp. 389-425.

Kohn, Melvin L. (1977) *Class and Conformity: A Study in Values.* (2nd ed.) Chicago: University of Chicago Press.

Langworthy, Robert H. and John T. Whitehead (1986) "Liberalism and Fear as Explanations of Punitiveness." *Criminology* 24: 575-91.

Lin, Nan (1976) *Foundations of Social Research.* New York: McGraw-Hill.

Lipset, Seymour Martin (1989) "The U.S. Elections: The Status Quo Re-affirmed." *International Journal of Public Opinion Research* 1: 25-44.

Miller, J.L., P. Rossi, and J. Simpson (1986) "Perceptions of Justice: Race and Gender Differences in Judgments of Appropriate Prison Sentences." *Law and Society Review* 20: 313-34.

Potas, Ivan and John Walker (1987) "Capital Punishment." *Trends and Issues.* Number 3. Canberra: Australian Institute Criminology.

Rankin, Joseph H. (1979) "Changing Attitudes toward Capital Punishment." *Social Forces* 58: 194-211.

Rokeach, Milton and D. Daniel McClellan (1969) "Dogmatism and the Death Penalty: A Reinterpretation of the Duquesne Poll Data." *Duquesne Law Review* 8: 125-29.

Rokeach, Milton and Neil Vidmar (1973) "Testimony Concerning Possible Jury Bias in a Black Panther Murder Trial." *Journal of Applied Social Psychology* 3: 19-29.

Sartori, G. (1976) *Parties and Party Systems.* Cambridge: Cambridge University Press.

Scheingold, Stuart A. (1984) *The Politics of Law and Order: Street Crime and Public Policy.* New York: Longmans.

Singh, Avtar and C.H.S. Jayewardene (1978) "Conservatism and Toughmindedness as Determinants toward Capital Punishment." *Canadian Journal of Criminology* 20: 191-93.

Seltzer, Rich and Joseph P. McCormick II (1987) "The Impact of Crime Victimization and Fear of Crime on Attitudes toward Death Penalty Defendants." *Violence and Victims* 2:99-109.

Skovron, Sandra Evans, Joseph E. Scott, and Francis T. Cullen (1988) "Prison Crowding: Public Attitudes toward Strategies of Population Control." *Journal of Research in Crime and Delinquency* 25: 150-69.

——— (1989) "The Death Penalty for Juveniles: An Assessment of Public Support." *Crime and Delinquency* 35:546-61.

Smith, T.W. (1975) "A Trend Analysis of Attitudes toward Capital Punishment, 1936-1974." In James A. David (ed.), *Studies of Social Change since 1948.* Volume 2. Chicago: National Opinion Research Center, pp. ———.

Snortum, John R. and Victor H. Ashear (1972) "Prejudice, Punitiveness and Personality." *Journal of Personality Assessment* 36: 291-96.

Stinchcombe, Arthur L., R. Adams, C.A. Heimer, K.L. Schepple, T.W. Smith, and D.G. Taylor (1980) *Crime and Punishment: Changing Attitudes in America.* San Francisco: Jossey-Bass.

Taylor, Douglas C., K.L. Schepple, and Arthur L. Stinchcombe (1979) "Salience of Crime and Support for Harsher Criminal Sanctions." *Social Problems* 26: 413-24.

Thomas, Charles (1977) "Eighth Amendment Challenges to the Death Penalty: The Relevance of Informed Public Opinion." *Vanderbilt Law Review* 30:1005-30.

Thomas, Charles W. and Samuel C. Foster (1975) "A Sociological Perspective on Public Support for Capital Punishment." *American Journal of Orthopsychiatry* 45: 641-57.

Tyler, Tom R. and Renee Weber (1982) "Support for the Death Penalty: Instrumental Response to Crime, or Symbolic Attitude?" *Law and Society Review* 17: 21-46.

van Dijk, Jan J.M., Pat Mayhew, and Martin Killias (1989) *Experiences of Crime across the World: Key Findings of the 1989 International Crime Survey.* City: Research and the Documentation Centre, Ministry of Justice, The Netherlands.

Vidmar, Neil (1974) "Retributive and Utilitarian Motives and Other Correlates of Canadian Attitudes Toward the Death Penalty." *Canadian Psychologist* 15:337-56.

