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COMMENTARIES

FACT-FREE GUN POLICY?

PHILIP J. COOK[†] & JENS LUDWIG^{††}

INTRODUCTION

Dan M. Kahan and Donald Braman's interesting article is addressed to those "academics and others who want to help resolve the gun controversy."¹ That's not us. The pragmatic goal of our labors in the consequentialist realm of empirical research has been to determine what works and at what cost.² Good answers to these questions strike us as important precursors to any satisfactory "resolution" of the debate. Indeed, our goal is *not* to end or resolve the debate, but to develop sound information that at least some voters and authorities may find useful. We aspire to be a sort of *Consumer Reports* for gun policy, not multicultural marketers.

But do facts actually affect gun policy in the real world? Kahan and Braman argue, persuasively, that "cultural worldviews" influence how individuals perceive gun control measures.³ We are convinced. From there, however, Kahan and Braman draw a somewhat puzzling—and almost certainly erroneous—conclusion that culture matters, and therefore, evidence on consequences does not matter. Why can't both culture *and* consequences matter? The fallacy is the same as in the old question: Do you walk to school or carry your lunch?

As a matter of fact, factual information has helped steer popular opinion in debates where voters held strong and conflicting cultural

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¹ Dan M. Kahan & Donald Braman, *More Statistics, Less Persuasion: A Cultural Theory of Gun-Risk Perceptions*, 151 U. PA. L. REV. 1291, 1294 (2003).

² See, e.g., Philip J. Cook & Jens Ludwig, *Pragmatic Gun Policy*, in EVALUATING GUN POLICY 1, 2 (Jens Ludwig & Philip J. Cook eds., 2003) ("Our inspiration, then, is the pragmatic belief that there is an important role for dispassionate analysis of the evidence.").

³ Kahan & Braman, *supra* note 1, at 1291 ("[I]ndividuals' positions on gun control derive from their cultural worldviews.").

attitudes, including in the area of guns. And, equally important, empirical research may affect public policy directly, independent of its influence on public opinion, by informing the decisions of courts, bureaucrats, and other actors in the policymaking process.

I. CULTURE, THE PARTIAL EXPLANATION

Needless to say, there are differences in opinion about gun control, and those differences tend to follow certain patterns. Views on gun control measures have been correlated with objective characteristics such as gender, race, region, religion, and military experience, as well as with such subjective matters as trust in government and judgment concerning the protection offered by the police.⁴ Kahan and Braman demonstrate that the two scales they construct from answers to survey questions, which, according to them, measure two dimensions of the respondent's "cultural worldview," are also associated with views on gun control. They find that people who are opposed to gun control tend to be less supportive of government social and regulatory programs (their *individualism-solidarism* scale) and tend to be less progressive with respect to race, sexual orientation, and capital punishment (their *hierarchy-egalitarianism* scale). But while circumstances and culture help "explain" (in a statistical sense) attitudes toward gun control, that is not the whole story.

For one thing, people's views of gun control depend on the specific policy measure in question. Arguably the best data available on attitudes toward gun policy come from nationally representative surveys collected in 1996, 1997, and 1998 by the University of Chicago's National Opinion Research Center (NORC). The NORC surveys show overwhelming support for moderate gun control measures: 88% of respondents believed that all handguns should be "child proofed," 81% believed that handgun sales should be limited to one per person per month, 82% believed that handguns should be registered, 77% supported background check requirements for private gun sales, and 89% believed that people who have been convicted of domestic-

⁴ See PHILIP J. COOK & JENS LUDWIG, POLICE FOUND., GUNS IN AMERICA: RESULTS OF A COMPREHENSIVE NATIONAL SURVEY ON FIREARMS OWNERSHIP AND USE 77-83 (1996) (presenting views on gun control in relation to sociodemographic characteristics, the "extent of involvement with guns," and concerns about crime); GARY KLECK, TARGETING GUNS: FIREARMS AND THEIR CONTROL 340-42, 348 tbl.10.3 (1997) (reviewing correlations between various demographics and support for gun control); ROBERT J. SPITZER, THE POLITICS OF GUN CONTROL 95-96 (2d ed. 1998) (tying certain demographics and beliefs to gun ownership and support for gun control).

