Experiments in Public Opinion Research on the Internet

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November 16, 1999
File:EPORIV1A.DOC

INTRODUCTION

The Growth of Internet Access

As computer technology has evolved and come into the grasp of the every day consumer, the World Wide Web (www) has become the preferred medium of communication, commerce, data collection and distribution around the world. "The Internet is the fastest growing medium in history. It took radio 38 years to reach 50 million users, TV 13 years, Cable 10, and the Internet 5 (Morgan Stanley Technology Research, 1998)." Today, the average computer user can access the Internet for a nominal fee.[1] Electronic Mail (e-mail), homepages, and file transfers are virtually free of charge for the Internet user.[2] The Internet offers the ability to manage sophisticated graphics, motion picture, high quality audio, and text. These capabilities have mesmerized Internet users to the point that they tend to prefer time spent utilizing the World Wide Web over watching TV, using a phone, sleeping, exercising, reading, watching movies, socializing or doing household work (GVU 10th user survey, 1998).

Throughout the U.S., the number of computer users, as well as, overall Internet usage, has been increasing rapidly. According to Pew Center Surveys, the percentage of Americans who use personal computers at home, school, and work has increased from 59% to 69% between January of 1996 and January of 1998. Similarly, the percentage of Americans accessing the Internet has increased from 21% to 37% during the same time-period (Pew, 1998). In 1997, 37% of U.S. households reported owning a computer which is up from 24% in 1994

[1] Internet connection fees via Internet Service Providers range from $7 to $20 a month (1999).
[2] Yahoo and Excite are among many companies providing free e-mail service to the general public.

(National Telecommunication and Information Administration, 1998). From March to November 1998, CBS News/New York Times Polls that were conducted by telephone reported that 67% of the respondents had computer access and 31% had an e-mail address (Frankovich, 1998).

Survey Research on The Internet

The number of surveys conducted over the Internet has increased dramatically in recent years as well. Conducting survey research via telephone is becoming more difficult. Many individuals avoid the contact by call screening or just simply refusing to be interviewed (Maisel, 1995). The Internet provides an alternative to both telephone and traditional paper-and-pencil questionnaires. Pilon and Craig (1988) documented a "novelty effect" suggesting an increased response rate utilizing Computer Self-administered questionnaires (CSAQs) over pencil/paper questionnaires.

Today, computers play a critical role in survey research. Utilizing computers in survey research dates back to 1971, when Chilton Research Services conducted the first computer-assisted telephone interviewing (CATI) survey which has become one the most commonly used methods for data collection in the U.S. and Europe. CAPI or computer-assisted personal interviewing is used for conducting face-to-face interviews. It is similar to CATI in which survey programs are loaded onto a laptop machine and utilized in data collection at the respondent's home or office location. Other methods for computerized, self-administered questions include voice recognition entry (VRE), touch-tone-data-entry (TDE), prepared data entry (PDE),

audio computer-assisted self-administered interviews (ACASI), and finally the Internet survey itself.

Since the Internet provides an inexpensive, efficient alternative to access millions of citizens, considerable growth can be expected in the area of Internet Survey development. This method allows for collection of a large amount of data directly from respondents (Dillman, 1999; Witt, 1998). Internet surveys can be developed in a short period of time and uploaded to the web-sites accessible to everyone around the globe. It is apparent that survey programming on the web has reached a technical level in which complex branching, response validation, and question/answer randomization are easily programmable (Saris, 1991; Batagelj and Vehovar, 1998).

The Internet Survey approach can be divided into two distinct techniques: e-mail based interviewing and browser based interviewing (Batagelj and Vehovar, 1998). E-mail based interviewing can be conducted in various ways as well. In e-mail only interviewing, the interviewer simply sends an e-mail message to the respondent and requests answers to the survey questions presented in the body of the message. The respondent inserts answers into the original mail and sends it back to the requestor. In this method, organizing answers can be a difficult task requiring a secondary data-entry effort. Disk by e-mail is another method in which a computer program is shipped to the respondent via e-mail. The respondent runs this program on the local computer and ships the results back to the requestor. This method is cumbersome for the respondent as well as the interviewer, but it allows for sophisticated designs such as random selection of questions and the use of complex skip patterns. Browser-based

interviewing[3] is the most flexible method and it can be utilized to collect data in an interactive session with a respondent. A variety of programming methods such as Java-scripts, CGI-scripts, VB-scripts, as well as Active-X routines in combination with HTML code can used to customize survey forms. Browser-based interviewing (electronic questionnaires) can also provide immediate on-line feedback to the respondent. Help windows can be set up to assist the respondents along the way. Even error checking can be done as users filling out the questionnaire on-line in real time mode and questions can be tailored as users proceed through the electronic survey form.

