

THE CONTRIBUTION OF
RESPONDENT COMPUTER EXPERIENCE
ON PRIMACY EFFECT AND SATISFICING
IN INTERNET SURVEYS

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ABSTRACT

This study, conducted in the spring of 2005, was designed to assess the contribution of computer experience on primacy effect and satisficing in online survey formats. Although regression analysis found that survey format can predict primacy effect, computer experience did not add to the explanation of the variance in primacy effect. Similarly, survey format was found to be a predictor for satisficing, however, computer experience did not add to the explanation of the variance in satisficing. In addition, there was not a significant correlation between computer experience and the number of words used to answer open-ended questions. Lack of variability of computer experience among respondents was a limitation in this study.

Six survey formats (answer choices listed visible vertical, visible horizontal, pull-down menu, or check-all-that-apply with two surveys for each formats; answer choices listed in forward order and answer choices listed in reverse) were used to test for primacy effect. Initial linear regressions revealed that 6 of the 85 questions resulted in a positive and significant beta indicating primacy effect. Further regression analysis compared horizontally listed answer choices and pull-down menu survey formats individually against the vertical and visible answer choice survey format to determine if survey format explained a significant proportion of the variance in primacy effect. The interaction between survey format and answer order did not

produce a significant positive correlation with primacy effect, therefore further investigation of the contribution of computer experience on primacy effect in those two survey formats was not necessary. Linear regression showed that the check-all-that-apply answer format does significantly explain the variance in primacy effect, however further analysis showed that computer experience did not significantly explain additional variance in primacy effect.

Regression analysis showed that satisficing was more evident in the matrix survey format when compared with the visible vertical survey format, however computer experience did not significantly explain the variance in satisficing in these two survey formats. Finally, regression analysis failed to show that computer experience had an effect on the number of words used to answer open-ended questions (an indication of satisficing).

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CHAPTER ONE: INTRODUCTION

This chapter consists of six sections: background of the study, statement of the study, purpose, research questions, definition of terms, and significance. Issues related to conducting surveys and cognitive processes related to completing surveys are considered in the first section. Response order effects and deficiencies in the current research concerning Internet surveys are considered in the second section. The third section briefly describes what the study did and why the research is important, followed by a section listing the research questions that guided this study. The fifth section defines terms used in the research question. The significance of the research and impact the results will have on current research are discussed in the final section.

Background of the Study

Given that Internet surveys greatly reduce the time, effort, and cost of conducting surveys, the researcher who decides to use this mode should not make the assumption that all results yielded will be the same as when using paper-and-pencil surveys. General survey concepts can be applied to any survey mode be it face-to-face, telephone, paper-and-pencil, or Internet. However, there are some concepts that can only be applied to specific modes. Being a relatively new survey mode, Internet surveys are not as fully studied as are modes that have been in use longer. Much of the research on Internet surveys conducted thus far has been focused on increasing response rates (e.g. Dillman, Phelps, Tortora, Swift, Kohrell, & Berck, 2001; Hallowell, Patel, Bales, & Gerber, 2000; Paolo, Bonaminio, Gibson, Partridge, & Kallail, 2000; Soloman, 2001; Zhang, 2000). Other researchers have found that the

demographic variables (age, race, gender, educational attainment, income level) of Internet users are not the same as those of the general population (Best, Krueger, Hubbard, & Smith, 2001; Matz, 1999; White, 1996).

Completing surveys online requires eye-hand coordination that is different than what is used when completing surveys in other modes. For the most part, respondents to Internet surveys may have acquired that coordination, but there are many who may not have. Increasingly greater numbers of organizations are providing online-only versions of required surveys without taking into consideration that computer experience may not be equal for those completing the surveys. Since it is unknown if lack of computer experience interferes with respondents' ability to complete a survey, it is not known if differences in the survey answers can be attributed to differences in respondents' demographics, in their ability to coordinate their motions to complete the survey, or some other unidentified factor.

Special Issues in Surveying

Regardless of the survey mode, the design of the survey is of the utmost importance. Survey-design research and psychological cognitive principles have been used to investigate how the wording of the questions and formatting affect the validity and reliability of surveys, i.e. the meaning of the questions will be the same for all respondents, will have the same meaning across time, and will yield the most accurate data.

To ensure that questions mean the same to all respondents, the survey needs to be designed so the respondent is able to navigate easily through the questions and to

be able to understand what is being asked. For the most part investigations into these issues have focused on face-to-face, paper-and-pencil, and telephone surveys; only limited research has focused on Internet surveys. Some of the studies on Internet surveys have focused on navigation issues: encouraging easier flow from question to question (Bowker & Dillman, 2000) and formatting that enables the respondent to determine which questions apply to that particular respondent (Dillman & Bowker, 2001; Schaefer & Dillman, 1998; Dillman, Tortora, & Bowker, 1998). These issues, along with formatting that will increase motivation and ensure adequate response rates (Couper, Traugott, & Lamias, 2001; Crawford, Couper, & Lamias, 2001), are the main issues with which survey researchers have been concerned.

Survey design. Because a poorly designed survey can encourage nonresponse, it is worthwhile for survey researchers to consider the design of respondent-friendly Internet surveys. Becoming familiar with four features of visual design sciences can aid the Internet survey researcher in that endeavor: the law of groundfigure refers to finding a contrast between font and background that draws the respondent's attention to the appropriate place in the survey (Dillman & Christian, 2002). The law of Pragnantz states that simpler shapes are easier to perceive and remember. The law of proximity states that objects that are close to one another are perceived as belonging together. The law of similarity states that similar shapes and figures will be seen as a group. Dillman & Christian (2002) go to great lengths to explain how these laws affect the respondent's ability to properly perceive the questions and navigate through the survey. These principles have been investigated for paper-and-pencil surveys and can be applied to Internet surveys because both are visual formats (Dillman &

Bowker, 2001; Dillman, Tortora, & Bowker, 1998; Dillman, Tortora, Conradt, & Bowker, 1998; Redline & Dillman, 1999). The application of these principles will alleviate some of the respondent's cognitive burden when completing surveys.

Internet survey researchers use many different question formats including Likert scales where the answer choices are placed horizontally or vertically, Likert matrices (matrices or banks of several questions with Likert scales for answer choices), check-all-that-apply, and open-ended questions. Survey researchers have studied primacy and recency effects (Chang, 2001; Dillman et al., 2001; Dillman, 2000) and satisficing (Chang, 2001; Krosnick, Narayan, & Smith, 1996; Tourangeau, 1984) using these different question formats in more traditional survey modes; in Internet surveys however, the survey designer has format options that are not available in paper-and-pencil surveys. For example, rather than listing Likert scale answer choices in full view on the page, they can be placed in a pull-down menu. The different answering options potentially pose a problem for respondents who have little computer experience because not only do respondents have to determine how to answer the question, but they also need to coordinate the mouse and keyboard actions in order to mark their answer. Thus top-down processing complicates the situation especially for those respondents who have little computer experience.

Cognitive process research. *Primacy effect* describes a respondent's tendency to choose answer items that are at the beginning of a list. *Satisficing* is an attempt by respondents to minimize the cognitive effort they need to expend to answer survey questions. The three factors of satisficing identified by Krosnick (1991) are motivation, ability, and task difficulty. *Motivation* refers to the respondent's

enthusiasm to complete the survey. *Ability* refers to the respondent's capability to understand what the question is asking and having the knowledge to respond. Task difficulty refers to the complexity of the survey in terms of navigation. Because there are additional skills required in answering questions on a computer, question formats that require greater mouse and keyboard action may result in greater primacy effect or satisficing. Therefore in Internet surveys task difficulty also refers to the respondent's skill in using eye-hand coordination to manipulate the mouse and the keyboard to answer the questions, while ability also refers to the respondent's knowledge of how to perform these tasks.

Much research has been conducted to determine why respondents choose to answer questions the way they do. Sometimes respondents choose an answer that does not best portray their opinions or attitudes. Reasons for this include the desire to choose the most socially acceptable answer, choosing an answer that appears more prominent, or choosing an answer that seems to be "good enough." Research about the mental steps the respondent works through to answer questions is a rather new concept, and it has mostly been conducted for telephone, face-to-face, and paper-and-pencil surveys (Chang, 2001; Dillman et al., 2001; Krosnick & Alwin, 1987; Krosnick, Holbrook, Berent, & Carson, et al., 2002; Krosnick, Narayan, & Smith, 1996) likewise for this study the investigation of response order effects (primacy and recency effects) and satisficing has been studied for paper-and-pencil surveys but not for Internet surveys.

Krosnick and Alwin (1987) observed that regardless of how qualities of children were placed in a list, respondents tended to choose those qualities that

appeared at the beginning of the list as being more desirable. By contrast, in their long-distance telephone customer satisfaction survey, Dillman et al. (2001) found that paper-and-pencil respondents were more likely to choose the middle of a numerical scale while telephone respondents were more likely to choose the end of the scale.

Chang (2001) found evidence of satisficing while comparing telephone and Internet responses. She found that the telephone respondents exhibited more satisficing than did Internet respondents on a sliding answering scale, and the Internet respondents exhibited more satisficing than did telephone respondents on trait ratings. Krosnick, Holbrook, Berent, and Carson, et al. (2002) conducted a study using face-to-face and telephone interviews and found that respondents with lower educational attainment and respondents who were allowed to enter their responses anonymously exhibited greater satisficing. They also found that respondents tended to exhibit greater satisficing on questions towards the end of a long survey. Half of the respondents in the study were given the option of having no-opinion (evidence of satisficing) and their answers were compared with survey answers that did not have the no opinion option. In order to measure motivation, one of the factors of satisficing, respondents indicated whether they had thought about their answers, searched their memories for information that would help them formulate an answer, or if they were careful to be sure their answers best reflected their opinions.

In both a paper-and-pencil survey of 721 students and a telephone survey of 425 adults, Krosnick, Narayan, and Smith (1996) found evidence of satisficing and primacy effect. In the first study they found a negative relationship between educational skills and response order effects (primacy and recency effects) and

acquiescence (agreeing with the question). The second study confirmed their findings relating educational attainment and response order effects and also showed that high perceived value of the study, high need for cognition, inclusion of detailed instructions, and prior thought about the topic discouraged satisficing.