Vidmar, Neil and Tony Dittenhoffer (1981) "Informed Public Opinion and Death Penalty Attitudes." *Canadian Journal of Criminology* 23: 43-56.

Vidmar, Neil and Phoebe Ellsworth (1974) "Public Opinion and the Death Penalty." *Stanford Law Review* 26: 1245-70.

Wallace, Donald H. (1989) "Bloodbath and Brutalization: Public Opinion and the Death Penalty." *Journal of Crime and Justice* 12: 51-78.

Williams, Frank P. III, Dennis Longmire, and David B. Gulick (1988) "The Public and the Death Penalty: Opinion as an Artifact of Question Type." *Criminal Justice Research Bulletin* 3: 1-5.

Zimring, Frank and Gordon Hawkins (1986) *Capital Punishment and the American Agenda.* Cambridge: Cambridge University Press.

Appendix Table 1: Variables Used in the Analysis

Demographic and Class Variables

Sex: Female = 1, male = 0

Occupational status:* 14 status categories constructed from detailed occupational titles, ranging from higher professionals (status = 100) to farm laborer (status = 0).

Education: Years of primary, secondary, and tertiary education.

Income: Family income from all sources, in dollars.

Age: Age in years.

Married: Now married = 1, single, widowed, separated, or divorced = 0.

Rural: Rural resident = 1; others = 0.

Metropolitan: Resident of city over 500,000 in population = 1; others = 0.

Attitudinal and Behavioral Variables

Abolition scale: Contextual measure of timing of abolition of capital punishment in state of residence. Average of four measures. See the text for details.

Watch TV: hours watching television, per day.

Sympathy for Aborgines* Likert-type scale based on three items: a feeling thermometer rating of "Aborigines" on a scale of 0 ("very cold or unfavorable feeling") to 100 ("very warm or favorable feeling"); a question on spending on Aborigines: ("far too much, too much, about right amount, too little, far too little"); and ". . . what if a close relative were planning to marry an Aborigine?" (would you feel "very uneasy, fairly uneasy, a little uneasy, not uneasy, or not at all uneasy").

Sympathy for non-English-speaking migrants* Likert-type scale based on three items: thermometer ratings of "Italian migrants," "Greek migrants," and "Vietnamese migrants," each on a scale of 0 ("very cold or unfavorable feeling") to 100 ("very warm or favorable feeling").

Pessimism about human nature* Likert-type scale based on two items: "Most people don't really care what happens to the next fellow"(agree strongly, agree, neither agree nor disagree, disagree, disagree strongly); and "If you don't watch out, people will take advantage of you" (agree strongly, agree, neither agree nor disagree, disagree, disagree strongly).

Christian belief* Likert-type scale based on five items:

1. Which of the following statements come closest to expressing what you believe about God? I don't know whether there is a God and I don't believe there is any way to find out; I don't believe in a personal God, but I believe in a higher power; I find myself believing in God some of the time, but not at other times; while I have doubts, I feel that I do believe in God; I know God really exists and I have no doubts about it.

2. Do you believe in life after death? (No, definitely not; no, probably not; yes, probably; yes, definitely).
3. And do you believe in the devil? (No, definitely not; no, probably not; yes, probably; yes, definitely).
4. Do you believe in hell? (No, definitely not; no probably not; yes, probably; yes, definitely).
5. And do you believe in heaven? (No, definitely not; no probably not; yes, probably; yes, definitely).

Church attendance: Frequency of church attendance, ten categories ranging from "never" to "every day."

Economic conservatism* Likert-type scale based on four items:

1. Government ownership of big industries such as steel (strongly in favor; in favor, neither; opposed; strongly opposed).
2. Do you think Australia would be better off with a socialist economy, or with a private enterprise economy, or would some combination of the two be better? (Entirely socialist, with the government owning all businesses big and small; mostly socialist, but with the government owning all big businesses but not small businesses; somewhat socialist, with the government owning about half of the big businesses; mixed, with the government owning a few big businesses, together with public utilities like electricity and telephones; entirely private enterprise, with the government not even owning utilities like electricity and telephones).
3. Big business in this country has too much power (strongly agree; agree; neither agree nor disagree; disagree; strongly disagree).
4. Stronger government control should be exercised over the activities of multinational companies (strongly agree; agree; neither agree nor disagree; disagree; strongly disagree).