violence misdemeanors should be prohibited from purchasing guns.⁵ But broad support for more stringent measures is lacking; the same NORC surveys found that only approximately 37% of the respondents favored a general ban on handgun possession outside of their use in law enforcement.⁶

If support for gun control were driven *entirely* by scorn for guns and the desire to “equalize wealth, status, and power,”⁷ why is it that over half of those who support moderate controls oppose a ban on the private ownership of handguns? It seems that much of the public is not judging these matters solely from their cultural gut but instead have a rather nuanced view of gun policy. More striking still is the finding that a majority of *gun owners* support each of the moderate gun control measures discussed above.⁸ Thus, it appears that even “individualistic, hierarchical” gun owners may support the “egalitarian, solidaristic” goal of reducing gun violence through government regulation.

Further evidence that there is more to the story comes from Kahan and Braman’s own analysis. (We set aside for the moment the irony of their using multivariate regression analysis as a tool of persuasion to argue that multivariate regression analyses are not persuasive!) Kahan and Braman’s measures of cultural attitudes among respondents to the General Social Surveys (GSS) plus their measures of the sociodemographic, religious, and regional backgrounds of respondents, together only explain 8% of the variation in people’s attitudes toward gun control.⁹ Is there some reason to believe that facts are entirely irrelevant in explaining the remaining 92% of the variation in the public’s attitudes about gun policy?

II. DO STATISTICS EVER PERSUADE?

Kahan and Braman argue that people will “credit or dismiss empirical evidence . . . depending on whether it coheres or conflicts with

⁵ Stephen P. Teret et al., *Support for New Policies to Regulate Firearms: Results of Two National Surveys*, 339 NEW ENG. J. MED. 813, 814 tbl.2, 815 tbl.3, 816 tbl.4 (1998).

⁶ See TOM W. SMITH, NAT’L OPINION RESEARCH CTR., 1999 NATIONAL GUN POLICY SURVEY OF THE NATIONAL OPINION RESEARCH CENTER 42 tbl.6 (2000) (displaying levels of support for various gun control measures).

⁷ Kahan & Braman, *supra* note 1, at 1297.

⁸ See Teret et al., *supra* note 5, at 814 tbl.2, 815 tbl.3, 816 tbl.4 (reporting the results of polls asking gun owners if they would support various gun control policies and regulations).

⁹ Kahan & Braman, *supra* note 1, at 1306 tbl.1.

their cultural values."¹⁰ While this response undoubtedly occurs, facts surely are not irrelevant. But the Kahan-Braman analysis is not suited to determine the role of factual information. We illustrate this point by replicating their analysis for two other outcome variables: whether the respondent smokes or not, and whether the respondent used a condom during her last sexual encounter.

Our Table 1 reports the results of our effort to replicate Kahan and Braman's regression analysis presented in their Table 1 and then reports the results of the same regression specification with the two other dependent variables.¹¹ As seen in the first column, our numbers confirm the Kahan-Braman results: the likelihood that a GSS respondent during the 1988 to 2000 waves reports favoring "a law which would require a person to obtain a police permit before he or she could buy a gun" is positively and statistically significantly related to the two "culture" variables, even after conditioning on race, gender, religion, region, educational attainment, socioeconomic status, and political affiliation. We present unstandardized regression coefficients in our Table 1, which we believe are consistent with what is shown in Kahan and Braman's Table 1; the general patterns of results are qualitatively similar for standardized regression coefficients.

The remaining columns in our Table 1 demonstrate that some of the same variables help predict whether the individual smokes or used a condom in her last sexual encounter. In particular, the "culture" variables are statistically important.¹² People who are more progressive in their views (our interpretation of the hierarchy-egalitarianism scale) are less likely to smoke and more likely to use a condom. People who are favorably disposed toward government social programs (the individualism-solidarism scale) are more likely to use a condom. Cultural worldview appears as relevant for these behaviors as for opinions about gun control.