Browser-based interviewing obviously eliminates the need for having an interviewer. Therefore, all errors and costs associated with the interviewer are eliminated. For example, in an Internet survey respondents type the answers to open-ended questions themselves which is more likely to be accurate in comparison to those answers collected by an interviewer over the phone (Flemming, 1999). In addition, Internet surveys can collect and transfer data directly to database systems eliminating errors associated with secondary data entry effort.[4] On-line polling thus creates an environment in which public opinion can be examined quickly and utilized as a powerful tool in the policy-making process.

It is important to point out that many researchers utilize e-mail technology to promote browser-based interviewing efforts. Informing the participants is usually done by placing "banners" in high-traffic search engines and information sites on the web, in addition to directly

[3] Microsoft Internet Explorer and Netscape are examples of Browser software.
[4] ActiveX scripts in combination with HTML codes can send collected data to database systems for further processing.

contacting them via e-mail services. This approach is currently being employed by Harris-Black International, Ltd., a polling organization that is engaged in forecasting statewide elections via the Internet. Excite, Inc. drives Internet traffic to the Harris-Black web-site and respondents are encouraged to register and participate in on-line polls. Researchers from the Political Science Department of the University of Rochester conduct the statistical analysis of the collected data (Black, Terhanian, 1998).

Issues in Internet Survey Reseach

An important question confronting the field today is whether or not the current on-line population is a seriously biased sample of the electorate. According to Warren Mitofsky, little has changed since the days of Literary Digest disaster. "Instead of sampling from recruited panels that respond by mail, we now have recruited Internet panels that respond by e-mail" (Mitofsky, 1999) and these panels do not represent any larger group. "The people recruited into panels are self-selected, with characteristics that differ from the target population. People on the Internet do not represent the adult population of the country, and the Internet panelists do not even represent people on the Internet (Mitofsky, 1999)." He warns us that even though people who do these polls are aware of these facts, they believe that their magic formula can convert their sample into the real thing.

A recent Wall Street Journal Article entitled "Are Political Polls Via Internet Reliable? Yes? No? Maybe?" by John Simons (1999) questions the validity of on-line polls as well. In this article, Gordon Black, chairman of Harris-Black is quoted as saying that "all research is going to migrate to the Internet," but most researchers as of now see Web

polls as being flawed. The majority of Internet users are male, white, rich, educated and technology-oriented. Simons points out that "there are small but important political differences between wired Americans and those who remain unplugged. According to February 1999 data, a slight plurality of Internet users, 34%, claimed to be "independent" voters, 31% said they were Democrats and 29% called themselves Republicans. But among all registered voters, Democrats have the edge: 35% claimed to vote Democratic, compared to 29% who said they vote Republican and 28% who called themselves independent."[5] Along the same line, a GVU study (8th survey, 1997) showed that 47% of the online population has a college education and that they were generally more affluent than the national population. In addition, one of the major findings reported by the GVU study was that approximately 40% of online users falsified their personal information. This can be quite problematic to survey researchers who would like to utilize demographic information in their evaluations of Internet survey data. But, sample representativeness is not the only challenging issue confronting the Internet survey researchers. They must also guard themselves against hackers who can significantly affect data quality by changing data (Fisher, Resnick, Margolis, Bishop, 1995).

The design of Internet questionnaires raises still other issues, Dillman, Tortora, Conradt, and Bowker (1999) reported the results of an experiment comparing a sophisticated questionnaire version to a simple version. "The advanced questionnaire used color, graphics for headers, html tables, and a format that departed significantly from that used in most paper and pencil questionnaires." The results obtained in this experiment suggested that using a questionnaire

[5] Wall Street Journal, April 13, 1999 issue:
http://interactive.wsj.com/public/current/articles/SB923957499521692.htm

without color and html tables required less transmission time, produced higher response rates, and was more likely to be fully completed. The study also showed that respondents took less time to complete the questionnaire; therefore, the advanced page layout in creating web questionnaires "does not translate to higher completion rate and better quality of data" (Dillman, 1999). Of course, technology is changing rapidly. High-speed processors such as Intel Pentium III process transmit data quickly. The new modem technology (56K) supported by high-speed lines such as T3 allows for extremely fast data transmission. Soon, technology will reach a point where pages will be transmitted instantaneously and use of color, fancy graphics and page layouts will not cause transmission delays resulting in poor response rates.