Krosnick and Alwin (1987), Dillman et al. (2001), and Chang (2001) all looked at response effects in general; Krosnick and Alwin (1987) concentrated on primacy effect and Dillman et al. (2001) and Chang (2001) on satisficing. The two Krosnick et al. studies (1996 and 2002) made comparisons between satisficing and educational attainment. These studies have shown how response order effects and satisficing can be measured and can interact with educational attainment; the Chang study however was the only one with an Internet component. In none of these studies was the respondent's computer experience correlated with response order effects.

Several studies (Schaefer & Dillman, 1998; Paolo et al., 2000; Shermis & Lombard, 1999) found that respondents completed open-ended questions more thoroughly on Internet surveys than on paper-and-pencil surveys. Although the studies weren't specifically measuring satisficing, completing open-ended questions more thoroughly can be considered an act of optimizing (the opposite of satisficing) response strategy because the respondent has to expend more time and energy to complete the questions more thoroughly.

Special Issues in Surveying on the Internet

This section will discuss special issues regarding Internet surveys, such as survey design, computer hardware and software, and respondent computer experience.

Survey design. Some concepts that have been investigated in Internet survey design include constructing surveys for clarity, designing easy-to-follow navigational paths, and organizing information in the survey. Several studies (Jenkins & Dillman, 1995; Dillman, 1999; Dillman, 2002; Dillman et al., 2001) have investigated the use of graphical and word symbols, format, brightness (including color), and shape, and the influence these features have on the respondent's ability to understand the questions, ability to mark the correct response, and ability to navigate to the next question. Other studies have investigated the effect that some format features have on a respondent's cognitive burden, such as survey progress indication and scrolling pages as opposed to questions on separate pages.

Several studies (Couper, Traugott, & Lamias, 2001; Crawford, Couper, & Lamias, 2001; Dillman et al., 2001; Dillman, Tortora, & Bowker, 1998; Shonlau, Fricker, & Elliott, 2002) indicate that showing survey completion progress results in a greater likelihood that the respondent will finish a survey. Informing respondents of their progress through the survey relieves frustration, thereby reducing task difficulty by reducing the respondent's cognitive burden. Two of the studies could not find agreement as to whether placing one question on each page or having one scrolling page made completing the survey less frustrating for the respondent. Dillman, Tortora, and Bowker (1998) indicated that it was less frustrating for the respondent to

be able to scroll through the entire survey because it allowed them to have both an idea of how much there was left to go and a frame of reference for how they answered previous questions. Shonlau, Fricker, and Elliott (2002), on the other hand, indicated that reducing the amount of reading on the page by minimizing the number of questions per page reduced frustration. Perhaps because neither of the studies measured computer experience, it is difficult to explain the discrepancy in the findings.

Hardware/software issues. There are some specific technological problems related to the variability of computer hardware and software that arise when surveying on the Internet that are not a problem with other modes of survey research. Naturally there is the need for completely accurate and valid e-mail addresses in order to receive the invitation to participate. Also variability in computer languages makes Internet survey access difficult for respondents who do not have a large variety or updated programs on their computers. Additionally, how the survey appears on screen can be affected by the computer monitor's various size or color settings. Computer programming and settings affect not only *how* but *if* a survey can be viewed. There may be occasions when a survey will download, but due to the amount and variability of memory, the computer will freeze after the respondent has completed several pages. Problems such as these add to respondent frustration and thus increase the likelihood of nonresponse error.

The issue of transference of the survey that Dillman, Tortora, Conradt et al. (1998) investigated is related because surveys are transmitted to the computer via a modem however, a variety of modem types are available. These include dial-up

connection, cable modem, or Digital Subscriber Line (DSL), to name a few. Some modems are capable of receiving data faster than others. A diligently designed survey with a large number of graphics and tables may take one type of modem a few seconds to download and another type of modem several minutes. The longer it takes for a survey to download the greater the respondent's frustration and therefore the greater the nonresponse. Graphics or other items added to Internet surveys in order to entice respondents to complete and submit their surveys can actually prevent them from being viewed due to the large amount of memory required for download.

Respondent computer experience. Another issue specific to Internet surveys is computer experience. In other modes of survey research, once the survey instrument is created, it is for the most part usable by all potential respondents. The only exception is where reading and writing skills and language differences interfere. Most people have acquired the writing and speaking skills necessary to complete paper-and-pencil, telephone, and face-to-face surveys; however, with computers being a fairly new technology, computer experience is widely varied. One's computer experience can range from relatively none with a mouse and keyboard to 30 years or more of experience. Those with the most experience tend to be young, married, highly educated, white males in a higher socioeconomic group (National Telecommunications and Information Administration, 2001). Therefore age, gender, income level, race, and educational attainment may correlate with computer experience.

Bowker and Dillman (2000) and Jenkins and Dillman (1995) discussed the issue of "top-down processing." The general idea is that the lack of knowledge or

ability to accomplish one task (coordinating a mouse and keyboard to complete an Internet survey) can interfere with the knowledge needed to accomplish another (ability to complete the survey). For those respondents who have not mastered basic computer skills, completing an Internet survey can be a daunting task. The combined mental stress of trying to understand what the question is asking, determining which answer to mark, and trying to manipulate the keyboard and mouse can be more than some respondents can handle. Not all respondents will know how to check a radio button, how to uncheck a mistakenly checked box, how to use a pull-down menu, how to type in an answer box, or how to submit the survey. As a result of this lack of computer experience, inaccurate and unreliable answers can potentially be yielded. The effect of computer experience is an issue that greatly needs to be investigated.

Summary

Some of the challenges facing Internet-survey researchers are different than those faced by researchers of other survey modes. Even though the challenge of creating survey designs that are clear and easy for the respondent to navigate is similar to the challenge that faces paper-and-pencil survey researchers, this challenge can and has been investigated through experimentation. On the other hand, the challenge of varying technology will most likely be worked out with time as computer programs are developed to be more compatible with each other. For the time being, Internet-survey researchers can consider options such as programming the survey in several popular languages or offering free downloads of the appropriate software. As for hardware, Internet researchers can design surveys to be viewed on

minimal computer settings so that regardless of a computer's capability, users can view the survey as intended. To accommodate the differences in modem speeds, the Internet-survey researcher can create surveys with a minimum of graphics and features so respondents will be able to download or view the survey at a relatively quick pace regardless of the speed of the modem.

The range of computer experience is a more difficult challenge to address. Even though the range of computer skills is not currently consistent, many school districts throughout the United States require children to have a minimum competency of computer skills and increasingly greater numbers of adults are improving their skills with practice. Eventually, possessing adequate computer skills will be as commonplace as the ability to read and write. Many of these challenges will be overcome in time, but that does not help the Internet survey researcher of today who would like to capitalize on the advantages of conducting fast and inexpensive research. The range of respondent computer experience must be taken into account in order to yield the most accurate survey results. This study addresses the effect the range of computer experience can have on Internet survey results.

Statement of the Problem

Increasing Use of Internet Surveys

There is a proliferation of surveys on the World Wide Web today. Compared to mail and telephone survey modes, constructing and administering surveys on the Internet is faster and cheaper, and data entry is easier. However, just as telephone surveys did not replace face-to-face interviews and mail surveys did not replace

telephone surveys, Internet surveys most likely will not replace other modes of data collection. Their use will continue to increase though. It used to take a team of researchers to get a survey out to the public, collect and enter the data into a database, and analyze the results, but with Internet surveys, one person can be responsible for the entire process. One person can access a survey construction program from his or her computer, write an e-mail letter, include a company logo, and use broadcast e-mail to send a survey link to thousands of recipients in one mailing or post the link on a Web site. Days or even hours later, the data can be downloaded and analyzed. The survey construction program may even be able to analyze the results and produce a minimal report.

Response Effects

There are several types of response effects that have been studied in recent literature. A few examples are acquiescence (Dillman, Phelps, Tortora, Swift, Kohrell, & Berck, 2001; Krosnick, Narayan, & Smith, 1996) no opinion filter effect (Krosnick, Holbrook, Berent, & Carson, et al., 2002; Krosnick, Narayan, & Smith, 1996) response order effects (primacy and recency effects) (Chang, L., 2001; Krosnick, Narayan, & Smith, 1996), satisficing (Chang, L., 2001; Dillman, Phelps, Tortora, Swift, Kohrell, & Berck, 2001; Dillman, Tortora, Conradt, & Bowker, 1998; Krosnick, Holbrook, Berent, & Carson, et al., 2002; Krosnick, Narayan, & Smith, 1996) and status quo alternative(Krosnick, Narayan, & Smith, 1996). This study only investigated primacy effect and satisficing.

Response order effects. The two types of response order effects are primacy effect and recency effect. Response order effects are apparent with lists of answer choices. When lists of written answer choices are used there is a tendency of some respondents to choose items toward the beginning of a list (primacy effect). When lists of oral answer choices are used there is a tendency of some respondents to choose items towards the end of a list (recency effect). These effects have been studied in relation to other survey modes but there is little research on primacy and recency effects in Internet surveys (Chang, 2001; Dillman et al., 2001). Consequently, it is more likely that if either of the two effects were to occur in Internet surveys it would be primacy effect because the answer choices are visual. Because recency effect is less likely to occur in Internet surveys (oral lists are unnecessary) only primacy effect will be studied.

Satisficing. Satisficing is an attempt by respondents to minimize the cognitive effort they need to expend during the survey-response process (Chang, 2001) and is displayed most often in survey questions that are very long or complicated, contain vaguely defined terms, require retrieval of information from memory, involve making complex judgments, or offer response options that are difficult to envision. Satisficing tends to occur when the respondent is required to undertake complicated actions that can result in frustration. In Internet surveys, when the actions necessary to complete and submit the survey require greater computer experience than the respondent possesses, there can be a greater chance of satisficing.

Purpose

The research that has been conducted on phone, paper-and-pencil, and face-to-face survey modes has obviously not completely investigated all the factors that can affect Internet surveys. In particular, different skills are required to answer Internet surveys (i.e. computer skills). Cognitive research shows educational attainment can have an effect on the ability of the respondent to provide answers, however these studies (Krosnick et al., 2002; Krosnick et al., 1996) were not conducted using Internet surveys. The amount of computer experience the respondent has acquired can potentially interact with the respondent's ability to answer the questions. Therefore, primacy effect and satisficing can be greater when computer experience is lower. The purpose of this study is to investigate the effect of computer experience on primacy effect and satisficing. Because others (Krosnick, Narayan, & Smith, 1996; Narayan & Krosnick, 1996) have found that certain demographic variables (i.e. age, educational attainment, gender, and income level) are correlated with computer experience, these variables will be included as well.