¹⁰ *Id.* at 1292.

¹¹ Thanks to Dan Kahan and Donald Braman for sharing their data. While their choice about how to code a number of the control variables differs from what we would choose (for example, we disagree with their calculation of a Z-score for dummy variables linked to sex, race, religion, and urbanicity), their version of the data file is sufficient to illustrate our central point.

¹² The sample sizes are smaller for smoking than for gun control attitudes because the gun question was asked in more of the GSS surveys between 1988 and 2000 than was the smoking question. We note that the results are not driven by differences in samples or sample sizes because we obtained very similar results for the gun control regression when we restricted the analytic sample to the respondents who answered the smoking question.

Yet even with this apparent relevance of cultural worldview to smoking and condom use, we know that people's attitudes and behaviors about smoking and unprotected sex have changed dramatically over time. The changes have occurred, in part, in response to a growing body of epidemiological research about the health risks associated with each of these activities. For example, it is widely accepted that scientific information on smoking, released in the form of reports from the Surgeon General, public service ads, and mandated warnings on cigarette packs, accounted for much of the upward shift in the public's perception of risks associated with smoking and the remarkable decline in smoking since 1980.¹³ Put differently, statistical evidence *can* affect people's attitudes and behaviors even in areas where cultural attitudes run deep.

Further evidence on how facts can matter comes from the history of gun control legislation. The most important legislation in the post-War era was the Gun Control Act of 1968, which included a ban on sales of handguns to out-of-state customers.¹⁴ Senator Thomas Dodd laid the groundwork for this ban through staff studies of gun trafficking in 1961 and 1962, followed by public hearings in 1963.¹⁵ These efforts represented the first body of policy-oriented research on firearms markets.¹⁶ Writing in 1966, journalist Carl Bakal noted that "[n]o other firearms proposal in our history was based on such extensive research as the measure that was to become known as the Dodd Bill."¹⁷ Of course, it took several more years and strong leadership from the Johnson administration to get Congress to act, but Dodd's research helped give the proposed ban a credible basis.

Moreover, many knowledgeable people behave (and spend their money) *as if* facts were relevant for public attitudes, even those concerning gun policy. Gun manufacturers such as Beretta sponsor print advertisements that encourage readers to "[t]ip the odds in [their] fa-

¹³ See W. KIP VISCUSI, *SMOKING: MAKING THE RISKY DECISION* 48-59 (1992) (reviewing the public perception of the risks associated with smoking and attributing the increased recognition of risk to hazard warnings and a ban on television and radio advertising).

¹⁴ Pub. L. No. 90-618, § 101, 82 Stat. 1213, 1216-18 (codified as amended at 18 U.S.C. § 922 (2000)).

¹⁵ See Franklin E. Zimring, *Firearms and Federal Law: The Gun Control Act of 1968*, 4 J. LEGAL STUD. 133, 133-45 (1975) (outlining the activities of Dodd's committee, which addressed the mail-order gun problem).

¹⁶ Kristin Anne Goss, *Disarmed: The Real American Gun Control Paradox* 47 (2003) (unpublished Ph.D. dissertation, Harvard University) (on file with authors).

¹⁷ CARL BAKAL, *NO RIGHT TO BEAR ARMS* 185 (Paperback Library ed. 1968).

vor” by purchasing a handgun.¹⁸ State legislatures across the country have invited economist John Lott to testify about his research on the effects of permissive gun-carrying laws, and *The Wall Street Journal* has opened its “Op-Ed” space to a number of Lott’s essays about the futility of gun control measures.¹⁹ If Lott’s statistical research had no chance of persuading anyone, why would anticontrol groups call on him and procontrol groups attempt to impugn his professional objectivity?²⁰ Why would anticontrol activists work to discredit an ongoing National Research Council review of the firearms research literature if technical reviews of statistical findings had no power to persuade?²¹