Zukerberg, Nichols, and Tedesco (1999) also examined design challenges while adapting a paper self-administered questionnaire to an Internet self-administered reporting questionnaire. Their report is based on a pretest of a National Library Media Center Survey. The U.S. Bureau of the Census conducts this survey on behalf of the National Center for Education Statistics. Two navigational strategies were implemented in this study as well as two item-level edit procedures. They reported that minor changes in wording or formatting can have a large impact in how respondents interact with Internet Surveys (Zukerberg, Nichols, Tedesco, 1999).

New programs such as Survey Select ™ , programming languages such as Questionnaire Markup Language (QML), and utilities which allow for automatic transformation from QML to CATI, CASI, and CADI formats (Vehovar and Battagelj, 1999), have been developed to make this development process easier for the Internet survey researchers.

Studies performed by Turner (1998), and by Tourangeau and Smith (1996) suggest that a self-administered, computer-assisted questionnaire yields a higher level of reporting rates in comparison to written questionnaires, especially when dealing with sensitive issues. The Pew Research Center also reports a higher rate of participation among volunteers on the Internet polls than those recruited through national telephone surveys. "About one-third of potential respondents recruited in telephone interviews participated in subsequent Internet poll - 35% in the pre-election online poll, and 33% in the millennium on-line poll. In contrast, fully 61% of the webpage volunteers completed the millennium online survey (Flemming and Sonner, 1999)."

It is evident that self-administration removes all errors associated with an interviewer such as a variable tone of voice suggesting specific answers. On the other hand, the interviewer interaction provides the respondents with cues about the meaning of the questions (Schwarz, 1996; Schwarz, Strack, Hippler, & Bishop, 1991). In addition, many other factors play a role in influencing the respondent such as question wording and format and the order of response categories. Design and layout of the instrument can potentially influence responses as well. Studies suggest that this can be observed in comparison between computer assisted polling and paper-and pencil questionnaires (Baker, Bradburn & Johnson, 1995; Bergman, 1994), but such differences do not seem to be substantive (Nicholls, Baker, & Martin). Nonetheless, changes in screen design that may seem to be harmless can convey a different message to the respondent.

Conducting survey research on the Internet is not an easy technical task. Many problems such as software breakdowns due to internal bugs, hardware failures, security issues must be carefully considered. Principles for improving the design of Web Surveys have previously been suggested by Dillman, Tortora, & Bowker (1998). Despite the empirical evidence on the importance of such design, little research has been done in regards to Internet surveys. Computer assisted surveys allow for a wide range of designs. Text layout, font, color, graphic icons, scrolling, input devices all can be under design control. Still pictures, animated graphics, full-motion video images can impact the results. Simple design changes such as changes in color, placing high-lighted items, and placing the answers in a box can easily affect the completion of web surveys (Dillman, Tortora, and Bowker, 1998).

In many situations, well-trained interviewers compensate for design flaws by assisting the user at the time of the interview. This is not possible when Internet surveys are employed. In general, respondents are not trained for this task and their familiarity with the equipment and the Internet can vary dramatically. Since the survey questionnaire must be understood in the same way by all respondents regardless of the access method, it creates a challenging environment for the designers. In addition, Browsers such as Netscape and Microsoft Internet Explorer do not display the HTML files in the same fashion. HTML files can be displayed in slightly different colors and formats depending upon the brand of the browser utilized. Therefore, there is a vital need for testing this type of questionnaire on various browsers prior to their release.

Design of Study

The purpose of this study is not to address the sample representativeness or specific technical design issues, but rather to use the Internet survey as an experimental laboratory for conducting methodological experiments on such issues as form, wording, order and context effects. Provided that we can get sufficiently large, varied samples, Internet surveys can be used to conduct such methodological experiments rapidly and efficiently with multiple replications.

In an attempt to search for patterns of multiple authorship by primary types of data collection, Fisher et al. discovered that over 95% of data-analysis in three leading political Science journals (American Political Science Review, American Journal of Political Science, and Journal of Politics) is based on secondary data (Fisher, Cobane, Vander Ven, Cullen, 1998). Researchers rarely collect their own data due to cost issues. My proposed experiment is a demonstration of how political scientists can collect their own data rapidly and cost-effectively to test various hypotheses.

In this study, I plan to demonstrate the utility of Internet surveys by replicating a number of well-documented experiments in the literature such as those carried out originally by Schuman and Presser (1981). In addition, I plan to test alternative hypotheses that have been developed to explain the various kinds of question form, wording, and content effects (see Sudman et al., 1996 for a recent review).

