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ABSTRACT

In spite of the increased use of the Internet for data collection, there is little published research about the process of data collection online. That is, discipline specific studies publish the "results" of their web-based surveys in discipline-specific journals, but little information is available on the "process" of Internet-based data collection. Thus it is difficult for the researcher wishing to use this cyber data collection method to find resources to use as guides. This document discusses using Web-based surveys to conduct counseling research. It goes over the most common types of Internet-based data collection, their advantages and disadvantages. A sample study is presented, which includes details as to the actual design, development, implementation, and analysis of the study. The document concludes with recommendations for using the Internet for data collection in research. (Contains 34 references and 3 figures.) (Author/ADT)

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Using Web-Based Surveys to Conduct Counseling Research

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by
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Chapter Fifteen

Using Web-Based Surveys to Conduct Counseling Research

Darcy Haag Granello and Joe E. Wheaton

Internet use in the United States is growing by more than two million new users per month and more than 150 million Americans have regular access to the Internet (Cyber-Atlas, 2002). Americans are becoming increasingly computer literate and the Internet is becoming the communication and information method of choice for many people (Duffy, 2000). Because of the expansive growth of the online population, researchers from many disciplines are starting to see the benefits of collecting data over the Internet (Schleyer & Forrest, 2000). Consequently there has been a rapid proliferation of online data collection as well as research published from online data sources (Crawford, Couper, & Lamias, 2001).

In spite of this increased use of the Internet for data collection, there is little published research about the process of data collection online. That is, discipline specific studies publish the *results* of their web-based surveys in discipline-specific journals but little information is available on the *process* of Internet-based data collection. Thus it is difficult for the researcher wishing to use this cyber data collection method to find resources to use as guides.

Collecting Data over the Web

The two most common types of Internet-based data collection are e-mail surveys and web-based surveys. With e-mail surveys, the participant receives an e-mail with a survey embedded in it. To complete the survey, the participant “replies” to the message and fills in the information just as is done with a paper and pencil survey. The survey is then e-mailed to the researcher who transfers the raw data into a database. The advantage of the e-mail survey is minimal technology or computer literacy is required by the user. However, a major disadvantage is the loss of anonymity as the user’s e-mail address is transmitted with the answers.

The use of a web-based survey, on the other hand, requires the ability to use a web browser but allows for flexibility and design control, automatic

data entry, and anonymity (Harris & Dersch, 1997). With web-based surveys participants are solicited to participate in the survey either by traditional mail, e-mail, telephone, or through other websites. Participants are given access information to enter the survey website; they complete the form online and then click on a “submit” button when they have completed their response.

Web-based surveys are quickly becoming the online data collection method of choice by researchers. This chapter outlines the advantages and limitations of web-based data collection and then describes the design and implementation of a web-based survey that has been conducted by the authors. Practical suggestions and lessons learned are included for researchers wishing to engage in their own online data collection.

Advantages of Web-based Surveys

Web-based surveys have several important advantages over paper and pencil surveys that make them particularly attractive to researchers. These advantages include reduced time, lowered cost, ease of data entry, flexibility and control over format, software development, recipient acceptance of the format, and the ability to obtain additional response-set information.

Reduced time. A primary advantage of web-based surveys is that they dramatically decrease response times (Lazar & Preece, 1999). Farmer (1998) reported that typical turnaround time is four to six weeks with traditional mail surveys, two to three weeks for telephone surveys, and only two to three days for web-based surveys. Franceschini (2000) also noted reduced turnaround time. In his study, half of the respondents were sent mail surveys and the other half were surveyed via the Internet. He reported that 21 of the 29 web-based responses were received before there were any responses to the traditional mail survey. In fact, Bauman, Airey, and Atak (1998) found that the majority of recipients of an e-mail survey either responded within one to two days of receiving the initial solicitation or not at all.

Lowered cost. Web-based surveys can have substantially lower costs than traditional mail surveys because there are no printing, postage, or stationary costs (Bauman, Airey, & Atak 1998). There are, however, some costs associated with web-based surveys, primarily for programming, using space on a server and some limited data entry. Farmer (1998) argued web-based surveys are 50% less expensive to implement than telephone surveys and 20% less expensive than mail surveys. In their study, Schleyer and Forrest (2000) found the web-based survey to be 38% less expensive than mail surveys. If there are technical problems with the survey, however, costs associated with “help desk” technicians can increase costs dramatically (Couper, Blair, & Triplett, 1998). To address the need for help desk support,

an initial piloting of the survey is essential to reduce the number of unforeseen technical problems that can increase cost.