Research Questions

Some factors that affect survey results include the demographics of respondents and different question formats. Respondents with less computer experience (self-reported) tend to be older, less educated, female, in a lower socioeconomic bracket, and in minority groups; therefore primacy effect and satisficing are more likely to occur in such respondents.

Typically in paper-and-pencil surveys answer choices are listed vertically. If answer choices in Internet surveys are listed horizontally, greater primacy effect may occur due to the greater movement of the hand and mouse to answer horizontally across a screen than to move the hand and mouse vertically down. Also, respondents with less computer experience may have greater difficulty marking answers in a pull-down menu than they would marking them in a vertical list that is fully visible. Thus, just as respondents with lower educational attainment exhibit greater satisficing than those with higher educational attainment (Krosnick, Narayan, & Smith, 1996; Narayan & Krosnick, 1996), using the computer to answer a survey may add to task difficulty for those respondents with less computer experience, possibly resulting in greater satisficing. With that in mind, two questions are investigated in this research (also displayed in Table 1).

1. Will respondents with little computer experience exhibit primacy effect (a tendency to choose answer options toward the beginning of a list) more frequently than respondents with more computer experience regardless of age, educational level, gender, and income level? Three conditions include:
 - a. Fully visible horizontal lists versus fully visible vertical lists
 - b. Vertical lists in a pull-down format versus fully visible vertical lists

- c. The amount of answers checked toward the beginning of the list of check-all-that-apply questions versus those checked throughout the list
2. Will respondents with little computer experience exhibit greater satisficing (tendency to minimize cognitive effort, based on the factors of motivation, ability, and task difficulty) compared to those with more computer experience regardless of age, educational level, gender, and income level? Two conditions include:
 - a. Likert scale question-and-answer lists formatted in matrices versus separate question-and-answer lists
 - b. Completing open-ended questions using fewer words versus more words

Table 1: The Relationship Between Survey Question Format and Expected Outcome		
Research Question	Survey Question Format	Outcome
Primacy Effect		
1a	Horizontal vs. vertical	Fully visible horizontal
1b	Pull-down menu vs. vertical	Pull-down menu
1c	Check-all-that-apply	More checked at top of list
Satisficing		
2a	Matrix vs. Single	Likert matrix
2b	Open-ended	Fewer words used

Definition of Major Terms

Age – Because this study is based on alumni of a university, age is categorized as *up to 34*, *34 to 50*, and *more than 50*.

Computer experience – General computer experience evaluated in this study by the variety of computer access points, frequency of use, length of use, and comfort level with several of the most common software types. A composite of these variables will become the computer experience score.

Educational level – For the purposes of this study, educational level is categorized as *undergraduate degree or less* or *beyond undergraduate degree*.

Income level – For the purpose of this study, the total household income is reported in ranges of *up to \$50,000*, *\$50,000 to \$100,000*, and *more than \$100,000*.

Matrix – A question format where several questions are listed vertically in rows and the answer choices are listed horizontally in column headers.

Primacy effect – The effect that describes a respondent’s tendency to choose answer items listed toward the beginning of a list.

Satisficing – An attempt by a respondent to minimize the cognitive effort needed to answer questions on a survey. For the purposes of this study, it is measured by counting the number of answers given in a Likert scale matrix that exhibit no differentiation and counting the number of significant words used in open-ended answers.

Significance

Even though it is easy to program many varieties of question formats in Internet surveys, some formats may be better suited than others depending on the respondent’s ability to coordinate a keyboard and mouse. A respondent who is concentrating on how to physically answer a question (computer experience required) may not be able to concentrate on appropriately answering a question (knowledge required). Internet survey developers have few guidelines regarding the effects of different format options on respondents’ answers. This research will investigate to what extent one’s computer experience affects the degree of primacy effect and satisficing when Internet surveys are used.

CHAPTER TWO: LITERATURE REVIEW

This literature review compares and contrasts research that has been conducted on paper-and-pencil surveys with research that has specifically been conducted on Internet surveys. Research that has been conducted on the cognitive processes a respondent undergoes to complete surveys is also discussed. Cognitive processes of respondents completing Internet surveys have not been studied extensively and because of this, the discussion is mostly limited to cognitive processes used when completing surveys in general. This review of literature consists of two major areas: Internet survey research and research on cognitive processes as they relate to completing surveys with a focus on response effects.

Internet Survey Research

Although research on Internet surveys dates back to the mid-1980s (Kiesler, & Sproull, 1986; Sproull, 1986) most research on Internet surveys has been conducted in the past five years. During this time, only very few major topics have been studied, the most common of which are increasing response rates and survey design. One of the greatest concerns to any survey researcher regardless of the survey mode is achieving an adequate response rate. Without sufficient response rates, researchers cannot guarantee that their results can be generalized for the population they are studying. A well-designed survey will not only encourage respondents to submit the survey but also will help them to navigate through the survey. Because obtaining adequate response rates is so critical, most research emphasizes increasing response rates.

Increasing Response

Adequate response rates are necessary to ensure representativeness and to decrease the sampling bias that occurs when nonresponse is not random. There are two general types of nonresponse. One type occurs when the respondent does not submit a survey at all; the other, called *item nonresponse*, occurs when the respondent does not complete all questions in the survey. New methodologies have been investigated in an effort to reduce nonresponse rates. Some researchers (Cook, Heath, & Thompson, 2000; Dillman, 2002) speculate that the novelty of the Internet acts as source of motivation for respondents to complete surveys, thus potentially alleviating the nonresponse problem. Furthermore, according to Dillman (2000) the interactive graphics capabilities of HTML and Javascript allow more innovative interfaces than are available for paper-and-pencil or telephone surveys, which can further encourage responses. Studies involving methods of increasing response rates are described below.

Witte (1998) concluded that response rates in Internet surveys are affected by several factors. For example, respondents are more inclined to complete a survey if the topic has salience (importance of the topic to the respondent), if the survey length is reasonable, if incentives are offered, if taking the survey is convenient, and if anonymity is guaranteed. Sheehan and McMillan (1999) found a positive relationship in the effect of survey salience on response rate and response speed in Internet surveys. Kittleson (1997) found that follow-up notices, but more precisely, two follow-up notices increased response rates, and Oppermann (1995) found that the timing of follow-up notices increased response rates. In a meta-analysis of response

rates in Internet surveys, Cook et al. (2000) determined that the salience, incentives, number of contacts, disclosure, and nature of the sponsoring agency were among the factors that most influence response rates. Other factors that affected response rates were the timing of the survey distribution as it relates to holidays/vacations/weekends and the time lapse between survey prescreening and the follow-up reminder. The factors that affected response rates in these studies are practically the same as the factors that have been found to affect response rates in paper-and-pencil surveys (Church, 1993; Fox, Crask, & Kim, 1988; Heberlein & Baumgartner, 1978).

Response rates are also affected by factors specific to Internet surveys, such as the characteristics of the research sample (i.e. excluding those without an e-mail address), the limited bandwidth of the server (i.e. the amount of information that can be transferred in a particular period of time), and variations of technology used. These can have a negative effect whereas other factors, such as the ability to broadcast personalized e-mail invitations, can have a positive effect (Dillman, 1999; Dillman et al., 2001; Schaefer & Dillman, 1998; Soloman, 2001; Zhang, 2000). With limited bandwidth, when a great number of respondents attempt to access the survey at the same time, the lack of adequate bandwidth will deny some of them access, load pages slowly, or cease respondents' survey sessions (Witte, 1998). As a result of lower bandwidth the respondent can become frustrated with the process and not complete the survey. Variation in technology is another factor that can lead to frustration for the respondent; for example, the speed of the respondent's modem will affect the speed at which pages load. Technical issues will be discussed in greater detail later in this paper.

Regardless of the similarities between factors affecting response rates in Internet surveys and paper-and-pencil surveys, several studies both have shown that response rates for Internet surveys are not as high as those for paper-and-pencil surveys (Bachmann, Elfrink, & Vazzana, 1999/2000; Couper, Blair, & Triplett, 1999; Marvis & Brocato, 1998; Paolo, Bonaminio, Gibson, Partridge, & Kallail, 2000; Schaefer & Dillman, 1998; Schuldt & Totten, 1994; Shermis & Lombard, 1999; Tse, 1998; Tse, Tse, Yin, Ting, Yi, Yee, & Hong, 1995). It is difficult to make clear comparisons among these studies, however, because the methodologies are not the same. The variations in the aforementioned factors — saliency, incentives, survey length, and so forth, as well as variations in the sampling frames — affect response rates. Moreover Internet user characteristics are rapidly changing and becoming more homogenous every year, so sampling frames from even two years earlier may be very different from current ones.

Regardless in these studies response rates for the Internet surveys ranged from 6% (Tse, Tse, Yin, Ting, Yi, Yee, & Hong, 1995) to 43% (Couper, Blair, & Triplett, 1999) with an average of 21%. Those for the mail surveys ranged from 27% (Tse, Tse, Yin, Ting, Yi, Yee, & Hong, 1995) to 71% (Couper, Blair, & Triplett, 1999) with an average of 47%. On average, the mail surveys in these studies yielded nearly twice the response rate as the Internet surveys. In only one study was there essentially no difference between response rates of Internet surveys and paper-and-pencil surveys. However, considering that about 50% is an acceptable response rate for surveys (Babbie, 1990; Fox et al., 1988) and most of the Internet survey response

rates didn't achieve even that, much research is still needed to determine what will motivate respondents to complete Internet surveys.

Internet Surveys Versus Other Modes

Because Internet surveys are similar to paper-and-pencil surveys, researchers have made comparisons between the two more often than comparisons between Internet surveys and other survey modes. A few studies (Chang, 2001; Dillman et al., 2001; Hertz, Zook, Chitwood, O'Carroll, & Friede, 1996) have been conducted comparing response rates and response quality yielded from Internet surveys with that of other survey modes. The results of these studies offer a basis of understanding of effective Internet survey construction.

Dillman et al. (2001) noted three things that contribute to different results yielded by different modes: interviewer presence, aural versus visual communication, and respondent versus interviewer control of the question pace. Questions are generally formatted to accommodate the different survey modes, thus mode effects are evident in the various questions types. For Internet surveys where there is no interviewer, the respondent has control of the pace of the questioning and, for the most part, communication is visual, although aural is not out of the realm of possibility. The subsections below discuss several studies comparing response rates and response quality yielded by different survey modes.