Table 1 shows a proposed set of experiments (see appendix A for details):

TABLE 1

List of Proposed Experiments by Type

Question Wording a. Forbid/Allow X-rated Movies b. Forbid/Allow Cigarette Ads c. Government Spending
Question Order a. Abortion vs. ending pregnancy
Response Order a. Child qualities b. Federal Tax c. Balanced Budget
Open vs. Closed a. Job satisfaction
No Opinion vs. DK a. Courts b. Arab/Israel c. Leaders Smart
Middle alternative vs. No Middle alternative a. Marijuana b. Liberal/Conservative c. Divorce
Question Balance a. Unions b. Gun Permits
Agree/Disagree vs. Forced Choice a. Lawlessness

In the area of question wording, I picked three experiments. The first two, Forbid/allow X-rated movies and Cigarette Ads (Schuman and Presser, 1981) believed to be highly salient and did not reveal a clear marginal effect (5% and 4%) and there was not much sign of an interaction with education. Interestingly, larger forbid-allow effect existed with higher DK level fitting the suggestion by Gallup that the effects of a "difference in wording ... tends to decrease to zero as the no opinion vote tends to zero (Gallup, 1941)." The third experiment is the replication of GSS wording variations in 1984, 1985, and 1986 regarding government spending. Rasinski (1989) concluded that issue labeling and enhancement have a substantial effect on public support for some issues. The effect of labeling was quite robust in his evaluation. To replicate such a question order experiment on the Internet, one must create a question/answering process that simulates conducting a survey by telephone, the mode in which Schuman and Presser's original experiments were carried out. In telephone surveys, after a question is read to the respondent, the interviewer moves on and rarely the respondent refers back to previously answered questions. In particular, we will restrict the respondent to view only one question at a time taking away the ability to move to previously displayed screens. This approach will be used to set up proposed experiments on the Internet.

I also plan to replicate a study originally conducted by Schuman and Presser on the abortion context effect. They found that survey respondents were significantly more likely to approve an abortion for a married woman who does not want any more children when it was

presented first, but significanly less likely when it was asked after a related question about abortion in a case of a child with a birth defect. Various hypotheses have been developed to explain this well-documented question order effect: The Subtraction hypothesis (Schuman and Presser, 1981), "Contrast Hypothesis" (Smith, 1986) and the closely related "Implicit Comparison Hypothesis" (Bishop, 1992). In addition to demonstrating the feasibility of replicating this classic question order experiment, I will also design follow-up experiments to test these alternative hypotheses.

In addition, I have selected Child Qualities response order question from the study conducted by krosnick and Alwin (1987); Federal Tax and Balanced-Budget questions from Bishop's study (1999). In these well-known studies, the order of answers were reversed leading to 8 to 16 percentage-point difference in response categories.

In the area of open versus closed responses, I am planning to replicate a question from Schuman and Presser adopted from NORC regarding the subject of work and job satisfaction. Five standard categories: High-income, no danger of being fired, working hours are short; lots of free time, chances for advancement, and the work is important and gives a feeling of accomplishment were created to be comparable across closed and open question forms. Schuman and Presser found that nearly 60% of the open responses fell outside these five and only a tiny fraction of closed responses fell within the five pre-coded categories.

I have also selected three questions from two studies by Schuman and Presser in the area of No Opinion/DK: 1) Courts and how they deal with criminals, 2) Arabs and Isreal peace effort, and 3) Smartness of

leaders in the government. From the marginals in the first study, the DK percentage is just about 14 points higher on the full filter version than on the quasi-filter version and in the second study, the difference was 10%. They suggested that "full filter that precedes an item and emphasizes the frequency of no opinion is more effective in encouraging DK responses than in quasi-filter (1981)." In addition, "since claiming an opinion is probably easier than claiming information or interest, one might expect DK to be higher with the latter type of filter (1981)." Bishop, Oldendick and Tuchfarber (1978) reported significantly more DKs with the use of interest verses an opinion filter as well.

I have also picked three questions regarding analysis of middle-alternative originally conducted by Kalton, Roberts, and Holt (1980) and then examined for "recency" bias by Schuman and Presser in two experiments varying the order of the middle option. They discovered that on one hand there was "compelling evidence that some of the increment due to addition of a middle alternative at the end of an item" was attributable to ordinal position. On the other hand, the major part could be attributed to the addition of a middle alternative regardless of its location (Schuman and Presser, 1981). My experiment replicates these questions and attempts clarify these points.