III. NOT JUST VOTERS

Perhaps the most noteworthy example of how statistical research may affect public policy comes from the landmark 1954 Supreme Court case *Brown v. Board of Education*²² regarding school segregation, an area that is not, it seems fair to say, devoid of cultural conflict. As Chief Justice Warren famously argued, citing the empirical research

¹⁸ See Jon S. Vernick et al., *Regulating Firearm Advertisements That Promise Home Protection*, 277 JAMA 1391, 1392-93 (1997) (reprinting the Beretta ad and reviewing studies of gun use in the home).

¹⁹ See, e.g., John R. Lott, Jr., Editorial, *More Guns, Less Violent Crime*, WALL ST. J., Aug. 28, 1996, at A13 (providing a preview of his study with David B. Mustard, later published as *Crime, Deterrence, and Right-to-Carry Concealed Handguns*, 26 J. LEGAL STUD. 1 (1997)); John R. Lott, Jr., Editorial, *The Real Lesson of the School Shootings*, WALL ST. J., Mar. 27, 1998, at A14 (noting that Arkansas’s school shootings occurred in a locale where possessing guns was actually illegal and reiterating the claim that “shall-issue” concealed handgun laws reduce murder rates).

²⁰ When John Lott’s research findings on permissive gun-carrying laws were first released, gun control advocates such as the Violence Policy Center tried to discredit Lott by pointing to the possible links between the Olin Corporation (which owns Winchester Ammunition) and the visiting Olin Fellowship that Lott held at the time at the University of Chicago Law School. *Funder of the Lott CCW Study Has Links to the Gun Industry*, Violence Policy Center, at http://www.vpc.org/fact_sht/lotlink.htm (1999).

Gun control opponents have attempted to discredit those scholars offering substantive criticisms of Lott’s methods and conclusions. For instance, conservative columnist Ann Coulter attacked one critic by calling him a “Democrat.” Ann Coulter, *More Facts, Fewer Liberals*, at <http://www.anncoulter.org/columns/2001/030801.htm> (Mar. 8, 2001).

²¹ See, e.g., John R. Lott, Jr., *Gun Panel Hears with an Ear Shut*, L.A. TIMES, Aug. 31, 2001, at B15 (arguing that government funding and review of firearms research is influenced by political motivations); Dave Kopel & Glenn Reynolds, *Political Science: Doing Science a Grave Injustice*, NAT’L REV. ONLINE, at <http://www.nationalreview.com/kopel/kopel082901.shtml> (Aug. 29, 2001) (describing members of the National Academy of Sciences (NAS) review panel as “antigun”).

²² 347 U.S. 483 (1954).

by Kenneth Clark and others, "Segregation of white and colored children in public schools has a detrimental effect upon the colored children Whatever may have been the extent of psychological knowledge at the time of *Plessy v. Ferguson*, this finding is amply supported by modern authority."²³ This example also serves to highlight another argument against Kahan and Braman's pessimistic view about the potential of empirical research to influence public policy: voters and politicians are not the only actors involved in setting public policies, and thus not the only relevant target audience for statistical research.

Just as they were in the case of desegregation, judges and juries will become an increasingly important constituency for social science research in the area of gun control. More than thirty cities and counties have filed lawsuits against the gun industry charging negligence or public nuisance.²⁴ Many of these lawsuits will hinge on questions about how the design and marketing practices of gun manufacturers and dealers affect rates of crime and violence—that is, questions that are unavoidably factual and can only be answered through statistical analysis.