Comparison of Response Rates and Quality with Different Mode Types

Dillman et al. (2001) incorporated different modes of data collection — mail, Internet, and telephone surveys — in an effort to investigate methods of combating

the decline in response rates. Even though the researchers found significant differences in response quality between mail and telephone surveys, it was impossible to determine if response effects were present. Regardless of the fact that the surveys did yield substantial differences in response rates among modes, it was not clear to the researchers whether using multiple modes increased response rates enough to outweigh the additional costs incurred from development of the survey in multiple modes.

The Internet survey yielded the lowest response rate (13%); mail yielded the greatest response rates (75%), followed by telephone (44%), and Interactive Voice Response or IVR (28%) (Dillman et al., 2001). Additionally differences in the demographics of respondents were found among survey modes. More males and more highly educated respondents submitted the Internet survey while more females responded to the telephone survey. Respondents from smaller households were more likely to submit the mail survey than the telephone survey. Telephone respondents had the least education and lived in smaller households but had higher incomes than IVR respondents. The results of the study show that conducting surveys in multiple modes will increase response rates by capturing data from respondents who may not respond to one survey mode but might respond to another, ultimately resulting in respondents with more varied characteristics.

Hertz et al. (1996) compared results from Internet and telephone surveys of users of an online health data index. As expected, they achieved a greater response rate with the telephone survey than they did with the Internet survey (96.2% compared to 68.5%).

The Dillman et al. (2001) and Hertz et al. (1996) studies show that Internet survey response rates lag behind not only paper-and-pencil survey response rates but also those of telephone surveys; there is a difference however in the data gathered from respondents in different modes. If increasing response rates were a researcher's only concern, certainly a survey mode other than Internet or a combination of survey modes might be chosen.

Mode Preference

Some studies involving respondent mode choice (Bertot & McClure, 1996; Kennedy, Kuh, & Carini, 2000; Matz, 1999) showed that more respondents chose paper-and-pencil surveys over Internet surveys when given the option. Even though one study (Schaefer & Dillman, 1998) showed no difference in response rates between paper-and-pencil and Internet surveys, the Internet respondents were contacted by paper when e-mail was not appropriate which probably contributed to the response rate of the e-mail group. Additionally, some of the studies showed that an e-mail pre-notification (prescreening) of the survey was more effective in eliciting responses from Internet survey respondents than paper pre-notices.

Bertot and McClure (1996), in a survey of Internet use in libraries, gave respondents the choice of submitting their survey by mail or through the Internet. They surmised that more respondents chose the mail version of the survey due to limited accessibility of the Internet surveys caused by some browser problems.

The Web survey was nearly identical to the mailed survey in content and question format to ensure validity and reliability. Those who had responded to the

print version were sent a follow-up survey by mail to determine reasons for their preference. Although the number of respondents was quite low (n=23, 64%), the reasons cited have implications for Internet survey researchers. For the most part, those who completed the paper version did so due to lack of the appropriate software/hardware necessary to access the Internet version. Other reasons cited for completing the paper version were attitudinal (unaware of the existence of electronic version, found little difference between paper and Internet version, and greater comfort with the printed version). The convenience of having paper to write the answers, lost connections, difficulty connecting to the Web site, formatting differences, and desire to save a copy of the survey were some of the other responses. These reasons provide Internet-survey researchers with important information about how they can accommodate respondents to increase response rates.

In a survey of college students, Kennedy et al. (2000) sent students a paper version of a survey with the option of responding via the Internet followed by a reminder that only gave the Internet option. They found that more students responded to the paper survey option than the Internet survey although more males chose the Internet version. (Until recently, more males than females used the Internet [Kehoe, Pitkow, Sutton, Aggarwal, & Rogers, 1999]. This accounts for more males responding to the Internet version of the survey.) The lowest response rate came from the group that had received the paper pre-notice of the Internet version of the survey. In Zhang's (2000) study of scholarly usage of the Internet, respondents were also given the option of responding by mail or Internet. Naturally those who chose to respond via Internet reported greater Internet use and higher self-perceived ability to

use the Internet. A logical conclusion can be made that those with greater experience and comfort with the Internet would chose the Internet version of the survey and those with less experience and comfort with the Internet would chose the mail version.

Matz (1999), in a study measuring mode effects and response rates, compared the results of an Internet survey announced by paper, an Internet survey announced by e-mail, and a paper-and-pencil survey. The response rate was highest for the paper-and-pencil survey, and the response rate for those who had been notified of the Internet survey by e-mail was higher than the response rate for those who had been notified of the Internet survey by mail. Matz suggested that technological difficulties with the Internet survey contributed to a lower response rate, a reasonable assumption to make considering that due to a problem link in the Internet survey, 15% of the surveys were invalidated.

On the other hand, Schaefer and Dillman (1998) sent university faculty members surveys that consisted of all-paper contact, all e-mail contact, respondent choice of either a paper or e-mail survey, or an e-mail pre-letter and survey with a paper thank you and reminder. Both the paper and Internet versions of the survey were nearly identical except the paper version had a five-point Likert scale and the e-mail version only had a three-point Likert scale to assure question stems and answer boxes stayed on the same line. It was not mentioned whether this difference in scale resulted in variations in response quality, nevertheless they found that response rates among groups did not differ significantly.

The research is inconclusive regarding survey respondent's preference for Internet or mail surveys. The characteristics of the sampling frame differed in each study and, as previously mentioned, some characteristics of respondents have an effect on their ability and comfort in completing Internet surveys. The results of these studies do show, however, that those who may be more inclined to respond to an Internet survey may also be more motivated by e-mail notices and reminders than by paper equivalents. The development of the technology involved in constructing Internet surveys is rapidly increasing. It is now possible to provide more detailed instructions through pop-ups or links making it easier to complete Internet surveys. As technology continues to improve, it is feasible that greater numbers of people may be more inclined to complete surveys on the Internet.

Response Quality

Schaefer and Dillman (1998) showed that an Internet version of a survey yielded more complete surveys and more complete open-ended questions. Paolo et al. (2000) found no difference in content of the answers to open-ended questions however the open-ended questions were answered with significantly more words in the Internet survey compared to the paper-and-pencil survey. Also, Shermis and Lombard (1999) found a significantly higher response rate to closed-ended questions and significantly more words used in open-ended questions in Internet surveys compared to paper-and-pencil surveys. Additionally Matz (1999) found that Internet surveys restricted response choices and made no provisions for additional comments thereby providing more "clean" data than paper-and-pencil versions. Marvis and

Brocato (1998) and Tse (1998), on the other hand, found no difference between the Internet version and the paper-and-pencil version of their survey. As with Matz's study, their survey was composed mostly of closed-ended questions. These studies indicate that respondents completed Internet surveys more thoroughly than paper-and-pencil surveys, thus response quality was greater. Response quality in closed-ended questions will most likely be higher in Internet surveys compared to paper-and-pencil surveys because respondents are limited to only marking the answer choices eliminating stray, misleading marks.

Overall, no clear conclusions can be made about differences in response quality of paper-and-pencil and Internet surveys. In each of the studies, however the Internet-survey response times were faster. Item nonresponse was comparable in most of the studies yet open-ended items were more complete in the Internet versions. Inferences made in these studies determined that open-ended questions were more complete because it was easier for the respondent to type than it was to write, however the differences in respondent characteristics were not taken into account.

Incentives

Very little research has been conducted on offering incentives for completing Internet surveys. Zhang (2000) showed that sharing the results of the survey was as adequate an incentive for Internet survey respondents as it was for mail survey respondents, but the results do not indicate whether response rates increased with the use of incentives. Cook et al. (2000) found that incentives seemed to be associated with more homogeneous, yet lower response rates. Although the incentives offered

did not aid in increasing response rates, one should not make the assumption that incentives do nothing to increase response rates. As mail-survey research has shown (Brennan, Rae, & Parackal, 1999), the incentives offered may not have been an adequate motivation for respondents to complete the surveys. Despite the similarities between paper-and-pencil surveys and Internet surveys, it would be unwise without further research to make the assumption that the same type of incentives that would motivate paper-and-pencil survey respondents would also motivate Internet survey respondents.

Often Internet survey panels (*www.surveypot.com*, *www.harrisinteractive.com*, *www.IPSOS.com*) entice the respondent to participate by entering them into a drawing for a prize (money, free services, some tangible object). In mail surveys, however it has been shown (Church, 1993; Fox et al., 1988; Heberlein & Baumgartner, 1978) that monetary incentives sent with the initial mailing have the greatest effect on increasing response rates when compared with monetary incentives given to the respondent when the survey is submitted, nonmonetary incentives given to the respondent with the initial mailing, and nonmonetary incentives given to the respondent when the survey is submitted. If this concept can be transferred to Internet surveys, a prize drawing may not be the most effective incentive for Internet survey respondents because the reward is neither immediate nor guaranteed. Investigation into different types and effects of incentives for Internet surveys has not been greatly studied. Sending monetary incentives with the initial Internet survey is virtually impossible, but perhaps something that could be printed out, such as a coupon or gift certificate could be considered.

Attrition

Two types of attrition in Internet surveys have been studied. One type occurs in a multiphase study where respondents drop out before completing all phases. The other occurs when respondents drop out before completing a single phase of a survey. One reason given for attrition is attitudinal (e.g. lack of motivation), which is not specific to Internet surveys; other reasons that are specific to Internet surveys include technical difficulties or difficulty of the task of completing the survey. Attrition is more evident in Internet surveys than in paper-and-pencil surveys because, in some cases, the data can be recorded in the Internet survey database as each page is submitted without a purposeful effort by the respondent. An incomplete paper-and-pencil survey, on the other hand, may merely be thrown away without the researcher ever having knowledge it was received or attempted.

Brennan, Rae, and Parackal (1999) measured attrition between survey phases. There was a noted decrease in participation between phase one and phase two, and further each page in each phase resulted in fewer completions (76% completed phase one, page two; 71% completed phase one, page three, 63% completed phase two, page one; 55% completed phase two, page two). In a second study with a one-page survey, only 43% of respondents completed the entire survey. Some suggested reasons for the respondents not completing the survey were technological or attitudinal in nature, but the researchers did not investigate these reasons to any great extent. On the other hand, Zhang's (2000) study on the scholarly use of Internet-based resources did partly investigate the reasons for respondents not completing the survey. At the end of the survey period, 90% of the respondents submitted usable surveys. The other 10% did

not get to the submission stage due to technical difficulties. What was specifically meant by “technical difficulty” was not detailed.