Ease of data entry. In traditional paper and pencil surveys or even with e-mail surveys, data entry can be extremely expensive, time consuming, and subject to error. An electronic survey can be configured to send data to a database, spreadsheet, or a text file for use with a statistical package, eliminating the need for data entry with all its attendant problems.

Flexibility and control over format. Using the web allows researchers to use flexible design formats such as color, graphics, innovative question displays, split screens, embedded programs (applets), animation and sound (Dillman, Tortora & Bowker, 1999). Additionally, researchers can control the order in which respondents answer the questions easier than with paper and pencil surveys where respondents can flip back and forth and change answers (Wyatt, 2000). Other rules, such as “select one answer only” or “do not leave this question blank,” can be enforced with radio buttons (Lazar & Preece, 1999). With web-based surveys, the order and formatting of questions can be easily altered, which is particularly useful for Delphi studies (Wyatt, 2000). One study found that dropout rates were significantly lower when the order of data collection was changed and demographic information was collected at the beginning of the survey (drop-out rate 10.3%) rather than at the end (drop-out rate 17.5%) (Bosnjak & Tuten, 2001). Although this flexibility can be extremely useful, there are no definitive answers as to the psychometric effects of the various web-based formatting options (Arnau, Thompson & Cook, 2001).

Software development. Most Internet surveys are now constructed using HTML format with the potential respondent contacted via an e-mail cover letter. HTML editors are becoming increasingly more sophisticated and easy to use and data can be captured by a program on the server called a Common Gateway Interface (CGI) script. Several products exist that provide both the editing capacity for HTML and the necessary CGI scripts for capturing data. The most common of these are Microsoft's FrontPage and Macromedia's ColdFusion (Solomon, 2001). Additionally, there are some software programs designed specifically for web-based surveying that offer additional features such as management of the distribution of e-mail cover letters, built-in statistical analysis, the ability to generate reports, and automatic tracking of respondents. Examples of these programs include Zoomerang, Perseus's Survey Solutions for the Web, Creative Research System's The Survey System, and Survey Said™ Survey Software (Solomon).

Recipient acceptance of the format. There is some evidence that the Internet is becoming more acceptable to respondents as a method of

collecting data, particularly for males (Dillman et al., 2001) and for individuals who are college-educated (Cartwright, Thompson, Poole, & Kester, 1999; Franceschini, 2000). Several authors have noted that self-disclosure is increased when people communicate via the Internet (e.g., Joinson, 1999; Joinson, 2001; Moon, 2000). Conboy, Domar, and O'Connell (2001) found that an Internet survey offered the necessary assurances of anonymity to allow respondents to give accurate data surrounding very sensitive health issues. Participants appear to accept claims of confidentiality and anonymity, even though there is a possibility that Internet password and encryption codes could be broken (Harris & Dersch, 1997) and Internet Protocol (IP) addresses can be identified. In fact, IP addresses that can identify a specific computer are easily obtained (it is merely a check box in Microsoft's FrontPage). However, identifying who actually used the computer could be more difficult, depending on the situation.

Ability to obtain additional response-set information. With traditional paper and pencil surveys researchers only can know the results of the responses. Using the Web, researchers can learn about the respondents' answering process (Bosnjak & Tutan, 2001). For example, researchers can identify the number of people who viewed the survey compared with those who completed it, or if the software will allow, the number of people who started the survey but did not complete it (Bosnjak & Tuten). Information such as time of day or day of the week of the response also can be tracked.

Limitations of Web-based Surveys

In spite of the many advantages of web-based surveys, concerns about their use have been raised in the literature. These concerns focus on the following limitations: representativeness of the sample, response rates, measurement errors, technical difficulties, and accessibility issues for persons with disabilities.

Representativeness of the sample. Internet use in the United States continues to grow. In one month alone (September, 2001), 143 million Americans (54%) used the Internet, representing a 26% increase over August of 2000 (CyberAtlas, 2002). In spite of this growth, access to the Internet remains unequally distributed over the U.S. population. Most Web users are white (87.2%), male (66.4%), married (47.6%), and highly educated with almost 88% having some college and over 59% having obtained at least one degree. Additionally, 48% of Internet users are 35 years old or younger (Graphics, Visualization, and Usability Center, 1999). There are, however, recent reports that suggest the demographics of Internet users are becoming more inclusive. Annual growth rates for 1999 and 2000 were 25% for Internet use by individuals in the lowest income households (less

than \$15,000 per household per year). Additionally, Internet use among African Americans increased at an annual rate of 33% during 2000 and by 30% for Hispanics (CyberAtlas, 2002). Nevertheless, it remains the responsibility of the researcher to insure that all members of a defined population have equal access to the technology needed to complete the survey (Dillman, Tortora, Conradt, & Bowker, 1998). To the extent that certain portions of a population are excluded, the generalizability of the survey is compromised.

