

Studying the Effect of Income on Punitive Attitudes with a Two-List Factorial Survey Method

TESS Proposal

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Given the relatively harsh criminal justice policies in the United States, social scientists are increasingly concerned about the antecedents and consequences of punitive attitudes towards criminals in the United States. This project examines an often-observed positive relationship in public opinion data between earned household income and punitive attitudes. We propose an internet-administered factorial survey using 8,000 respondent-questions that will allow us to investigate this relationship. In testing our hypothesis we propose to examine the feasibility of a type of randomized-response techniques that uses factorial survey methods in a new way.

#### THE SUBSTANTIVE ISSUE: PUNITIVE ATTITUDES AND INCOME

Repeated waves of the General Social Survey (GSS), the National Election Study (NES), and specialized data collections, have shown that household income in the United States is positively related to punitive attitudes (see e.g., Baumer, Messner, and Rosenfeld 2003; Soss, Langbein, and Metelko 2003). This statistical relationship is frequently interpreted to the effect that wealthier people are more punitive than poorer people as a result of class dynamics -- wealthier people use law to protect their interests, as in Black (1976; see also Chambliss and Seidman 1982). However, international victimization data suggest that the income-punitive attitudes relationship is reversed in other major industrialized democracies, where class conflict might be expected to be stronger (Author [unpublished manuscript]). Furthermore, in the US the positive relationship is non-linear because very poor people are *less* punitive than everybody else (Table 1). The income effect in the US is not well-understood.

#### SIGNIFICANCE OF THE PROBLEM & SOLUTION

Public opinion is frequently cited as a crucial factor in policy decisions concerning the criminal justice system (Hough and Moxon 1985; Roberts and Stalans 1997). Income differences strongly differentiate individuals with respect to their punitive attitudes -- net of education, political views, media exposure, age, or gender (Table 2). Yet crude and narrow measures of

punitive attitudes coupled with an inattention to income differences have obscured the social dynamics underlying punitive attitudes. As published research on punitive attitudes increasingly draws attention to arguments featuring "racial threat" (Baumer, Messner, and Rosenfeld 2003; Soss, Langbein, and Metelko 2003), income dynamics can and should take a more central role in explaining punitive attitudes. The need to understand this role becomes more urgent when spiraling rates of imprisonment are justified with allusions to benefits to individuals most likely to be victimized by crime (i.e., the poor).

Not only will the proposed project make headway into revealing the social dynamics producing punitive attitudes, but we also propose to investigate the feasibility of a *two-list* survey method (described below) in a practical setting. If the approach shows promise, then researchers in fields where sensitivity or social desirability problems emerge might make profitable use of the technique in factorial survey settings.

#### RESEARCH QUESTION

We ask if personal and vicarious experiences with the criminal justice system mediate income's negative effect on punitive attitudes.

Poorer people and minorities are disproportionately affected by the incarceration of enormous numbers of people. Individuals who are dealing with the burden or consequences of a relative or partner who is or has been imprisoned might express less punitive attitudes. People who have been directly affected by the criminal justice system might be less punitive than others. While such arguments have been alluded to in the literature (Baumer, Messner, and Rosenfeld 2003), they have not been empirically examined. We propose an experimental strategy to allow us to investigate the effects of these experiences on punitive attitudes. This investigation does not engage what mechanisms involved in transforming experiences into punitive attitudes, though we hope in the future to consider how authoritarianism, individualism, perceptions of justice, and

perceptions of criminals' "otherness" mediate the relationship between experiences and punitive attitudes.

## METHOD

The proposed study uses 8,000 internet respondent-questions. We want to over-sample individuals in the lowest quartile of the income distribution and administer one of two randomly chosen versions of 10 survey questions to respondents, providing a sample size of  $N = 800$ . A large sample is necessary due to measurement problems surrounding infrequent events, such as criminal behaviors.<sup>1</sup>

The first five questions constitute our manipulation and thus differ between the two surveys. These questions allow us to estimate how personal experience with the criminal justice system impacts punitive attitudes. The remaining five questions are identical in the two surveys. These measure several dimensions of punitive attitudes. Our specific questions were selected on the basis of exploratory factor analyses of large bodies of questions available in practice and in published literature, and on their face validity.<sup>2</sup>

## A TWO-LIST METHOD

Accurately measuring personal experiences with the criminal justice system is difficult due to non-response and under-reporting. It is with such considerations in mind that Fox and

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<sup>1</sup> Research suggests that internet data collection is superior to telephone or in-person interviewing when asking sensitive questions (Tourangeau and Smith 1996), and is appropriate for self-reports of criminal behavior, which suffer from under-reporting and non-response (Fox and Tracy 1981).

<sup>2</sup> Details of our procedures for selecting the questions are available upon request.

Tracy (1984) applied a "randomized response" methodology to the study of self-reported criminal behavior. However, such methods are infrequently used in the social sciences.