Other than technical difficulties, reasons for attrition can be related to the difficulty of the task in which respondents are engaged. In order for the respondents to complete the survey, their perceived value of completing the survey has to outweigh the difficulty of doing so. Regardless of the perceived value of the survey, if respondents do not have the cognitive or the computer skills necessary to complete the survey, frustration with the task will result in nonresponse. Knowing the reasons respondents do not complete surveys once they have begun will enable the Internet-survey researcher to design surveys that any respondent should be able to and is willing to complete.

Technical Difficulties

A number of technical difficulties can make it impossible to complete a survey. These can vary from server overload causing lost connections to inability to view a screen due to hardware and software incompatibilities. A number of studies (Brennan et al., 1999; Crawford, Couper, & Lamias, 2001; Dillman, 2000; Dillman, Tortora, Conradt et al., 1998; Matz, 1999; Shonlau et al., 2002) comparing response rates between Internet surveys and other modes noted that lower response rates with Internet surveys were due to frustration with technological difficulties. These studies indicate that there are some unique difficulties associated with Internet surveys that need to be overcome before response rates can be comparable to those achieved by mail or telephone. On the other hand, since most of these studies were

conducted several years ago some of the technical difficulties experienced in these studies may no longer be a great problem. Some issues related to technical difficulties, such as download time and browser incompatibilities, will be solved as technology further improves. Unfortunately, the effects of these technological difficulties on response rates have not been the focus of studies on Internet surveys.

Repeated Notification

Although few studies related to repeated notification were found, this is a pertinent topic for study with the current focus on spam e-mail. In a study measuring response speed (Brennan et al., 1999) the effects of repeated notification are evident. In the two-phase study, the first posting of a survey elicited the highest response (40% of the total of those who responded to the link). Each subsequent posting resulted in fewer responses (the second posting, 29% of the total; the third, 19% of the total; the fourth, 12% of the total). Although the notification in this study was from postings on an Internet site rather than e-mails, it does lend some evidence that there is a point at which potential respondents reach saturation and significantly greater responses will not be yielded (Kittleson, 1997). Crawford et al. (2001) looked at the effect of the timing of reminder notices on response rates and noted that a reminder after two days was more effective in eliciting responses than a reminder after five days. Other studies (Marvis & Brocato, 1998; Sheehan & McMillan, 1999) noted an increase in response after reminders were sent, however the studies did not specifically look at the most effective number of reminders only the number of days after the initial sending.

Summary

Whereas using Internet surveys for a research study will not guarantee higher response rates than would be achieved using a different survey mode, increased validity and reduced error can be achieved by the increased response rate that occurs when multiple survey modes are used to capture data from respondents with varying characteristics. Although the research indicates there is not a significant difference in the quality of the answers given in Internet surveys compared to other modes, some other differences do exist. Therefore, care must be taken in interpreting results of such studies. In general, notices sent by e-mail elicit greater participation from Internet respondents than do those sent by mail, the results are cleaner and more complete, and the response times are faster, but technical difficulties may result in reducing response rates.

Internet Survey Construction/Design Considerations

Survey design in any mode is important for increasing response rates making the results more valid and reliable and allowing generalizations to be made. Survey design is especially important in Internet surveys because response rates can be affected by technical difficulties and the need for additional skills that respondents may or may not have been mastered. Nonetheless many features of Internet surveys have been found to motivate respondents to complete the surveys (Dillman, 2000) including graphics and animation, HTML tables, and increased interaction for answering questions. The use of these features however may actually result in decreased response rates due to difficulties related to computer memory required for

programming these features. The reasons for this will be described in the sections below. As previously mentioned, Internet-survey technology continues to advance rapidly; as a result conclusions made in studies conducted several years ago may no longer be valid although some information could still be applicable.

Dillman, Tortora, Conradt et al. (1998) conducted an experiment to show that whereas more technologically advanced surveys may increase a desire to respond, response rates may actually be less than that which could be achieved with less technologically advanced surveys. They found that the greater programming information required in designing these more intricate Internet surveys resulted in longer transmission time making it difficult for respondents to access the survey properly. It is generally accepted that surveys that are longer in length tend to have lower response rates; for this reason Dillman, et al. (1998) equate longer transmission time with longer surveys and thus was a contributor to nonresponse in their study.

When respondents complete an aural (telephone or interview) survey or a visual (paper-and-pencil) survey, the skills necessary to do so are generally already learned, (reading, writing, or listening). With Internet surveys, respondents also must have acquired at least a minimum of computer skills. Without these minimum skills, the limitations of “computer operation logic” can contribute to task difficulty as illustrated in the study by Schaefer and Dillman (1998) in which some respondents forgot to hit “reply” to enter their answers. Jenkins and Dillman (1995) called this phenomenon top-down processing, where recall from previous experience of how to complete surveys interferes with respondents’ knowledge about how to use computers. For example, respondents will concentrate more on how to formulate an

answer to a question than on determining how to accomplish more difficult tasks needed to complete Internet surveys (e.g. providing or erasing answers in a radio-button format, using drop-down menus, or scrolling to additional answer choices). One method of alleviating respondent frustration due to a lack of computer skills is to include the necessary instructions for completing the answering tasks either at the beginning of the survey or, more preferably, where the action is required (Dillman & Bowker, 2001; Dillman, Tortora, & Bowker, 1998).

Partly due to their studies, Dillman, Tortora, Conradt et al. (1998) developed principles for constructing “respondent friendly” Web surveys that encourage greater responses rates. Respondent-friendly survey design increases the likelihood that respondents will not only participate in the survey but also that they will provide more accurate answers. The principles of respondent-friendly design describe programming features that better enable respondents to comprehend what is expected of them, to know the actions necessary to answer the questions, and to be more motivated to do so. Therefore, the principles take into account that due to inadequate hardware, software, browser, transmission limitations, and knowledge of computer operation logic and survey-logic operation some respondents may not be able to receive and respond to Internet surveys with advanced programming features.

Dillman, Tortora, and Bowker (1998) suggest that using the Internet survey design principles they developed will result in a survey constructed so that the respondent’s cognitive burden will be kept at a minimum. Although these principles are based on research (Dillman, Tortora, Conradt et al., 1998) where factors of cognitive burden were measured, the term cognitive burden was not specifically used

in the studies. Instead the studies discussed in this section use the term respondent-friendly questionnaires. The two terms are related because a “respondent friendly questionnaire” is a survey that is easier for the respondent to complete, thus reducing the cognitive burden required.

Dillman, Tortora, and Bowker (1998) and Shonlau et al. (2002) agreed that following the principles they developed increased response rates in Internet surveys. To summarize these principles, an Internet survey with a motivational welcome screen emphasizing the ease of responding and giving specific instructions for proceeding to the next page encourages respondents to complete the survey. Designing the first question to be fully visible on the first screen allows respondents to easily comprehend and answer it, and all questions afterward should follow a format similar to what is normally found in paper-and-pencil surveys to further encourage respondents to complete the survey. Shonlau et al. (2002) additionally found that Internet surveys created with fewer questions per screen and including no irrelevant questions increased response rates. Keeping the length of the lines short limits alteration in appearance of the questions due to the use of various browsers. Including specific instructions about where each action is to be taken and including some method-of-progress indication additionally reduces the respondent’s cognitive burden (Dillman, Tortora, & Bowker, 1998; Shonlau et al., 2002). Both studies found that using question structures that have known measurement problems in paper-and-pencil surveys, for example check-all-that-apply, open-ended questions, forced-answer questions, and the use of matrices) increases cognitive burden or, in other words, increases respondent s’ frustration. Yet as mentioned earlier, some research

(Schaefer & Dillman, 1998; Shermis & Lombard, 1999) has indicated that open-ended questions are completed more thoroughly in Internet surveys than on paper-and-pencil surveys, but the research is inconclusive.

Agreement was not found among studies as to whether scrolling from question to question or having a limited number of questions per screen reduces or increases respondents' cognitive burden. Dillman, Tortora, and Bowker (1998) concluded that concentration and frame of reference becomes disrupted when only one question is displayed on the screen at time, thus increasing cognitive burden. They found it to be more difficult for respondents to take several steps to answer a single item (i.e. scrolling down or over) and then choose the answer. In contrast, Couper et al. (2001) found that limiting the number of questions per page reduced cognitive burden. Nonetheless reducing cognitive burden is an important issue that needs further investigation. It may be that the answer lies in respondent s' computer skills because this measure was not taken in either of the studies mentioned.

One possible method of aiding respondent comprehension, thereby reducing nonresponse rates, is the use of graphics. Dillman, Tortora, and Bowker (1998) found that multimedia advantages such as hyperlinks, color, skip patterns, and logic checks help guide the respondent in answering the questions. Also, Couper et al. (2001) found that the graphics had an effect on how the respondent interprets the accompanying questions. They also found that limiting the use of graphics decreases transmission times. There is an advantage when the respondent properly follows skip patterns without missing questions, however, the graphics needed to guide the respondent through the survey may also have an influence on how the respondent

answers the question, thereby creating response bias. It is important to note that none of these studies measured the respondent's computer experience level. The effect of the use of some of these specialized features on a respondent's cognitive burden might be determined by investigating the relationship between the use of these features and the respondent's computer skill and/or experience level.

One study (Bowker & Dillman, 2000) specifically attempted to address the respondent's cognitive burden and computer skills and comfort level. Keeping in mind that paper-and-pencil survey construction is typically left-aligned, participants in this study completed either left-aligned or right-aligned surveys. Bowker and Dillman (2000) found that regardless of the alignment of the survey, the participants found both versions of the survey to be equally easy to complete and they were not confused about what to do (i.e., following instructions, how to answer questions in varying question formats). No differences were found regarding respondents' cognitive burden (all participants considered the survey easy to complete) or computer skill level (participants were found to be all moderate to great computer users). It is likely that results will be different if respondents with more varied skill levels are tested.

Summary

The construction of the Internet survey is one of the most important steps of Internet-survey research. The Internet-survey researcher has to take into account not only good survey design methodology, but also factors specific to Internet surveys. These specific factors, which include differences in the respondent's hardware,

software, and computer skills, affect response rates and measurement errors. Although the Internet-survey researcher has no control over the respondent's computer skills, providing explicit instructions and assistance should help reduce the respondent's cognitive burden. Also, programming for a common type of or a variety of browsers or providing a link to download the appropriate browser will reduce technical difficulties, thereby reducing cognitive burden. By having an understanding of the cognitive processes that occur when a respondent completes a survey regardless of the mode, the Internet-survey researcher can design surveys that will not only be answered accurately but also will motivate the respondent to complete the survey. The next section will discuss issues involving the cognitive processes that are required when completing surveys.