In the area of formal balance of questions, I am going to replicating two questions (unions and gun permit) utilized by Schuman and Presser in response to criticisms regarding unbalancing the issue in favor of one answer (i.e. Kornhauser, 1967-68). These two questions did not show any sign of univariate difference at all. I intend to verify those results.

Finally, I have picked 'lawlessness' question based on a tripartite split-ballot experiment by Schuman and Presser in 1974 and 1976, and 1978. It was evident that a clear majority chose the agree response, although logically if a majority agrees on one form the same proportion should disagree on the other form. This interpretation suggested that responses to the forced-choice form should fall between the other two forms. This was not the case. In their experiments, acquiescence was clearly visible in one instance but not in another when the two agree-disagree forms were compared with forced-choice form.

Summary

The objective of this study is not to solve the sampling issues in Internet Surveys and the problems associated with representativeness, but rather to demonstrate how this new mode of survey data collection can be utilized to create and/or replicate research investigations in an efficient and cost-effective manner.

Other researchers (Terhanian and others) are currently working on the methodological problems of statistical representiveness and the use of sophisticated weighting techniques to compensate and adjust for the under representation of various demographic subgroups in the population.

This dissertation project will focus instead on demonstrating how the cost-effective mode of Internet surveys can be used to replicate and extend previous research studies.

If, as expected, the result of this project show that we can replicate a number of major findings of classic methodological experiments reported in the literature (such as those by Schuman and Presser, Bishop, and Rasinski), then it will make it possible for numerous political scientists to carry out their own original investigations.

Most Political Scientists today who do empirical work rely heavily on secondary analysis (Fisher, Cobane, Vander Ven, Cullen, 1998) of data survey archives such as ICBSR, Roper, etc. Frequently these secondary analyses lead to new hypotheses which most investigators are unable to test because of their dependence on secondary survey data. However, if we can show that given a sufficiently heterogeneous population available through the Internet (though technically not statistically representative), we can replicate major research findings in methodological literature, it will give many political scientists the opportunity to beyond the limitation of secondary analysis and allow them to develop and test hypotheses that will advance the subfield of public opinion and political behavior. This new mode of political inquiry will, if successfully demonstrated, revolutionize the way we do empirical political science research today.

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Appendix A

Question Wording

1. Forbid/Allow X-rated Movies

   a. Do you think the government should forbid the showing of X-rated movies?

      1. Yes (forbid)
      2. No (not forbid)

   b. Do you think the government should allow the showing of X-rated Movies?

      1. No (not allow)
      2. Yes (allow)

Source: Schuman & Presser (1981) - SRC-77 August

2. Forbid/Allow Cigarette ADS

a. Do you think the government should forbid cigarette advertisements on television?

   1. Yes (forbid)
   2. No (not forbid)

b. Do you think the government should allow cigarette advertisement on television?

   1. No (not allow)
   2. Yes (allow)

Source: Schuman & Presser (1981) - SRC-79 Sept.

3. Are we spending too much, too little, or about the right amount on ...

Space exploration	Advancing space exploration
The environment	Improving and protecting the Environment
Health	Improving and protecting the nation's health
Assistance to big cities	Solving the problems of the big cities
Law enforcement	Reducing Crime
Drug Rehabilitation	Reducing drug addiction
Education	Improving the nation's education System
Assistance to blacks	Improving the conditions of blacks
National Defense	Strengthening national defense
Assistance to other countries	Helping other countries
Assistance to the poor	Caring for the poor

Source: Kenneth A. Rasinski (Autumn 1989) – GSS 84, 85, and 86

Question Order & Wording

1. Abortion versus ending Pregnancy

    a. Do you think it should be possible for a pregnant woman to obtain a legal abortion if there is a strong chance of serious defect in the baby?

    b. Do you think it should be possible for a pregnant woman to obtain a legal abortion if she is married and does not want any more children?

Source: Schuman and Presser (1981), Bishop (1985)

Response Order

1. Child Qualities

    a. Has good manners (manners)
    b. Tried hard to succeed (success)
    c. Is honost (honost)
    d. Is neat and clean (clean)
    e. Has good sense and sound judgment (judgment)
    f. Has self-control (control)
    g. Has acts like a boy or she acts like a girl (role)
    h. Gets along well with other children (amicable)
    i. Obey his parents well (obey)
    j. Is responsible (responsible)
    k. Is considerate of others (considerate)
    l. Is interested in how and why things happen (interested)
    m. Is a good student (studious)

A. The qualities listed on this card may all be important, but which three would you say are the most desirable for a child to have?
B. Which one of these three is the most desirable of all?
C. All of the qualities listed on this card may be desirable, but could you tell me which three you consider least important?
D. And which one of these three is least important of all?