One well-known extension of randomized response techniques, the *list method* (Fox and Tracy 1984; Gilens, Sniderman, and Kuklinski 1998), involves giving respondents a list of events and asked how many -- *total* -- apply to them. The sensitive item appears in one list, but not the other, allowing a researcher to estimate the prevalence of the sensitive item. Wimbush and Dalton (1997) compared conventional, list method, and a traditional randomized response strategy to estimate employee theft rates. Both of the latter revealed theft rates approximately *twice* as high as in the conventional survey strategy. However, the list method is limited in its usefulness for studying practical problems. First, the method usually focuses attention on the sensitive attribute as an aggregate-level response variable, rather than an explanatory variable<sup>3</sup> (though). Second, if the list technique *were* employed to investigate the effect of the sensitive attribute on another variable, the measured attribute would only be estimated from half of the respondents. With questions regarding relatively uncommon events (at least among the majority of the population as a whole) this becomes a serious limitation.

We extend the list method to allow a researcher to use the sensitive variable (e.g., spending time in jail or prison) as either an exogenous or endogenous variable. This *two-list method* extends ideas developed by Fox and Tracy and other scholars for correcting bias in randomized response surveys with multiple unrelated questions (Folsom, Greenberg, Horvitz, and Abernathy 1973). Assume that Groups I and II are asked: "How many of the following life events have you experienced in the last five years?" (our questions are in the Appendix) Groups I and II receive different lists (Table 3A). The sensitive item of interest, spending time in jail or

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<sup>3</sup> We note that this is not an essential feature of the technique itself, but of how it is typically used.

prison, is included in *both* lists, in contrast to the traditional list method, which only lists the sensitive question in *one* list. Next, Groups I and II answer those "non-sensitive" questions from the *other* Group's list: "Which of the following has happened to you in the last ten years? Check all that apply" (Table 3B). We use the estimated probabilities of answering A and B to correct bias both in the estimate of item C's coefficient and standard error. An adjusted variance-covariance matrix can then be used for covariance-structure modeling (Bollen 1989).<sup>4</sup>

The two-list technique has the advantage over the ordinary list technique of using the entire sample to estimate the effect of the sensitive characteristic. The method is superior to other randomized response methods because questions employed in the technique can have higher face validity, and respondents are less likely to be uneasy about complicated randomizing devices or fears of trick questions.<sup>5</sup>

In sum, we are excited about our method and our applied research question, and hope to open a dialog with TESS's administration that will allow us to pursue our research agenda.

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<sup>4</sup> An unpublished technical report, available upon request, discusses the method in depth.

<sup>5</sup> Indeed, the respondents' true answer is entirely unknown unless  $Q=0$  (in which case there is no problem with sensitivity) or  $Q=3$  (which will be extremely rare).

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## TABLES

Table 1. Proportion of GSS respondents (1977-2000) favoring capital punishment and favoring harsher courts, by income quartile.

Quartile	capital punishment	harsher courts
1	65%	81%
2	73%	84%
3	76%	87%
4	76%	85%

Table 2. Results from General Social Survey (GSS) data (1977-2000) showing the percent increase/decrease in the odds of more punitive attitude towards criminals as a function of an explanatory variables.

Variable	Unstandardized Change in Odds	% Change in Odds of a Punitive Response
Lowest Income Tertile*	<b>0.7</b>	<b>-29</b>
Highest Income Tertile*	0.9	-7
Female	<b>1.4</b>	<b>36</b>
Read newspaper every day	<b>0.9</b>	<b>-10</b>
Married	<b>1.3</b>	<b>35</b>
Lives outside of MSA?	<b>0.7</b>	<b>-32</b>
Unemployed	<b>0.5</b>	<b>-46</b>
Catholic*	1.1	11
Jewish*	1.0	-3
No Religion*	<b>0.7</b>	<b>-29</b>
	Unstandardized Change in Odds	% Change in Odds of a Punitive Response per SdX
Age (Years)	1.0	6
Educ (Years)	<b>0.9</b>	<b>-16</b>
Conservative (Scale 1-5)	<b>1.2</b>	<b>32</b>
Hours TV/Day (ln)	1.1	4
City Population (ln)	1.0	-4

Note: Question from the GSS was, "In general, do you think the courts in your area are too harsh, not harsh enough, or about right?" Results are from a multivariate ordinal logistic regression, controlling for year and state of residence

Numbers in bold are statistically significant at  $p < 0.05$  (two-tailed test)

Omitted categories are Middle Income Tertile and Protestant Religion

N = 14653 using all data with complete observations



Table 3a. Example of lists containing the sensitive item administered to Groups 1 and 2. Respondents indicate how many events, total, they have experienced within the time frame.