Cognitive Processes

Designing valid surveys requires knowledge of the cognitive processes respondents undergo when answering questions. Understanding these processes enables the survey researcher to design surveys that will elicit more truthful results and greater response rates. Internet-survey researchers have access to many survey-design features that are not available in other survey modes. In order to make the desired answer choice, respondents have to determine how to operate some of those features properly. If the activity of answering a question becomes too taxing for respondents, the result may be greater nonresponse rates. Taking cognitive processes into account will help the Internet-survey researcher design surveys that will reduce respondents' cognitive burden.

Jenkins and Dillman (1995) discuss many paper-and-pencil survey design issues and the cognitive processes that a respondent undergoes when completing surveys. They set the groundwork for understanding the relationship between cognitive processes and computer skills. They discuss how graphic design principles or the visual language of the survey affects the respondent's comprehension of the survey questions and the steps necessary to accurately complete it. The principles of Internet survey design mentioned earlier in this paper were built upon the principles developed from their study. The principles were developed with the idea that the arrangement of the visual language (which includes line separators, font styles, placement of answer choices, instructions, color, etc.) incorporate the respondent's natural eye movement and normal reading patterns, thereby enabling the respondent to complete the survey without extraordinary effort.

In addition to design considerations, some question types require more cognitive work than others (Couper et al., 2001; Dillman, Tortora, & Bowker, 1998). Forced-answer items, open-ended questions, and rank-ordered questions are examples of question types that can be problematic in paper-and-pencil surveys. Respondents who are forced to answer questions may not answer honestly. Open-ended questions require the respondent to think about how to formulate an answer necessitating greater cognitive work. Finally, ranking questions requires the respondent to order items before answering. This extra effort required by the respondent can result in measurement errors regardless of the mode, and there is a chance of increased measurement error due to the interaction between lack of computer skills and difficult question formats.

Response Order Effects

Response order effects occur for many reasons. Questions that are too long or contain unfamiliar words are more difficult for respondents to read thoroughly (Witte, 1998). By not reading questions comprehensively, respondents tend to mark answers at the beginning of a list rather than choosing the answers that most reflect respondents' opinions or knowledge. In Internet surveys, a lack of computer skills can further complicate answering long lists by requiring the respondent to scroll down the page or a drop-down menu. The additional cognitive burden can result in increased response order effects.

Primacy & Recency Effects

Primacy effect occurs in surveys where the answer choices are visual (Dillman et al., 2001). Items listed first in paper-and-pencil surveys tend to be chosen more often because deeper cognitive processing occurs as the respondent reads through the list, committing those items to memory. Recency effect occurs in surveys where the answer choices are aural. Items listed near the end of a list are chosen because there is not enough time to place the first items from the list in long-term memory before the next item is given. Therefore in paper-and-pencil surveys, primacy rather than recency effect occurs resulting in respondents' tendency to choose the responses toward the beginning of the list. Because both paper-and-pencil surveys and Internet surveys are visual, response patterns in Internet surveys generally tend to be similar to those of paper-and-pencil surveys. It stands to reason

that primacy effect rather than recency effect will be found in Internet surveys as well.

The likelihood of response order effects occurring is greater with abstract and attitudinal (opinion) questions because they require greater thought on the respondent's part (Dillman, 2000). Although research on response order effects (i.e., primacy and recency) in telephone and mail surveys can be found, little research has been conducted on response order effects in Internet surveys. Two studies, Dillman et al. (2001) and Chang (2001), compare response order effects across different modes. It is unclear from the research if differences in responses are due to the use of different surveying modes or whether primacy and recency effects or nonresponse effects can account for differences.

Satisficing

Simon (as cited in Krosnick, Narayan, & Smith, 1996) coined the term satisficing to describe the conventional decision-making process used in economics. When faced with demanding information-processing tasks, a person who satisfices tends to expend only what effort is necessary to ensure that profits are above a minimal threshold of acceptability. Krosnick and Alwin applied this term to psychology to describe the cognitive processes one uses when completing a survey. They describe satisficing as an attempt by respondents to minimize the cognitive effort they need to expend on the survey response process. Satisficing occurs when one or more of the steps of optimizing (e.g., interpret meaning of question, search memory for relevant information, integrate the information into summary judgments,

report the summary to convey meaning), as identified by Tourangeau (1984), is compromised. Weak satisficing occurs when the respondent uses all four steps of optimizing but not as thoroughly. Strong satisficing occurs when the respondent omits the steps of retrieval and judgment (Krosnick, Narayan, & Smith, 1996).

Factors of Satisficing

Three factors increase satisficing and are multiplicative rather than additive; therefore all three factors must be controlled concurrently to reduce satisficing (Krosnick, 1991). These three factors are task difficulty, respondent ability, and respondent motivation.

Task difficulty. Task difficulty can be increased by questions that are too long, contain vaguely defined terms, require retrieval of information from memory, involve making complex judgments, or offer response options that are difficult to envision. The result is difficulty in the retrieval process (Chang, 2001). In their study of response rate differences between “plain” and “fancy” survey formats, Dillman, Tortora, Conradt et al., (1998) hypothesized that using a fancy version of a survey would result in greater satisficing due to greater task difficulty. They measured satisficing by counting the number of answers given in check-all-that-apply questions, however, their findings regarding satisficing were inconclusive. Task difficulty in Internet surveys can be further increased when the respondent is unfamiliar with or has not adequately developed the skills needed to execute the computer steps required to answer the question.

Respondent Ability. Respondent ability is the capability to retrieve information and make judgments – one’s cognitive sophistication. It is determined by innate factors as well as one’s learning and training. Although not necessarily an indication of intelligence, educational attainment is strongly correlated with cognitive skills and can be used as a measure of ability. However, individuals can practice responding to particular types of questions or have a predetermined attitude about an issue that positively contributes to their ability (Krosnick, 1991). Again, it is likely that in Internet surveys, the respondent’s ability to coordinate the mouse and keyboard can affect their ability to answer the question. Therefore, computer experience levels could also be used as a measure of computer ability.

Motivation. Motivation plays a role in satisficing in that respondents who have a need for cognition enjoy thinking, gain intrinsic rewards from completing tasks, and enjoy confronting difficult tasks. Factors that affect motivation include the degree of topic relevance to the respondent (salience), the degree to which the respondent deems the survey to be important or useful, and accountability (the degree to which respondents are required to justify their answers). Regardless of initial motivation, certain conditions will result in a decrease in motivation thereby satisficing increases (Krosnick, 1991).

Stages of Cognitive Processing

Tourangeau (1984) noted that optimizing, the opposite of satisficing, occurs when the respondent engages in all four stages of cognitive processing comprehensively and carefully. Tourangeau states that respondents who are

motivated to optimize have a desire for self-expression, interpersonal response, intellectual challenge, self-understanding, altruism, emotional catharsis, gratification for successful performance, and/or to provide opinions to improve products or policies. However, even a respondent who has the intention of optimizing will satisfice under certain conditions such as fatigue or boredom resulting in the respondent only giving a satisfactory rather than optimal response (satisficing). Therefore if a survey is considered to be too long, if the respondent is unaware of the progress toward the end, or if the act of completing the survey is too difficult, a well-intentioned respondent may resort to satisficing.

With this in mind, an example of weak satisficing occurs when the respondent chooses the first response that seems reasonable or agrees with the question (acquiescence bias). An example of strong satisficing occurs when the respondent goes along with the status quo, fails to differentiate among a set of objects in questions involving ratings, answers “don’t know” or “no-opinion”, or randomly chooses the first reasonable alternative. In agreeing or accepting the assertion made by the question, the respondent thinks of reasons why it may be true rather than reasons why it might not be true. Endorsing the status quo then becomes reasonable. In addition to these reasons, a respondent may satisfice when like question types are grouped together, such as in question matrices where respondents may rate the first item in the group and then apply that rating to all the rest. Preceding questions with statements such as “Have you ever thought about . . .” before offering the “don’t know” option can aid in preventing satisficing (Krosnick, 1991).

Findings

Chang (2001) found telephone respondents exhibited more satisficing than did Internet respondents when using a sliding scale to answer questions and Internet respondents exhibited more satisficing than telephone respondents did when using trait ratings. Chang also found that those Internet respondents who took the survey in one sitting consistently showed less nondifferentiation, which conflicts with the theory that fatigue results in satisficing. Chang found essentially no significant response effects in either survey mode used. Chang's results relating to satisficing in Internet surveys were inconclusive; therefore further studies are needed on satisficing where the dependent variable is magnitude of response effects (Krosnick, 1991).

In several experiments, Krosnick, along with others, investigated the use of no-opinion as a measure of satisficing. Because it is easier not to give an opinion, choosing no-opinion is an indication of satisficing. In one experiment, Krosnick et al. (1996) found strong support that there is a relationship between education levels and response effects. They found response order effects and acquiescence effects for the median education group, both of which are indications of weak satisficing.

Krosnick, Holbrook, Berent, Carson, et al. (2002) found a significant three-way interaction among the method of answering, education, and answering options. Satisficing was greatest among respondents with the least education. Satisficing also was greatest among those with low education levels who answered anonymously and was least common among those with high education levels who answered to an interviewer. Submitting Internet surveys is usually done in the absence of an

interviewer, thus greater satisficing can be expected among Internet survey respondents with lower educational levels.

Summary

Being a relatively new concept, very little research can be found on satisficing and response order effects, and virtually no research can be found on these effects in Internet survey research. For the most part however, primacy and recency effects are dependent upon the mode – primacy effect is found in written surveys, recency effect is found in aural surveys. The respondent's ability, the respondent's motivation, and the level of difficulty for survey completion affect satisficing. These three factors interact to either increase or decrease satisficing and other response effects.

Conclusion

Although response order effects and satisficing have been studied in some survey modes, little research can be found about these response effects in Internet surveys, and even less can be found regarding the interaction of these effects with the respondent's computer experience. With Internet surveys, the interaction of the required computer actions and other factors, such as question formats, can affect the degree of satisficing more than in other survey modes. If satisficing is affected by motivation, ability to accomplish a task, and task difficulty, then it stands to reason that people with less computer experience as well as lower levels of educational attainment might display a greater degree of satisficing and response order effects when completing an Internet survey.