Lower spending on social services* Likert-type scale based on four items:

1. We would like to know if you think the government is spending too much money, too little money, or about the right amount on each of these . . . pensions and other social services (far too little; too little; about the right amount; too much; far too much).
2. We would like to know if you think the government is spending too much money, too little money, or about the right amount on each of these . . . providing assistance for the unemployed (far too little; too little; about the right amount; too much; far too much).
3. If the government had a choice between reducing taxes or spending more on social services, which do you think it should do? (very strongly in favor of spending more on social services; fairly strongly in favor of spending more on social services; mildly in favor of spending more on social services; fairly strongly in favor of reducing taxes; very strongly in favor of reducing taxes.

4. (Feeling thermometer): People on welfare. (Scored [reversed] from 0 "very warm or favorable feeling" to 100 "very cold or unfavorable feeling").

Anti-trade union* Likert-type scale based on four items:

1. How much confidence do you have in trade unions? (a very great deal; a great deal; some; only a little; hardly any; none at all).
2. In general, how good a job would you say the trade unions are doing for the country as a whole? (very good; fairly good; not very good; no good at all).
3. How about the power the trade unions have — do you think they have not nearly enough; not enough; about the right amount; a bit too much; far too much?
4. When you hear of a strike, are your sympathies generally for or against the strikers? (almost always for them; usually for them; usually against them; almost always against them).

Party identification* "Generally speaking, in Federal politics do you usually think of yourself as Liberal, Labor, National Country Party, or Australian Democrat?" (scored Liberal and National = 1; Labor = 0; others and no party = 0.5).

Crime a national priority* "What do you think should be the aims of this country over the next ten years? Here is a list . . . Fight crime" (most important thing; extremely important; very important indeed; fairly important; not important; undesirable; bad; very bad idea).

Fear of crime "Is there any area right around here — say within a kilometer or two — where you would be afraid to walk at night? ("Yes, no").

---

* Unless otherwise indicated, items are scored so the first mentioned . . . . gets a high score (generally 1.0); the last a low score (generally 0); and the others scored at equal intervals in between. (For example, "strongly agree" = 1.0; "agree" = .75; "neither agree nor disagree" = .5; "disagree" = .25; and "strongly disagree" = 0). Scale scores (on multiple-item scales) are the simple average of the component items. Thus scores range from a low of zero to a high of 1.0, for clarity; since this is a linear transformation, it has no effect on standardized coefficients but serves only to put the unstandardized coefficients into an intuitively clearer form. For further details on the scales see Kelley (1988) and Kelley, Cushing, and Headey (1987: 249-59).

Appendix Table 2. Attitude Scales: Interitem Correlations and Reliabilities

Scale and items	Correlations (1)	(2)	(3)	(4)
Aborigines				
1. Feeling thermometer: Aborigines?				
2. Spending: improving conditions for Aborigines?	.50			
3. Uneasy if a close relative married an Aborigine?	.24	.26		
Reliability (Cronbach's alpha) = .75				
Non-English-Speaking Migrants				
1. Feeling thermometer: Italian migrants				
2. Feeling thermometer: Greek migrants	.77			
3. Feeling thermometer: Vietnamese migrants	.60	.66		
Reliability (Cronbach's alpha) = .86				
Human Nature				
1. Don't care about next fellow				
2. Take advantage of you	.31			
Reliability (Cronbach's alpha) = .31				
Christian Belief				
1. Belief in God				
2. Do you believe in life after death?	.60			
3. Do you believe in the devil?	.54	.58		
4. Do you believe in hell?	.53	.56	.86	
5. Do you believe in heaven?	.74	.69	.64	.67
Reliability (Cronbach's alpha) = .90				
Spending on Social Services				
1. Spending too much money or too little on pensions and other social services?				
2. Reduce taxes or spending more on social services?	.32			
3. Feeling thermometer: people on welfare?	.30	.24		
4. Spending: providing assistance for the unemployed?	.37	.30	.26	
Reliability (Cronbach's alpha) = .61				
Economic organization				
1. Government ownership of big industries such as steel				
2. Better off with a socialist economy or with private enterprise?	.41			
3. Stronger government control over multinational companies	.27	.22		
4. Big business in this country has too much power	.29	.19	.37	
Reliability (Cronbach's alpha) = .61				
Unions				
1. How good a job are the trade unions doing for the country as a whole?				
2. How about the power the trade unions have—too much or not enough?	.56			
3. Are your sympathies generally for or against strikers?	.49	.48		
4. How much confidence do you have in trade unions?	.64	.53	.45	
Reliability (Cronbach's alpha) = .81				