Response rates. Several studies using web-based surveys have found lower response rates than traditional mail surveys (Medin, Roy, & Ann, 1999; Nichols & Sedivi, 1998). However, unless the web-based survey uses a sampling method that allows only certain individuals to access the survey, it is impossible to know the response rates. For example, when participants for electronic surveys are recruited via newsgroups or search engines, researchers are not able to pinpoint the number of individuals who received the information and therefore cannot determine response rates or speak to the representativeness of the sample (Schleyer & Forrest, 2000). To circumvent this difficulty many web-based surveys make use of an initial e-mail to a targeted group that contains a specific URL to access the survey. This e-mail also can include an access code, password, or PIN to ensure that only those who have been targeted can complete the survey and to prevent any individual from completing the survey more than once (Wyatt, 2000). Researchers are cautioned, however, not to make the web-based survey too difficult to access with too many codes and passwords, as this added complexity can lower response rates (Cartwright et al., 1999).

To reduce the problem of lowered response rates, several researchers have advocated a system of multiple reminders. This can be done easily if the original solicitation was done via e-mail. Kittleson (1997) found that it was possible to double response rates with e-mail follow-up reminders, but others have claimed more modest success (Solomon, 2001)

Measurement errors. Very little is known about the psychometric implications of moving a survey from traditional paper and pencil to an electronic format (Arnau et al., 2001). Bowker and Dillman (2000) found that the placement of the electronic survey on the page (left-aligned, right-aligned) affected the respondents' reactions to the survey, with some who received the right-aligned survey stating they were confused and rating the design unfavorably, although the placement did not affect response rates. Wyatt (2000) cautioned that the effects of design choices must be investigated, noting that in translating the survey from paper to electronic formats, items can be perceived differently by participants, thus affecting the validity of the survey. For example, not scrolling down to see an entire

list of options in a list box or not understanding how to correct a mistaken response could affect survey results. Others argue that as long as the electronic survey format is similar to paper and pencil surveys, traditional surveys can appropriately be transferred to the web (Lazar & Preece, 1999).

Technical difficulties. Not everyone who completes a web-based survey will be extremely computer-literate, nor will everyone have access to the most up-to-date technology. Dial-up access is still the most popular method to access the Internet (80%; CyberAtlas, 2002), and 66.5% of Internet users have a connection speed of 56k or slower (Graphics, Vizualization, and Usability Center, 1999). As of April 2002, the most commonly used Internet browsers were Internet Explorer (90%, versions 4.x and above) and Netscape Navigator and related compatible products (5%, versions 4.x and above) (W3Schools.com, n.d.). Researchers using web-based surveys must ensure that their pages are easily downloaded and maintain their formatting in all types of software and hardware environments. Additionally, formatting issues such as open-ended questions or questions arranged in tables can lead to higher drop-out rates, as can the absence of clear navigational aids (Bosnjak & Tuten, 2001). Notably, one study found that although sophisticated formatting can make the survey more attractive and interesting, surveys with advanced features and sophisticated designs (HTML tables, multiple colors, motion, sound) had a 5% lower response rate than simple surveys (black letters on a white screen) (Dillman et al., 1998). The authors noted that the sophisticated design was slower to load, particularly on older browsers, and some older browsers were more likely to crash when attempting to load the survey. It took respondents of the sophisticated questionnaire more than twice as long to complete as those who used the plain questionnaire. In another study, researchers developed a complex web-based survey. They found that although 523 potential respondents said they had access to the Internet, only 73 of those had the capability to respond to this technologically sophisticated survey (Nichols & Sedivi, 1998). The capacity of browsers to handle complex designs has undoubtedly improved since these studies. Nevertheless, although much more research clearly must be done, it still appears that there is a point at which adding more features to the surveys becomes self-defeating to response rates. Piloting the survey with a representative sample of the population and on a wide variety of computing formats should help to reduce these difficulties (Wyatt, 2000).

Lack of accessibility for persons with disabilities. Printed material presents problems for persons with visual impairments (Job Accommodation Network, 2002) and web pages can present special problems unless they are properly designed. Surveys are rendered as forms in HTML and forms

can be handled well by recent versions of computer screen readers (e.g., JAWS from Freedom Scientific) or special software designed to read web pages (e.g., HomePage Reader from IBM). Many web pages were not created with accessibility in mind (Wheaton, Chovan, O'Briant, & Howell, 2001). However, resources exist on designing accessible web pages (e.g., the Web Accessibility Initiative (2002); World Wide Web Consortium, 1999). As Wheaton et al. noted, most problems are easily repaired.