Source: Krosnick & Alwin (summer 1987) - GSS 1984

2. In general, which of the following statements best represents what you feel about the federal tax system?

a. It needs to be completely overhauled
b. It needs major changes
c. It needs minor changes
d. It is basically fine the way it is

Source: Gallup (9711, Wave 2, Question 25) - Bishop (1999)

3. If the goal of balanced budget in 1999 is reached, would you consider this to be --

a. One of the most significant achievements of the last twenty-five years
b. A major achievement, but not one of the most significant
c. A minor achievement, or
d. No achievement at all

Source: Gallup (9801, Wave 1, Question 7) - Bishop (1999)

Open vs. Closed

Closed Form:

This next question is on the subject of work. People look for different things in a job. Which one of the following five things would you **most** prefer in a job?

a. Work that pays well
b. Work that gives a feeling of accomplishment
c. Working where there is not too much supervision and you make most decisions yourself
d. Work that is pleasant and where the other people are nice to work with

Open Form:

This next question is on the subject of work. People look for different things in a job. What would you **most** prefer in a job?

Source: Schuman & Presser (DAS-76)

No Opinion / DK

1. Courts

Omitted Form

In general, do you think the courts in this area deal too harshly or not harshly enough with criminals?

1. Too harshly
2. Not harshly enough
3. About right (volunteered)
4. DK (volunteered)

Offered Form

In general, do you think the courts in this area deal too harshly or not harshly enough with criminals, or don't you have enough information about the courts to say?

1. Too harshly
2. Not harshly enough
3. About right (volunteered)
4. Not enough information to say

Source: (NORC-74)

2. Arabs

Standard Form

The Arab nations are trying to work for a real peace with Israel. Do you agree or Disagree?

1. Agree
2. Disagree

Filtered Form

The Arab nations are trying to work for a real peace with Israel. Do you have an Opinion on that?

(if yes) Do you agree or Disagree?

1. Agree
2. Disagree
3. No Opinion

Source: Schuman and Presser (SRC-74 Fall)

3. Leaders Smart

Standard Form

Do you feel that almost all of the people running the government are smart people, **or** do you think that quite few of them don't seem to know what they are doing?

1. Are Smart
2. Don't know what they're doing
3. DK (volunteered)

2. Liberal/Conservative

Omitted Form

a. On most political issues, would you say you are on the ***liberal*** side or on the ***conservative*** side?

1. Liberal
2. Conservative

Offered Form

b. On most political issues, would you say you are on the ***liberal*** side or on the ***conservative*** side or ***middle-of-road***?

1. Liberal
2. Conservative
3. Middle-of-road

Source: Schuman and Presser (SRC-79 Sept.)

4. Divorce

Omitted Form

a. Should divorce in this country be easier or more difficult to obtain than it is now?

1. Easier
2. More Difficult

Offered Form

b. Should divorce in this country be easier to obtain, more difficult to obtain, or stay as it is now?

1. Easier
2. More Difficult
3. Stay as is

Source: Schuman and Presser (SRC-79 Sept.)

Question Balance

1. Unions

Unbalanced Form

a. If there is a union at a particular company or business, do you think that all workers there should be required to be union members?

Formally Balanced Form

b. If there is a union at a particular company or business, do you think that all workers there should be required to be union members, or are you opposed to this?

Source: Schuman and Presser (SRC-74 Fall, SRC-80 Sept.)

2. Gun Permits

Unbalanced Form

a. Do you favor a law which would require a person to obtain a police permit before he could buy a gun?

Formally Balanced Form

b. Would you favor or oppose a law which would require a person to obtain a police permit before he could buy a gun?

Source: Schuman and Presser (SRC-75 Feb., SRC-76 Feb. & SRC-78 Fall)

Agree/Disagree - Forced choice

1. Lawlessness

a. Please tell me whether you agree or disagree with this statement. Individuals are more to blame than social conditions for crime and lawlessness in this country.

b. Please tell me whether you agree or disagree with this statement. Social conditions are more to blame than individuals for crime and lawlessness in this country.

c. Which in your opinion is more to blame for crime and lawlessness in this country-individuals or social conditions?

Source: Schuman & Presser