Source: Kelley (1988); see also Kelley, Cushing, and Headey (1987: 249-59). N=3,012

Appendix Table 3 Correlations, Means, and Standard Deviations

	Mean	Standard Deviation	CORRELATIONS DEATHPEN	FEMALE	AGE	METRO	RURAL	MARRIED	OOC	EDUC	INC	ABOL
DEATHPEN: Support for death penalty	62.7	33.0	1.00									
FEMALE:	.6	.5	−.07	1.00								
AGE:	42.6	16.9	.07	.01	1.00							
METRO: Metropolitan resident	.5	.5	−.07	−.01	−.03	1.00						
RURAL: Rural resident	.1	.3	.05	−.03	.01	−.32	1.00					
MARRIED:	.6	.5	.08	−.04	.12	−.05	.08	1.00				
OOC: Occupational status	46.7	25.5	−.16	.03	−.06	.15	−.11	.06	1.00			
EDUC: Education (years)	10.5	2.7	−.20	−.07	−.41	.15	−.05	−.03	.56	1.00		
INC: Family income	12999.3	13132.4	−.00	−.43	−.10	.04	−.00	.05	.26	.30	1.00	
ABOL: Abolition scale	.3	.4	.05	−.04	−.02	.15	−.00	.00	.03	.03	.06	1.00
HRSTV: TV watching (hours/day)	3.0	1.6	.10	.13	.05	−.12	.02	.01	−.19	−.22	−.23	−.04
CHATT: Church attendance	3.5	2.5	−.10	.12	.12	.01	−.00	.08	.09	.04	−.05	−.09
CBELIEF: Christian belief	52.0	30.5	−.04	.18	.01	−.05	.00	.05	−.03	−.05	−.13	−.10
UNIONS: Anti-trade union attitudes	66.6	19.4	.20	.07	.09	−.07	.16	.06	−.01	−.04	.01	−.04
MIG: Sympathy, non-English migrants	48.6	18.6	−.26	.08	.04	.19	−.12	.04	.21	.17	.03	.04
ABORIG: Sympathy, Aborigines	55.6	20.7	−.20	.10	.03	.07	−.10	−.04	.06	.04	−.08	−.02
HNATURE: View of human nature	61.2	19.6	.16	−.06	−.05	−.05	.03	−.07	−.16	−.09	−.03	−.04
ECONCON: Economic conservatism	51.5	17.6	.11	−.04	−.00	.00	.08	.04	.10	.11	.16	−.01
SOCSPEND: Less social service spending	46.8	17.8	.20	−.07	.01	−.07	.17	.15	.04	.06	.16	−.04
PARTY: Political party (conservative)	.5	.5	−.09	−.02	−.08	.05	−.13	−.05	−.07	−.05	−.07	.06
FEAR: Fear of crime	33.6	47.2	−.02	.39	.07	.13	−.11	−.08	.04	−.05	−.21	.03
CRIME: Crime national priority	75.8	18.1	.23	.04	.17	−.05	.02	.07	−.14	−.23	−.08	−.04
STIFFSEN: Stiffer sentences	77.2	23.0	.37	.08	.10	−.05	.02	.11	−.06	−.14	−.07	−.02

Source: 1984/85 National Social Science Survey; N=3,012.