Web page authors should provide information about the survey through a link from the home page. Such information should be linked from the top of the home page and be written in straight text. It should include information about the structure of the site by telling readers what is included in the survey (e.g., "The survey contains multiple choice and fill in the blank questions"), navigation tips ("Move between the fields by hitting the Tab key"), and how to contact the authors if help is needed. A simple and effective service is to provide a help line where the person can call and the form can be filled out. No names need to be given for this service so anonymity is maintained. It should be noted that web-based forms are more accessible than paper forms (which are just pieces of paper to persons with no vision) because the assistive software can read them as long as simple web design templates are followed.

Sample Study

Researchers wishing to use web-based surveys must consider the advantages and limitations addressed above in order to determine whether their research needs can be met with a Web-based survey. In this section of the chapter, we will discuss a sample study using a Web-based survey with recommendations for designing, implementing, and analyzing the results. The study was conducted by the authors in the autumn of 2000 (Wheaton and Granello, 2001) and distributed to employees of a large state agency, which had its own e-mail system. Participation was voluntary but strongly encouraged by the agency administration as the results would be used to determine the training needs for all staff over the next three years.

Study Design

In this study, we wanted to ascertain the training needs of all employees at the state agency. To accomplish this, we wanted to develop a Web-based instrument that would be easily understood and accepted by the recipients, allow for questions in a wide variety of formats (e.g., Likert-type scale questions, rank ordering questions, and open-ended questions), and be tailored to meet the needs of the various employees of the agency.

Although all participants were employees of the agency, there were really four different groups of employees, based on major job classifications. The four groups had both overlapping and discrete training needs. Thus, there were really five sets of questions that needed to be asked, one set that was common to all participants and four additional sets that were specific to each group. In addition, we wanted to conduct follow-up phone interviews of volunteers, but we wanted to ensure the anonymity of those volunteers. Therefore, we could not ask for identifying information on the survey.

Development of the Instrument

We chose to develop the questionnaire in Microsoft FrontPage, a commonly used and widely available web page authoring tool available in the Microsoft Office suite of programs. We also chose FrontPage because we had used it on many other occasions and were familiar with the product and the construction of forms within it. FrontPage allows for up to 256 questions, so it was ideal for our purposes.

The final instrument consisted of 166 questions. Sixty-four questions were in the general section and 13, 43, 16, and 30 questions in the specific sections for the four groups, therefore no person had to answer all 166 questions. The number of possible questions for each person ranged, depending on employee classification status, from 77 to 107. Participants were instructed to answer the first 64 questions and then click on one of four internal links, one for each of the four employee groups. Clicking on a link took the user to the appropriate section. When they reached the end of the questions for their employee groups, participants were asked to click on a submission button, which caused the form to be submitted. When the form was submitted, the server recorded the data, the time of day, the date, and the Internet Protocol (IP) address of the computer submitting the form. When the computer had recorded the information, a confirmation messages was sent back to the sender.

We included the information on time, date, and IP address in order to check for multiple entries, not as a means of identifying the respondents. When piloting the survey, we found that there was no method available to prevent a person from accidentally clicking the submit button more than once, thus submitting the data more than once. This inadvertent error could easily occur during peak times on the Internet because sending the data took some time, even on a high-speed connection, and the confirmatory response added to the delay. When such delays occurred, respondents might easily have believed that they had not submitted the form properly and click again in order to resubmit. Adding the date, time, and IP address served as a cross check of the submission. If a person submitted the form twice,

the date and IP address would be exactly the same, and the times of submission typically would be within a minute of each other. As a final check, all the answers would be *exactly* the same, as it was the same form that was being submitted every time. Identifying such errors was easy. We simply opened the data in a spreadsheet program and sorted by IP address and time of submission. If duplicates existed, the IP addresses matched and the times would be within one or two minutes of each other. By collecting information on date and time of submission, we also were able to examine response patterns by time of day and day of the week.