Administrative agencies also play a role in setting public policy, often on the basis of statistical social science evidence. For example, the Consumer Product Safety Commission (CPSC) was mandated by Congress to regulate products and suggest changes to, or even prohibition of, products that pose unacceptable risks to public health.²⁵ Assessments of these risk levels come, of course, from statistical analysis of population injury data. It is true that the CPSC does not regulate firearms; they were explicitly exempted from CPSC oversight by Congress.²⁶ But this lacuna says more about the political clout of the gun lobby at the time of the enacting legislation for CPSC than it does about the intrinsic limitations of empirical analysis to inform public

²³ *Id.* at 494 (internal quotation omitted); see also KENNETH B. CLARK, PREJUDICE AND YOUR CHILD 87-88 (1955) (addressing the Supreme Court's use of this language and ultimate rejection of segregation).

²⁴ Philip J. Cook & Jens Ludwig, *Litigation as Regulation: Firearms*, in REGULATION THROUGH LITIGATION 67, 67 (W. Kip Viscusi ed., 2002).

²⁵ See 15 U.S.C. § 2054(b) (2000) (listing the general duties of the CPSC).

²⁶ See Pub. L. No. 94-284, § 3(e), 90 Stat. 504, 504 (1976) (codified at 15 U.S.C. § 2080 (2000)) (prohibiting the CPSC from restricting the "manufacture or sale of firearms").

policy. At least one state, Massachusetts, has begun regulating firearms as consumer products.²⁷

The power of statistics to persuade remains evident in other areas of the gun policy debate as well. For example, this influence appears in the countless decisions made by national, state, and local law enforcement agencies about where, when, and how to deploy their resources in the battle against gun violence. Police in New York City use mapping and other statistical software to identify crime “hot spots” to be targeted for additional patrol activity,²⁸ a practice that has now been adopted in many other cities as well. New York’s aggressive anti-gun police patrols have also been motivated in part by the evaluation of a social science experiment in Kansas City.²⁹ And as part of the Bush administration’s Project Safe Neighborhoods initiative, local law enforcement agencies from across the country receive funds from the federal government to partner with local U.S. Attorneys’ offices and other federal agencies to identify interventions aimed at combating gun crime in their areas.³⁰ These local-federal partnerships are de-

²⁷ See *Enforcement Notice # 3, Attorney General’s Handgun Sales Regulations (940 CMR 16.00)*, Office of Massachusetts Attorney General Tom Reilly, at http://www.ago.state.ma.us/con_pro/guns.asp?head2=Handguns&parent=162§ion=17 (Feb. 2002) (discussing Massachusetts’s current handgun regulations).

²⁸ See *Mapping Crime Across New York State*, Vera Institute of Justice, at http://www.vera.org/project/project1_1.asp?section_id=2&project_id=6 (last visited Apr. 24, 2003) (providing information on New York State’s crime mapping program, and noting that “[t]he New York City Police Department helped pioneer” this tool for law enforcement).

²⁹ See LAWRENCE W. SHERMAN ET AL., NAT’L INST. OF JUSTICE, U.S. DEP’T OF JUSTICE, *THE KANSAS CITY GUN EXPERIMENT 9* (1995) (discussing the experiment and noting “[d]irected patrol around gun crime hot spots is about three times more cost-effective than normal uniformed police activity citywide, on average, in getting guns off the street”); Lawrence W. Sherman & Dennis P. Rogan, *Effects of Gun Seizures on Gun Violence: “Hot Spots” Patrol in Kansas City*, 12 JUST. Q. 673, 676-92 (1995) (describing and examining the Kansas City gun experiment). While, ultimately, the evidence from Kansas City may be somewhat less definitive than local police departments widely believe, more recent evaluations of similar policing interventions also provide evidence of some positive effects on crime. See Jacqueline Cohen & Jens Ludwig, *Policing Crime Guns*, in *EVALUATING GUN POLICY*, *supra* note 2, at 217, 220 (discussing a similar program in Pittsburgh, and concluding “the Pittsburgh program provides at least suggestive evidence that targeted patrols against illegally carried guns may reduce gun crime”).