Appendix Table 3 (continued) Correlations, Means, and Standard Deviations

	HRSTV	CHATT	CBELIEF	UNIONS	MIG	ABORIG	HNATURE	ECONCON	SOCSPEND	PARTY	FEAR	CRIME	STIFFSEN
DEATHPEN: Support for death penalty													
FEMALE:													
AGE:													
METRO: Metropolitan resident													
RURAL: Rural resident													
MARRIED:													
OOC: Occupational status													
EDUC: Education (years)													
INC: Family Income													
ABOL: Abolition scale													
HRSTV: TV watching (hours/day)	1.00												
CHATT: Church attendance	−.10	1.00											
CBELIEF: Christian belief	.03	.61	1.00										
UNIONS: Anti-trade union attitudes	−.01	.08	.08	1.00									
MIG: Sympathy, non-English migrants	−.14	.18	.09	−.14	1.00								
ABORIG: Sympathy, Aborigines	.00	.09	.06	−.22	.43	1.00							
HNATURE: View of human nature	.11	−.12	−.04	.05	−.17	−.08	1.00						
ECONCON: Economic conservatism	−.08	.08	.06	.41	−.05	−.20	−.06	1.00					
SOCSPEND: Less social service spending	−.12	.05	.02	.32	−.19	−.31	.02	.33	1.00				
PARTY: Political party (conservative)	.09	−.16	−.11	−.48	.04	.19	.03	−.46	−.30	1.00			
FEAR: Fear of crime	.06	.07	.10	−.01	.05	.06	.02	−.05	−.07	.00	1.00		
CRIME: Crime national priority	.10	.05	.03	.13	−.07	.01	.10	−.04	.01	−.01	.03	1.00	
STIFFSEN: Stiffer sentences	.09	.06	.10	.19	−.11	−.11	.13	.06	.12	−.10	.04	.28	1.00

Source: 1934/85 National Social Science Survey; N=3,012.

Appendix Table 4: Three models with support for the death penalty and support for stiffer sentences as the dependent variables: Metric (b) and standardized (β) partial regression coefficients from Equations 1, 2, and 3 in the text; for simplicity, standardized coefficients are shown only for Equation 3. The metric (unstandardized) coefficients discussed in the text are shown in boldface.

Variables	Support for Death Penalty				Support for Stiffer Sentences			
	Eq.1 b (1)	Eq.2 b (2)	Eq.3 b (3)	Eq.3 β (4)	Eq.1A b (5)	Eq.2A b (6)	Eq.3A b (7)	Eq.3A β (8)
Demography and Class								
1. Sex (female = 1, male = 0)	−4*	−3*	−5*	−.03*	4*	3*	3*	.06*
2. Age (years)	0	0	0	−.01	0	0	0	.02
3. Rural (rural = 1, else = 0)	3	−3	−2	−.02	0	−3	−2	−.03
4. Metropolitan (metro resident = 1, else = 0)	−1	0	0	.00	−1	0	0	.00
5. Married (married = 1, else = 0)	5*	5*	3*	.04*	5*	5*	4*	.03*
6. Education (years)	−2*	−2*	−1*	−.10*	−1*	−1*	−1*	−.06*
7. Occupational status (0 to 1)	−9*	−4	−5	−.04	0	3	3	.04
8. Income ($1,000s)	0	0	0	.01	0	0	0	−.02
Social and Political Attitudes								
9. Party identification (0 to 1)	—	0	0	.00	—	−1	−1	−.02
10. Economic conservatism (0 to 1)	—	7	9*	.05*	—	−2	0	.00
11. Anti-unions (0 to 1)	—	19*	11*	.06*	—	15*	11*	.09*
12. Lower social services spending (0 to 1)	—	21*	18*	.10*	—	8*	8*	.06*
13. Sympathy for Aborigines (0 to 1)	—	−8*	−6	−.04	—	−6*	−7*	−.06*
14. Sympathy for non-English-speaking migrants (0 to 1)	—	−24*	−21*	−.12*	—	−5	−5	−.03
15. Pessimism about human nature (0 to 1)	—	17*	9*	.06*	—	14*	12*	.10*
16. Watch TV (hours per day)	—	1*	1	.03	—	1*	1*	.05*
17. Christian belief (0 to 1)	—	0	0	−.01	—	5*	4*	.05*
18. Church attendance	—	−1*	−1*	−.07*	—	0	0	.01
19. Abolition Scale[b]	—	5*	5*	.06*	—	0	1	.01
Attitudes to Crime								
20. Crime a national priority (0 to 1)	—	—	19*	.10*	—	—	29*	.23*
21. Fear of crime (0 to 1)	—	—	0	.02	—	—	0	.00
22. Stiffer sentences (0 to 1)	—	—	40*	.28*	—	—	—	—
(Percentage of variance, R^2)	6%	16%	25%	—	4%	10%	14%	—

Source: National Social Science Survey, 1984. N=3,012.

a Unless otherwise noted, all variables are scored so that one extreme is zero and the other 1.0, with intermediate answers given intermediate scores; for example, strongly disagree = 0, disagree = .25, undecided = .5, agree = .75, and strongly agree = 1.0.

b See table 4