There are two important data formatting issues that should be noted: data were saved as tab-delimited text and the names of the variables followed SPSS conventions (they began with a letter and were no longer than eight characters). Although FrontPage allows for the creation of a database that data can be saved to directly, we chose to examine the data with Microsoft Excel and SPSS. The tab-delimited format allowed the data to be quickly imported into both programs. To move the data into Excel, we opened the text file, chose "Edit" from the Menu Bar at the top of the page, chose "Select All" from the Edit menu, and then selected "Copy." We then opened Excel, placed the cursor in the A1 cell and chose "Paste" from the Edit Menu (or clicked on the Paste icon). To open the data in SPSS, we chose "Read Text Data" from the file menu (SPSS version 11.0) and checked the appropriate boxes that identify tab-delimited text. In both cases the variable names were saved and the data was automatically placed in the correct cells.

Finally, we needed a mechanism to identify volunteers while ensuring their responses to the survey were anonymous. We accomplished this by creating a "confirmation" page in FrontPage. This page thanked the participants for participating in the survey and then asked them if they would be willing to volunteer for a follow-up phone interview. Those who volunteered clicked on a link that took them to a new FrontPage form that asked for their name and phone number. We did not gather date, time, and IP address because that information could have allowed us to match the date, submission time, and IP address to the same data in the original survey, violating their confidentiality.

Thus, using a common software program, we were able to develop a complex survey that was tailored to the individual, maintained anonymity, allowed for quick and errorless entry of data, and allowed us to solicit volunteers for a follow-up telephone interview. Because the survey was anonymous, we could not control for multiple responses, although our experience is that people are much less likely to respond to a survey at all than to complete it more than once.

We also noted that persons needing assistance could contact the authors and the form would be filled out over the phone. Those requiring assistance did not need to give their names or identifying information to access this service. Because this was official agency business, they could use the agency phones for this call without cost to them.

Implementation

We “beta” tested the survey by completing the instrument ourselves from the perspective of each of the four employee groups and by answering every question, using all possible answers. This procedure checked for errors in coding and submission. We pilot tested the survey for errors in content, spelling, and grammatical syntax using a pre-selected group of agency employees. We also used this group to test the clarity of the instructions. These persons were instructed to take the survey “for real” and to note any errors or problems and report them to us. Although the agency used Windows 98 and Internet Explorer 4.0 on almost all their computers, we tested the survey on the Macintosh and Windows 95 machines and with both Internet Explorer and Netscape Navigator 4.0. We also tested the form using JAWS test-to-speech synthesizer for persons with visual impairments. The survey did not render well in JAWS so we instituted the telephone alternative. Only one person used this service, however, as most staff with visual impairments completed the survey with the assistance of their colleagues. Based on the pilot study, small changes were made in the instructions and some syntax errors were corrected. No difficulty was observed with any browser.

When the survey was finalized, notification was sent to the staff via the Internal e-mail system of the agency. Employees were instructed to go to the web site listed in the e-mail and complete the form. The initial announcement was sent at approximately 4:00 p.m. on a Thursday afternoon. After the initial announcement, we requested that additional reminders be sent periodically. Unfortunately, we could not access the agency e-mail system, so all our messages to the staff had to be relayed through two other persons. Moreover we were not part of the e-mail system so we could not verify if the e-mail reminders that we requested early in the process had been sent. We corrected the problem but not before over a week had passed.

We did not have a central “help desk” but provided both our work and home phone numbers so that assistance was available during working hours every day the survey was open. We checked the data daily to ensure the data was being submitted and entered properly.

Analysis

The total number of valid responses was 419 of the 1,136 persons to whom the survey announcement was sent, for an overall response rate of 37%. Three of the four groups had response rates over 40% (46%, 45%, and 41%), but the fourth group had a response rate of only 16%. (We attributed this lower response rate to the diversity of job classifications within this category and the belief of persons within this category that the training needs survey was not relevant to them, although this is highly speculative.) The first group (with a 46% completion rate) had completed a paper needs assessment survey three years before and had a similar response rate (45%). The other groups had not been surveyed agency-wide before.

As discussed above, in addition to the survey results, we gathered data on time and date of submission. Coupling this data with the reminder times and dates, we were able to graph response patterns for all our participants. These results are shown in Figures 1 through 3. Figure 1 displays the time of day responding. Figure 2 gives the date (with day of the week) of response. Figure 3 shows the range of response times for each day and adds the median time of response. Reminders are indicated in bold. Double question marks (??) by a date designates when reminders were requested but their actual delivery could not be verified. Dates marked with an asterisk indicate the dates and times when reminders were sent and can be verified.