	<b>GROUP I</b>	<b>GROUP II</b>
A	Experienced the death of a child	Lost a house due to flooding or fire
B	Won more than \$100 in a lottery	Inherited more than \$1000
C	Spent more than 1 day in jail or prison*	Spent more than 1 day in jail or prison*

Table 3b. Example of the follow-up list of items for Groups 1 and 2. Respondents indicate which of the two (if any) of the events they have experienced within the time frame.

	<b>GROUP I</b>	<b>GROUP II</b>
A	Lost a house due to flooding or fire	Experienced the death of a child
B	Inherited more than \$1000	Won more than \$100 in a lottery

\* Sensitive item

## APPENDIX (QUESTIONS PROPOSED FOR THE STUDY)

There are 10 questions, total. There are two versions of the questionnaire. The first five questions differ between the two versions.

### VERSION A

**INSTRUCTIONS:** The next several questions ask you about major life events that have happened to you within the last 5 years. Please indicate the total number of events that apply to you personally.

(1A) How many of the following major life events have happened to you in the past 5 years?

- Had a close friend get fired from job
- Had a friend or acquaintance go to jail or prison
- Had a close friend experience a life-threatening illness or injury

0                               1                               2                               3

(2A) How many of the following major life events have happened to you in the past 5 years?

- Had a close loved one to go to jail or prison
- Had a family member win \$1,000 or more in a lottery
- Had a spouse or child spend more than a week in the hospital

0                               1                               2                               3

(3A) How many of the following major life events have happened to you in the past 5 years?

- Experienced the death of a child
- Been sued or appeared in court for any reason
- Won \$1,000 or more in a lottery

0                               1                               2                               3

(4A) How many of the following major life events have happened to you in the past 5 years?

- Spent more than a week in the hospital
- Been fired from a job
- Spent more than a day in jail or prison

0                               1                               2                               3

(5A) Please check which, if any, of the following life events have happened to you over the past five years.

Lost a house due to flooding or fire  
Had a friend or acquaintance win over  
\$10,000 in a lottery  
Had a close friend get into in a major car  
accident  
Divorced or separated from your spouse  
Had your parents get a divorce  
Had a family member have a car or truck  
stolen

Had a parent or parents die from natural  
causes  
Moved to a new state

VERSION B

INSTRUCTIONS: The next several questions ask you about major life events that have happened to you within the last 5 years. Please indicate the total number of events that apply to you personally.

(1B) How many of the following major life events have happened to you in the past 5 years?

- Had a friend or acquaintance win over \$10,000 in a lottery
- Had a friend or acquaintance go to jail or prison
- Had a close friend get into in a major car accident

0                                       1                                       2                                       3

(2B) How many of the following major life events have happened to you in the past 5 years?

- Had a close loved one to go to jail or prison
- Divorced or separated from your spouse
- Had a family member have a car or truck stolen

0                                       1                                       2                                       3

(3B) How many of the following major life events have happened to you in the past 5 years?

- Had your parents get a divorce
- Been sued or appeared in court for any reason
- Moved to a new state

0                                       1                                       2                                       3

(4B) How many of the following major life events have happened to you in the past 5 years?

- Had a parent or parents die from natural causes
- Lost a house due to flooding or fire
- Spent more than a day in jail or prison

0                                       1                                       2                                       3

(5B) Please check which, if any, of the following life events have happened to you over the past five years.

- Had a close friend get fired from job
- Had a close friend experience a life-threatening illness or injury
- Had a family member win \$1,000 or more in a lottery
- Had a spouse or child spend more than a week in the hospital
- Experienced the death of a child
- Won \$1,000 or more in a lottery
- Spent more than a week in the hospital
- Been fired from a job

Both versions ask the following 5 questions:

(6) Compared to current practices, how frequently should convicted felons, overall, be sent to prison?

- MUCH LESS OFTEN
- SOMEWHAT LESS OFTEN
- SLIGHTLY LESS OFTEN
- NEITHER MORE NOR LESS OFTEN
- SLIGHTLY MORE OFTEN
- SOMEWHAT MORE OFTEN
- MUCH MORE OFTEN

(7) In the United States, someone convicted of murder will spend, on average, a little over 13 years in prison. In your opinion, is this amount of time...

- TOO SHORT
- SOMEWHAT SHORT
- SLIGHTLY SHORT
- ABOUT RIGHT
- SLIGHTLY LONG
- SOMEWHAT LONG
- TOO LONG

(8) In the United States, someone convicted of burglary will spend, on average, 2-and-a-half years in prison. In your opinion, is this amount of time...

- [ SAME ANSWER CHOICES AS IN (15) ]

(9) How much do you agree or disagree with the following statement?  
Too many people are put in jail for drug possession

- [ SAME ANSWER CHOICES AS IN (6) ]

(10) How often should a convicted murderer receive the death penalty?

- NEVER
- VERY RARELY
- OCCASIONALLY
- GENERALLY
- FAIRLY OFTEN
- ALMOST ALWAYS
- ALWAYS