³⁰ For a description of the funding sources and multilevel collaboration initiated through Project Safe Neighborhoods, see Press Release, U.S. Dep’t of Justice, Attorney General Ashcroft Announces Record Increase in Federal Firearms Prosecutions, New Resources to Prevent and Prosecute Gun Violence (Jan. 30, 2003), available at http://www.usdoj.gov/opa/pr/2003/January/03_ag_052.htm; Press Release, U.S. Dep’t of Justice, Fact Sheet, Project Safe Neighborhoods: America’s Network Against

signing their interventions at least in part on the basis of technocratic empirical analyses of what types of interventions have worked elsewhere. And Project Safe Neighborhoods was itself motivated by the apparently favorable evaluation results for two local programs: Operation Ceasefire in Boston and Project Exile in Richmond, Virginia.³¹

CONCLUSION: PRAGMATIC GUN POLICY

In sum, culture clearly matters for public opinion about gun policy in America, but there is also room for empirical analysis to affect policy development, not only through its influence on public opinion, but also through its direct influence on judges, regulatory agencies, and legislators. Of course, reasonable people will assign different values to the benefits that a given gun policy might achieve in terms of improved safety and health, and to the costs that such programs might entail in terms of the government budget and forgone liberty or convenience, but empirical analysis can, and should, be undertaken to provide some sense of the magnitude of these tradeoffs. This perspective is consistent with our own call for “pragmatic gun policy.”³²

If we accept the argument that there is some role for facts in setting gun policy, then statistical social science research on gun issues almost surely passes a benefit-cost test from society’s perspective. The costs of gun violence to American society are estimated to be on the

Gun Violence (Jan. 30, 2003), available at <http://www.usdoj.gov/ag/speeches/2003/013003psnfactsheet.htm>.

³¹ The perceived success of Operation Ceasefire in Boston came from rigorous social science research. See generally Anthony A. Braga et al., *Problem-Oriented Policing, Deterrence, and Youth Violence: An Evaluation of Boston’s Operation Ceasefire*, 38 J. RES. CRIME & DELINQ. 195, 219 (2001) (concluding that Operation Ceasefire successfully reduced youth violence). But see Jeffrey Fagan, *Policing Guns and Youth Violence*, 12 FUTURE CHILD. 133, 137 (2002) (arguing that the apparent success was actually part of a larger statewide trend). The perceived success of Project Exile, however, stemmed largely from the coincident decline in crime that Richmond experienced following the program’s announcement. More systematic research has since suggested that Project Exile contributed only modestly, if at all, to this decline. See Steven Raphael & Jens Ludwig, *Prison Sentence Enhancements: The Case of Project Exile*, in EVALUATING GUN POLICY, *supra* note 2, at 251, 252 (“We argue that the reduction in Richmond’s gun homicide rates surrounding the implementation of Project Exile was not unusual and that almost all of the observed decrease probably would have occurred even in the absence of the program.”). Anecdotal reports suggest that law enforcement in Richmond was not enthusiastic about the results of the formal Project Exile evaluation, which is puzzling if statistical social science evidence never persuades.

³² Cook & Ludwig, *supra* note 2, at 2.

order of \$100 billion per year.³³ Suppose that every ten years empirical social science research leads to the enactment of one good idea (or the suppression of one bad idea), defined as an intervention that would reduce (or increase) the volume of gun violence by only 0.5%. In this case, the discounted stream of benefits from such an intervention would be on the order of \$5 billion, valued using a very conservative 10% discount rate. Even if every one of the, say, fifty social scientists who currently conduct empirical research on gun policy were paid \$1 million per year (lamentably not the case), the benefits of conducting statistical research would outweigh these salary costs over a ten-year period—by a factor of ten! Statistical research on important problems is a sound investment of society's resources, even if one believes that such research only shapes policy at the margins in most cases.