Overall, it appears that response rates for three of the four groups were somewhat consistent with response rates for paper and pencil surveys, as determined by a meta-analysis of published research (Kerlinger, 1986) and consistent with meta-analytic results of web-based survey response rates (39.6%, according to Cook, Heath, and Thompson, 2000). For one employee group, response rates were consistent with an earlier paper and pencil survey for the same population. It also appears that reminders do influence response rates (see Figure 2). Moreover, Figure 1 suggests that staff were most likely to respond either when they first arrived at the office or just before they went home. Noting this trend, we reasoned that reminders should go out late in the day to catch people when they were most likely to respond immediately or so that the reminder would still be visible first thing in the morning, before the demands of the day began to impinge on the employee's time. To test this assumption, we sent out a reminder on Wednesday, September 20, at 6:00 p.m., and another on Monday, September 25, at 3:30 p.m. The response rate on September 21 was the highest of any give day (see Figure 2), and the median response time was 9:35 a.m. The response on September 25 was also encouraging with the median response

time of 4:15 p.m. In addition, the median response time for the following day was 9:23 a.m. The number of people completing the survey was lower on September 25 and 26, but this may have been caused because of saturation (i.e., those who were going to respond had done so by that time).

Conclusion and Recommendations

Form development

We chose to create one form for all four employee groups. Given the large number of questions, this page would have loaded very slowly on a modem. In our situation all employees had access to high speed Internet connections, but researchers not having this luxury may consider breaking the form into its components and linking to the specific pages. By using one form, we also were able to link the general questions with the employee specific questions, giving us more information about each group.

Depending on how the data is to be analyzed, saving the data in tab-delimited format allows easy importation into spreadsheet programs such as Excel. Moreover, if a statistical package such as SPSS is to be used, making all the field names conform to the SPSS naming convention will allow SPSS to retain the variable's names. It should be noted that SPSS will import the data even if the variables are not named as SPSS mandates, but the variable names will be lost and replaced with generic names generated by SPSS, which will require re-entry by the researcher, a time consuming task that can easily be avoided.

Reminders

Although we had the severe limitation of not being able to control when reminders were sent at the beginning of the study, we were able to test our hypothesis about when was the best time to send reminders. From observation of the response patterns early in the study, we surmised that sending reminders late in the day or very early in the morning has the potential to be the most effective. We hasten to add that this hypothesis is as yet highly tentative for at least two reasons. First, the reminder of September 20 may have been the first reminder the staff received, notwithstanding the "bump" in responses on Tuesday, September 12, when we requested a reminder but did not receive confirmation that it was sent. If the September 20 reminder was the first, then perhaps those who had intended to complete the survey but had not done so now recognized that this was the time to carry out their intention. Second, we were not able to test sending out the reminder at other times of the day as we were near the end of the study. The response rates and median time of response do,

nonetheless, lend support to the hypothesis that reminders late in the day can lead to higher response rates. Our study may have some limited generalizability because the population was a “closed” group. That is, all participants worked for a single agency and could be contacted in a systematic and controlled manner, a luxury that many researchers will not have.

Notwithstanding these limitations, this study provides researchers with suggestions for constructing instruments, tabulating the data, and increasing response rates. Hopefully, others can apply this information and web-based survey research can become more precise.