Some question types might result in greater response effects in Internet surveys than in other modes depending upon how the question format affects the respondent's ability, motivation, and level of difficulty of the task. Questions that require more thought to answer (i.e., forced answer, rank ordering, and questions with "don't know" or "no opinion") and those that require greater computer skills (i.e., pull-down menus, scrolling) will exhibit greater satisficing in surveys completed by respondents with less computer experience. Therefore factors that may affect ability are respondent attributes, such as cognitive sophistication (measured by educational attainment), respondent's experience with the topic, and the respondent's previous computer experience. Surveys can be tailored to varying computer skill levels so these effects can be decreased or prevented.

Question format (rank ordering, open-ended questions, etc.) and by the steps the respondent needs to go through to answer the question (general use of the mouse, clicking on pull-down menus, scrolling through lists or pages, or knowing how to unmark incorrectly chosen answers) affects task difficulty. Other task-difficulty factors found in Internet surveys include technical difficulties such as the connection timing out. Motivation can be measured by the degree of accountability, question placement, topic salience, and respondent's belief about the survey's value. To measure the degree of satisficing, these factors (ability, motivation, and task difficulty) can be correlated with response effects and response strategy (Krosnick, 1991; Krosnick et al., 1996).

A number of questions arise out of this literature review concerning the interaction of survey task difficulty and the respondent's computer experience level.

Survey task difficulty refers to the complexity of question formats required to complete the survey and the level of computer skills required to do so. Such question formats include clicking on pull-down menus to make all choices visible or selecting answers in a pull-down menu, as well as scrolling through pull-down menus, clicking and unclicking radio buttons, matrices, and typing in open-ended boxes. It would seem reasonable that due to top-down processing, respondents with less computer experience will exhibit greater primacy effect and satisficing on question formats that require more difficult computer actions. The hypothesis is that computer experience will contribute to response effects.

CHAPTER THREE: METHODOLOGY

This chapter consists of six sections: description of the variables, description of the survey instruments, sample selection, data collection, data analyses, and a summary. Predictor or independent variables and criterion or dependent variables and how they were measured are discussed in the first section. The format of each of the 10 surveys that were used to answer the research questions and how each survey relates to the design of the research questions is explored in the second section. The third section describes the sample that was used. The fourth section outlines procedures that were used for survey distribution and the data collection procedures. The fifth section details the analyses used and what performing each analysis accomplished. The final section summarizes the chapter.

Description of Variables

This section describes the variables that were used to answer the research questions. The independent or predictor variables are demographics, computer experience, and question format. The dependent or criterion variables are primacy effect and satisficing. Each variable is described below.

Independent/Predictor Variable

The independent variables in this study are the question format, respondent's computer experience score, age category, sex, income level, and educational level. The computer experience and demographic questions are exactly the same in all versions of the survey.

Demographic variables. The demographic variables were coded so that larger numbers indicate greater expected primacy effect or satisficing. Therefore age was categorized into three levels: up to 34, 34 to 54, and 55 or above (coded 1, 2, and 3 respectively). Sex was categorized into male and female (coded 0 and 1 respectively). Income level was categorized into lower (household income \$50,000 or below), middle (above \$50,000 to \$100,000), and high (greater than \$100,000) (coded 3, 2, and 1 respectively). Educational level was categorized into undergraduate degree, and post-graduate degree, coded 1 and 0 respectively.

Computer Experience Score. The questions in the computer experience section ask respondents to report where they use computers, frequency of use, length of use, and comfort level with several of the most common software program types. There also are questions that ask respondents in what activities they engage when online and how often they check e-mail. The answers to the questions were categorical and thus coded 1 or 0, or 1 through 3 depending on the format of answer choices. For the check-all-that-apply questions, the items checked were tallied and reverse coded so that for all of the computer experience questions “1” indicates the greatest experience regardless of the question format. All computer experience questions were subjected to hierarchical cluster analysis to separate respondents into two groups: those with less computer experience or those with more computer experience, thus the computer experience score was created.

Hierarchical cluster analysis is an exploratory data analysis tool that results in categorizing cases. This type of analysis handles both continuous and categorical variables and groups the data into clusters. In this case all variables were entered into

the hierarchical cluster analysis to separate the respondents into groups of those with less computer experience and those with more computer experience.

Dependent/Outcome Variable

The dependent variables in this study are primacy effect and satisficing. The section on the description of the survey instruments will describe the question formats used to determine the degree of primacy effect and satisficing. Primacy effect is measured in research question one and satisficing is measured in research question two.

Primacy effect. Answer choices to research question one are in the form of Likert scales and check-all-that-apply questions. The answers to the Likert scale questions were coded as dichotomous variables such that if the list is positive to negative and the respondent chooses one of the two positive answer choices in the list (e.g. strongly agree/agree, very likely/likely), the question was coded with a number 1. If any of the other responses were chosen, the question was coded as 0. If the list is negative to positive and the respondent chooses one of the two negative choices in the list (e.g. strongly disagree/disagree, very unlikely/unlikely), the question was coded with a number 1. If any of the other responses were chosen, the question was coded as 0. The check-all-that-apply questions were coded such that if the respondent chooses the first one-third of answers only, the question was coded 1. If any other answers were chosen, the question was coded 0.

Satisficing. Research question 2a uses matrix questions and single questions to measure satisficing. The matrix had questions listed horizontally together in groups

and answers in a five-point Likert scale listed vertically. The group of corresponding single questions had the same five-point Likert scale answer choices. The number of choices in the matrix that the respondent rated at the same point on the Likert or at the same point in the group of corresponding single questions was tallied, and the highest number rated the same on each scale was the person's score. Thus, if in a matrix of five questions, the respondent marked the second answer choice (e.g., somewhat likely) in four of the five questions, the respondent's score was 4. In the corresponding single questions, the same scoring method was used. Research question 2b used open-ended questions to measure satisficing. This variable was simply measured by counting all the significant words (i.e. not counting *a*, *the*, etc) and using that number as the score. The "word count" function in the word processing software was used to accomplish this task.

Description of the Survey Instruments

Ten surveys were used in this study with each survey consisting of several sections. The first section of each survey consisted of questions that were used to gauge the respondent's computer experience. Demographic information (age, gender, level of education, and income level) were included in the second section of each survey. The third and fourth sections of each survey consisted of questions that were salient to the respondents (i.e., alumni experience and fund raising). The questions in the first two sections of the surveys were exactly the same in all 10 versions; the formatting of the questions in the last two sections was altered in the separate surveys to answer the research questions. The purpose of asking the demographic questions

was to correlate those variables with the variables of computer experience to assure they were not confounding variables.

Survey Format and Questions

Ten variations of the survey were created in HTML format with the survey link housed on the Surveypro Web site. In all 10 versions of the survey, the computer experience and demographic questions had the same wording and format. The number of salient questions (i.e., those related to alumni experience and fundraising) was not the same in each survey nor was the formatting, however the same basic questions were asked in all versions. Four of the 10 surveys were used to answer research question 1a. Four of the 10 surveys (two of which were also used to answer research question 1a) were used to answer research question 1b. Two surveys were used to answer research question 1c. Two surveys (one of which was used to answer both research questions 1a and 1b) were used to answer research question 2a. One survey was used to answer research question 2b. Further explanations are provided below. The surveys were created using the Surveypro survey tool developed by Survey Professionals, Inc. The default font used is Arial size 9. According to Ryan Scott (personal communication, September 8, 2004), a principal of Survey Professionals, Inc., surveys created on Surveypro are optimized for Internet Explorer and Netscape.

Computer Experience and Demographic Questions

The computer experience section consisted of fourteen questions (See Appendix A). For three of those questions the answer choices were in matrix format and included an open-ended answer box to describe what was meant by “other” if that option was chosen; the answer choices for the other eleven questions were in fully visible, vertical format. These questions gathered information about the respondent’s computer use, including frequency, locations, number of years of use, variety of programs used, and comfort level.

Research has shown that level of education, sex, age, race, and income level have an effect on computer experience (National Telecommunications & Information Administration, 2000). Therefore, the demographic section consisted of five questions, four of which were in fully visible, vertical format. These questions asked respondents about their educational level, sex, age, and income level. Race was not used which I will explain in the section describing the sample. In an open-ended format question, respondents were asked to enter their college major.

Research Questions

Before any research questions could be answered, it had to be determined which questions, if any, would produce a primacy effect. This was accomplished by creating two surveys that had the same questions, but one survey had reversed answer choices. The salient sections (the sections that contained the questions that were manipulated) of the survey labeled LVVP2N (Likert visible vertical survey format, positive [e.g., very likely] to negative [e.g., very unlikely] answer choices) consisted

of 85 questions or sub-questions of fully visible vertical answer format where the answer choices were listed from most positive to most negative. The salient sections of survey LVVN2P (Likert visible vertical survey format, negative [e.g., very unlikely] to positive [e.g., very likely] answer choices) consisted of 85 questions or sub-questions of fully visible vertical answer format where the answer choices were listed from most negative to most positive. To maintain consistency across the separate surveys, all surveys also consisted of 10 yes-or-no fully visible vertical format questions and two fill-in-the-blank format questions. Seven surveys (LVVP2N, LVVN2P, LVHP2N, LVHN2P, CAAF, CAAR, and LMAT) had three additional open-ended format questions; two surveys (CAAF and CAAR) also had seven additional fully visible horizontal format questions and six fully visible vertical format questions. Survey OPEN also consisted of 32 fully visible vertical format questions, and 14 Likert menu format questions. Table 2 provides a summary of the survey instruments that were used to answer the research questions. Surveys may be found in Appendix B.

Table 2: Summary of Survey Instruments			
Survey Code	Question Number	Survey Format	Answer Format
LVVP2N	1a, 1b, 2a	Likert fully visible vertical	Positive to negative
LVVN2P	1a, 1b	Likert fully visible vertical	Negative to positive
LVHP2N	1a	Likert fully visible horizontal	Positive to negative
LVHN2P	1a	Likert fully visible horizontal	Negative to positive
PDP2N	1b	Pull-down menu	Positive to negative
PDN2P	1b	Pull-down menu	Negative to positive
CAAF	1c	Check-all-that-apply	Forward order
CAAR	1c	Check-all-that-apply	Reverse order
LMAT	2a	Likert matrix	Positive to negative
OPEN	2b	Open-ended	N/A

Question 1a. Surveys LVVP2N, LVVN2P, LVHP2N, and LVHN2P were used to answer research question 1a: Will respondents with less computer experience exhibit primacy effect more frequently when compared to respondents with more computer experience (regardless of age, educational level, gender, and income level) when fully visible, horizontal answer lists or fully visible, vertical answer lists are used? The salient sections of surveys LVHP2N and LVHN2P consisted of 85

questions or sub-questions of fully visible horizontal answer format where the answer choices were listed from most negative to most positive.