Incidentally, this conclusion would surely have been embraced by the late Aaron Wildavsky, identified by Kahan and Braman as co-author of the best-known work on the cultural theory of risk.³⁴ After all, Wildavsky served for many years as the dean of one of the nation's leading public policy schools, which are (as we can testify from first-hand experience) hotbeds of statistical research on policy consequences. Indeed, Wildavsky's final word on the subject of health and safety risks was a book dedicated to helping citizens become better consumers of scientific research so that they could participate more effectively in the regulatory process.³⁵ In words that seem quite relevant to the Kahan-Braman position, he wrote: "The only sure way to know what we want to know is through the science itself. Citizens who train themselves to read and understand the primary sources, the original scientific studies, can participate meaningfully; those who do not, cannot."³⁶

In any event, we encourage other empirically oriented researchers to join us in resisting Kahan and Braman's call to drop our current research program on the consequences of gun control measures and instead turn our attention "to the project of constructing a new expres-

³³ See PHILIP J. COOK & JENS LUDWIG, *GUN VIOLENCE: THE REAL COSTS* 113-15 (2000) (estimating the costs to society by considering medical expenses, lost productivity, and contingent valuation data).

³⁴ See Kahan & Braman, *supra* note 1, at 1296 (citing MARY DOUGLAS & AARON WILDAVSKY, *RISK AND CULTURE* (1982)).

³⁵ AARON WILDAVSKY, *BUT IS IT TRUE? A CITIZEN'S GUIDE TO ENVIRONMENTAL HEALTH AND SAFETY ISSUES* 2 (1995) (explaining his purpose to help create an informed citizenry).

³⁶ *Id.* at 408.

sive vocabulary for carrying such deliberations forward.”³⁷ However, we would like to invite Kahan and Braman to take their own advice, noting that with terms like “hierarchy-egalitarianism” and “individualism-solidarism,” they have a good start on a new vocabulary that is sure to capture the imaginations of both sides of America’s gun debate. Meanwhile, the principle of comparative advantage suggests that we are better suited to running regressions.

³⁷ Kahan & Braman, *supra* note 1, at 1325.

Table 1: Regression Analysis of Kahan and Braman GSS Data³⁸

<i>Explanatory Variable:</i>	<i>Outcome Variable</i>		
	Favors gun permit requirement	Smokes	Last sexual encounter used a condom
Female	.056 (.004)**	-.037 (.009)**	-.026 (.006)**
Black	.001 (.004)	.006 (.010)	.053 (.007)**
Northeast	.004 (.004)	-.007 (.009)	-.014 (.006)**
South	-.005 (.004)	.001 (.009)	-.004 (.006)
West	-.018 (.004)**	.012 (.009)	-.003 (.006)
Urban	.005 (.004)	.009 (.009)	.013 (.006)**
Catholic	.031 (.004)**	.007 (.009)	.018 (.006)**
Jewish	.008 (.004)**	-.014 (.009)	-.005 (.006)
Education	.003 (.004)	-.046 (.011)**	.023 (.008)**
Socioeconomic	.012 (.004)**	-.049 (.011)**	-.022 (.008)**
Party Affiliation	.012 (.004)**	.004 (.010)	-.009 (.007)
Political Orientation	.015 (.004)**	.037 (.010)**	.009 (.007)
Fear of Crime	.024 (.004)**	.009 (.010)	.016 (.007)**
Hierarchy-Egalitarianism	.027 (.004)**	-.022 (.011)**	.040 (.007)**
Individualism-Solidarism	.050 (.004)**	.015 (.010)	.014 (.007)**
<i>R</i> ²	.082	.049	.046
N	12,077	2,610	4,392

³⁸ Results calculated using standardized GSS covariates generously provided to us by Dan Kahan and Donald Braman. Our regression model sets missing values for the socioeconomic variable as well as party affiliation and political orientation equal to zero and includes variable-missing dummies in an attempt to replicate as closely as possible the sample sizes reported in Kahan and Braman's Table 1. The model also includes a constant term (not shown). Standard errors are shown in parentheses. * = statistically significant at .10 level. ** = statistically significant at .05 level. Sample sizes are smaller for smoker and condom use than for gun control attitudes because these questions were asked in a smaller subset of years during the 1988 to 2000 period.