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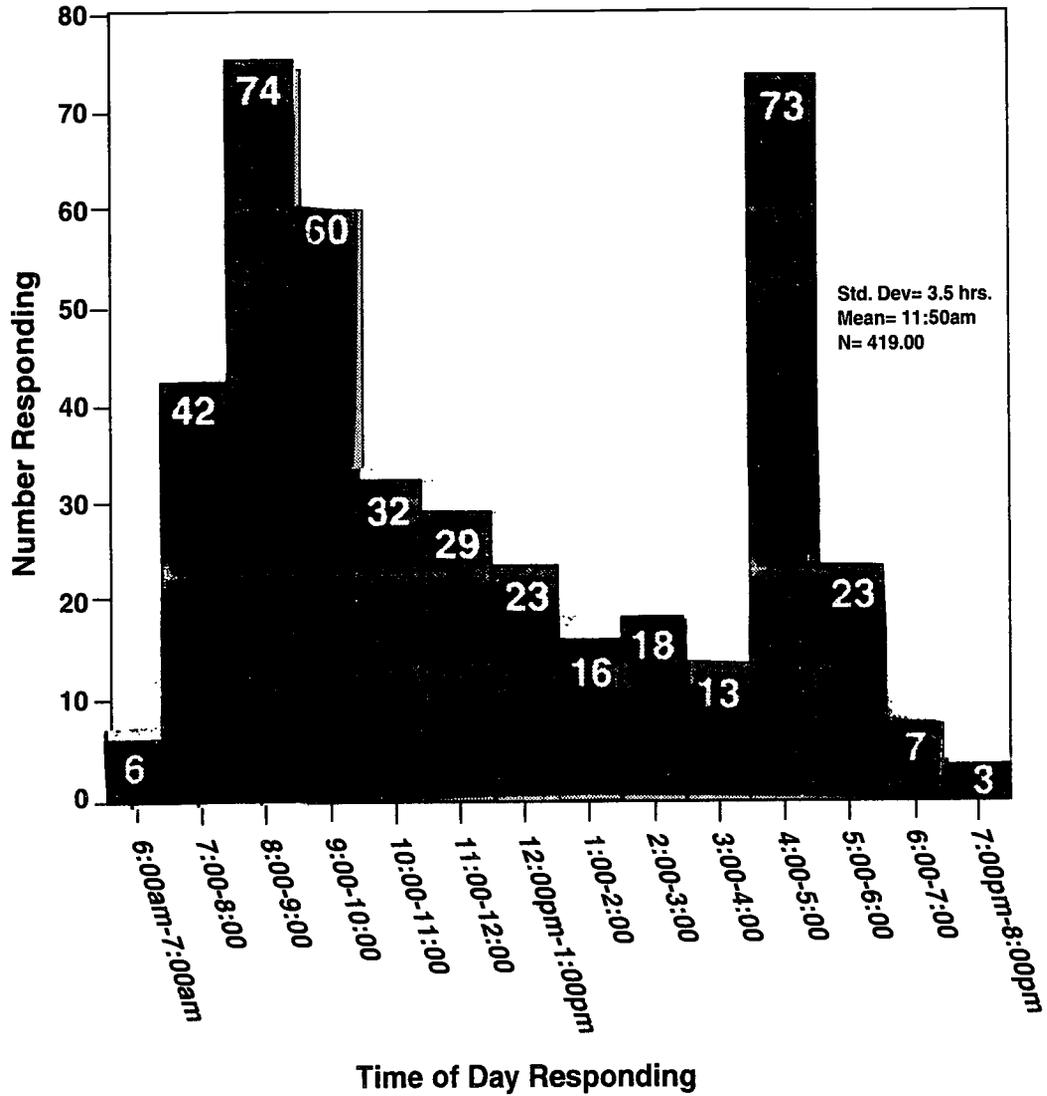
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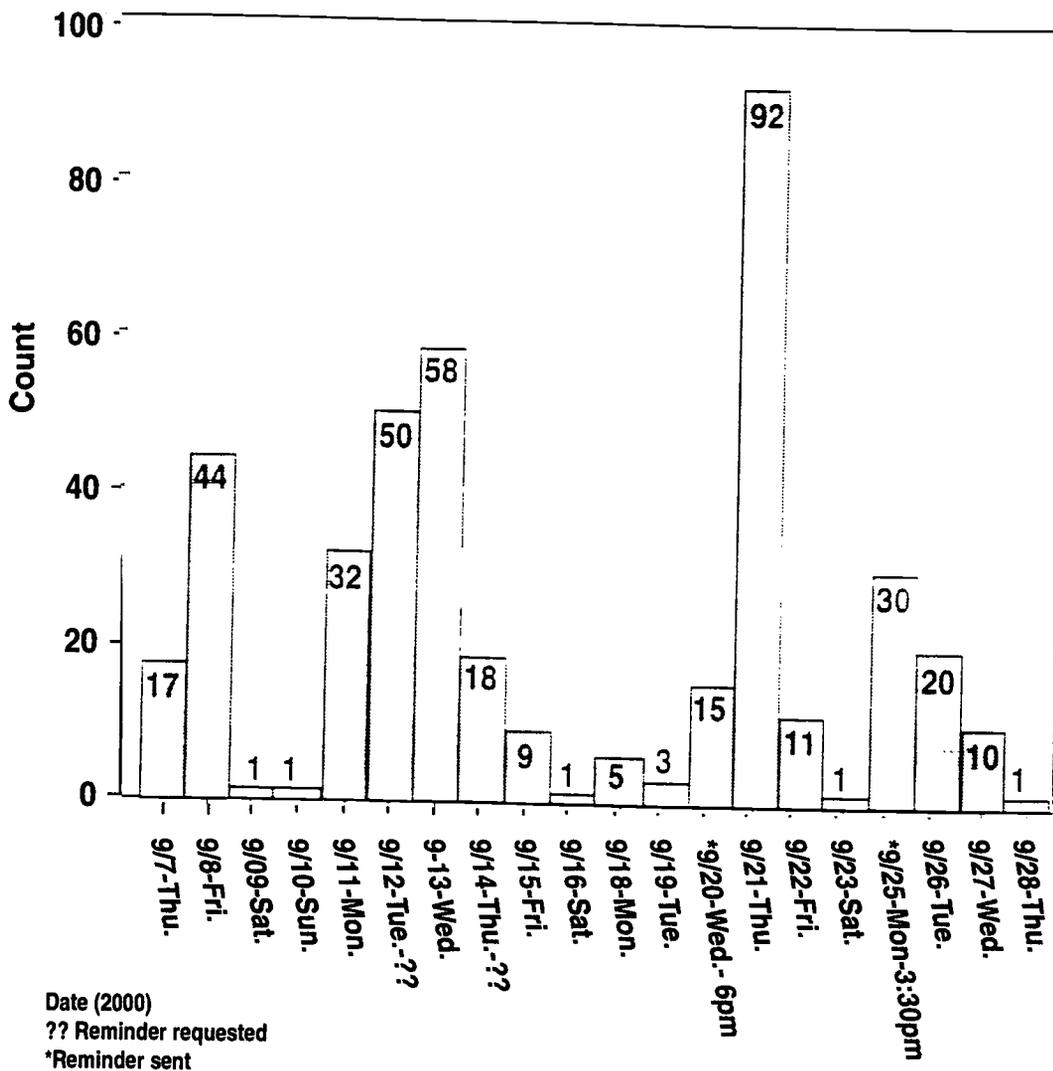
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Figure 1: Time of day Responding



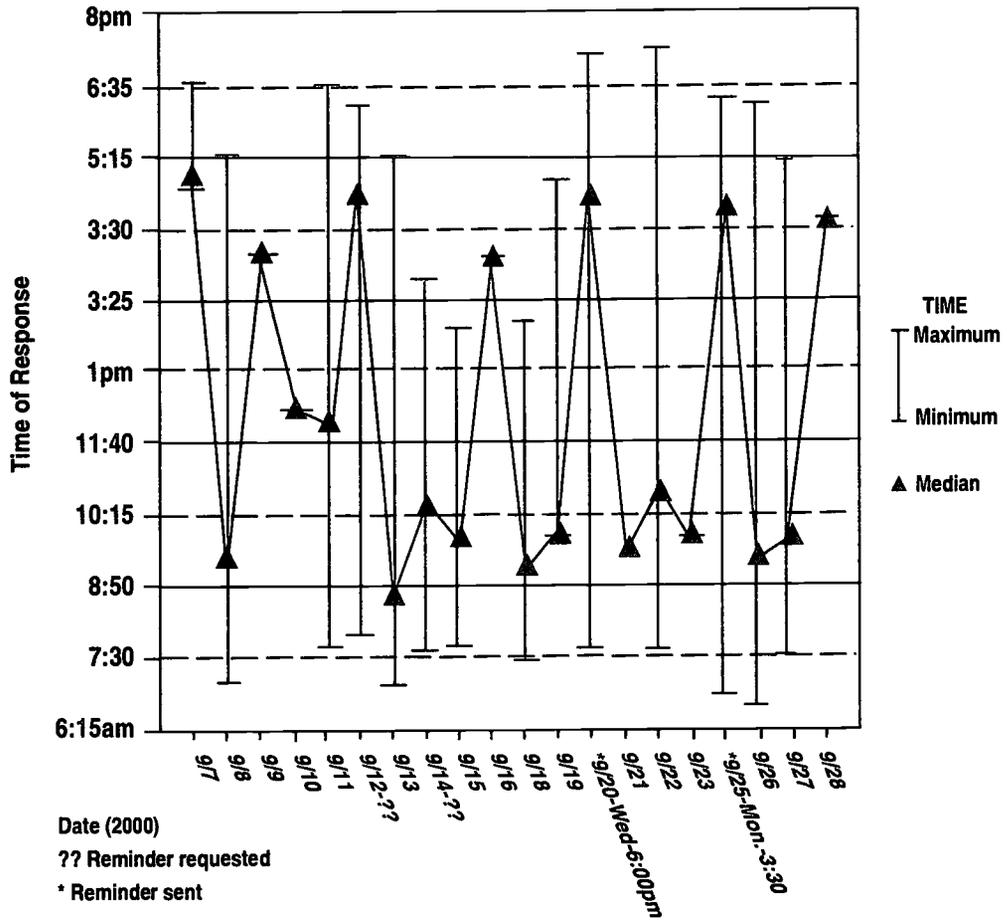
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Figure 2: Response Rate by Day



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Figure 3: Range and Median Response Times by Date



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