Question 1b. Surveys LVVP2N, LVVN2P, PDP2N, and PDN2P were used to answer research question 1b: Will respondents with less computer experience exhibit primacy effect more frequently when compared with respondents with more computer experience (regardless of age, educational level, gender, and income level) when lists in a pull-down menu format versus fully visible vertical lists are used? The salient sections of surveys PDP2N and PDN2P consisted of 85 questions or sub-questions with a pull-down menu answer format where the answer choices were listed from most negative to most positive.

Question 1c. Survey CAAF and survey CAAR were used to answer research question 1c: Will respondents with less computer experience exhibit primacy effect more frequently when compared to respondents with more computer experience (regardless of age, educational level, gender, and income level) in check-all-that-apply questions? To answer the research question the salient section of survey CAAF consisted of 14 check-all-that-apply questions listed, for lack of a better term, forward. The salient section of survey CAAR consisted of the same 14 check-all-that-apply questions but the answer choices were reversed.

Question 2a. Survey LVVP2N and survey LMAT were used to answer research question 2a: Will respondents with less computer experience exhibit satisficing when compared with respondents with more computer experience (regardless of age, educational level, gender, and income level) when the questions are formatted in Likert matrices or when each question-and-answer list is separate?

To answer the research question, the salient section of survey LVVP2N consisted of 85 questions or sub-questions of fully visible, vertical answer format and the salient section of survey LMAT consists of 71 questions or sub-questions of matrix answer format and 14 questions or sub-questions of fully visible vertical answer format. The answer choices in both surveys were listed from most positive to most negative.

Question 2b. Survey OPEN was used to answer research question 2b: Will respondents with less computer experience exhibit greater satisficing (i.e. completing open-ended questions using fewer words) than those with more computer experience regardless of age, educational level, gender, and income level? To answer the research question, the salient section of the survey consisted of 22 open-ended questions.

Sample Selection

A public Masters I (Carnegie classification system) Historically Black College or University (HBCU) in the southern United States agreed to provide access to the e-mail addresses of their university alumni (See Appendix D). A sample of approximately 1,700 alumni was originally randomly selected from the office of alumni affairs' database. Research has shown that an average of about 25 percent of the sample respond to online surveys (Bachmann, Elfrink, & Vazzana, 1999/2000; Couper et al., 1999; Hallowell et al., 2000; Matz, 1999; Paolo et al., 2000; Schuldt & Totten, 1994; Shermis & Lombard, 1999; Tse, 1998; Tse et al., 1995). Also research has shown that alumni and specifically alumni of HBCUs are less likely to respond to surveys (Gasman, & Anderson-Thompkins, 2003) therefore the survey population

was over-sampled to safeguard against receiving too few responses to make analyses effective. Each e-mail address was randomly selected to receive one of the 10 surveys. Even so, additional e-mail addresses had to be used as will be explained in Chapter 4.

Data Collection

Data collection occurred in three steps: a pre-survey letter was e-mailed to all potential respondents in the sample, a link to one of the 10 surveys was randomly e-mailed to each member of the sample, and a reminder letter that included the survey link was e-mailed to all members of the sample. The sample contact information was housed in a database to enable tracking of the addresses.

This first e-mail, which included the pre-survey letter, was sent to each member of the sample one to two days before sending the survey link. The e-mail was sent on behalf of the office of alumni affairs and requested participation and explained the value of the survey answers for the office of alumni affairs and that some of the data was to be used in a graduate study. There were two purposes for including this step: (a) according to Dillman (2000), several notices yield a higher response rate, and (b) returned e-mail addresses could be double-checked for accuracy and completely invalid addresses could be replaced. The letter guaranteed anonymity (See Appendix E). Because some of the addresses were personal e-mail addresses and some were business e-mail addresses, the first e-mail was sent at the beginning of the week to ensure that everyone in the sample received the e-mail at approximately the same time.

The second e-mail with a randomly selected version of the survey was distributed to the sample mid-week. The e-mail again explained the importance of the survey, and reiterated the anonymity guarantee (See also Appendix E). Data was collected for approximately one week. Near the end of the initial collection period it became evident that some survey formats may not yield enough responses to conduct analyses so additional e-mail addresses were used. These additional members of the sample received the initial e-mail, followed by the second e-mail a few days later.

Approximately one week after the second e-mail, a third e-mailed letter was sent reminding respondents of the due date and the survey link (See also Appendix E). Because respondents' identities were kept confidential, follow-up with nonrespondents was impossible. Data was collected in an online comma-delimited database as respondents submitted their surveys. The data was then downloaded into a Statistical Package for the Social Sciences (SPSS) database approximately two weeks after sending the links.

Data Analyses

Data analysis consisted of three parts: data preparation, descriptive analysis, and inferential analysis. The database was "cleaned" in preparation for analysis. Descriptive analysis was conducted to determine whether or not variables were suitable for further analysis. Inferential analysis was conducted to answer the research question.

Several types of analyses were necessary to ultimately test the two research questions. Hierarchical cluster analysis was used to determine computer experience level. *T-tests* were conducted so that variables that could not be dichotomously coded from the survey responses could be coded as "significantly different" or "not

significantly different.” Finally a series of regression analyses were conducted to distinguish the relationships between the variables. Explanations are provided below.

Computer Experience/Hierarchical Cluster Analysis

Responses from the computer experience questions were subjected to hierarchical cluster analysis to determine group membership – less computer experience or more computer experience levels. A field study of the surveys was conducted to test this method of determining computer experience level. The field study was conducted by randomly placing each member of a sample of 27 alumni association chapter presidents for whom e-mail addresses were available in seven groups (the number of surveys used at the time). Each group was assigned to receive a link to one of the seven surveys. Conducting the field study determined that the sample would be varied enough to predict computer-experience groups and determined that the sample was varied enough to predict the effect the demographic variables have on computer experience. Results of the field study are found in Appendix F.

t-Test

Several analyses were conducted to determine if satisficing is significantly more prevalent in one survey format or for one group of respondents. *T-tests* were conducted to determine if there were significant differences in satisficing between the groups.

Questions producing satisficing.

The first analysis was conducted to determine if satisficing was more prevalent in one question format than another. To accomplish this, an independent *t-test* was conducted between the items in the single question-and-answer format of survey LVVP2N and the corresponding items of the matrix format in survey LMAT. Those items that were found to have significantly greater satisficing in one survey or the other were coded 1, and those not found to have significantly greater satisficing were coded 0. Regression analyses could then be conducted. This will be discussed below.

An independent *t-test* was also conducted between those respondents with less computer experience and those with more computer experience for the open-ended items in survey OPEN. The items could then be recoded as 1 for those question items exhibiting significantly greater satisficing and 0 for those not exhibiting significantly greater satisficing. Further analysis was to have been conducted on those items found to be significantly different.

Regression Analyses

Several regressions were conducted to answer the various research questions. Regression statements are provided and explained below.

Primacy effect in individual items. The development of the individual question coding was achieved by conducting a regression analysis. Therefore, the first regression determined which question items produced primacy effect. Responses from surveys LVVP2N and LVVN2P were used to make this determination. For each

question item the responses were coded 1 if one of the first two answer options were chosen and coded 0 otherwise. Because the survey format LVVN2P was used to gauge if primacy effect was detected, it will be coded 1. Survey LVVP2N was coded 0. By coding thusly, 1 indicated greater expected primacy effect. All remaining analyses measuring primacy effect were a combination of responses from question items that displayed a positive and significant primacy effect.

Primacy effect in question formats. Once it was determined which question items produced primacy effect, regressions were conducted to determine which survey formats resulted in greater primacy effect (e.g., horizontal versus vertical, pull-down menu vs. vertical, and check-all-that-apply forward vs. check-all-that-apply reverse). In addition to the coding described above, the survey format expected to exhibit greater primacy was coded 1 for these analyses, and coded 0 otherwise. Further regressions were only conducted on those question formats that resulted in a positive and significant interaction term.

Primacy effect and demographics. Using the computer experience scores, a final regression analysis with all demographic variables was conducted to determine whether primacy effect is more evident for some respondents. Only the answer items and survey formats that were found to have positive and significant primacy effect were used in the final regression equations. The demographic variables were coded so that the larger number was assigned to a range of the variable expected to yield greater primacy effect. Therefore, in addition to the coding described above, the demographic variables were coded as follows: computer experience was coded 1 if less (due to the small percentage of respondents in the low group both low and

medium groups were combined), 0 if more; educational attainment was coded 1 if less than postgraduate degree, 0 if postgraduate degree or beyond; income level was coded 2 if income level was lower income level, 1 if mid-income level, 0 if higher income level; gender was coded 1 if female, 0 if male; and age was coded 0 if low age group, 1 if mid age group, and 2 if high age group. A stepwise regression, with computer experience entered first, was to have been conducted to determine if each demographic variable added further explanation of the variance.

Satisficing in individual items. The same set of regression models were conducted for items expected to produce satisficing. After *t-tests* were conducted and variables recoded based on the results, regressions were conducted to determine if the survey format interacts with respondent characteristics to affect susceptibility to satisficing.

Satisficing in survey formats. Regression models were conducted to determine if satisficing was greater in matrix question formats or vertical question formats. Once it was determined which question items produced satisficing, regressions were conducted to determine which survey format resulted in greater satisficing. In addition to the coding described above, the matrix format was expected to exhibit greater satisficing and so was coded 1 for these analyses, and coded 0 otherwise. Further regression models were to have only been conducted on those question formats that resulted in a positive and significant interaction term.

Satisficing, survey format, and demographics. Using the computer experience scores, a final stepwise regression analysis with all demographic variables was to have been conducted to determine whether satisficing was more evident for some

respondents. Only if the previous regression produced positive and significant satisficing would the final regression have been conducted. As with the other variables, the demographic variables were coded in such a way that that the larger number was assigned to the range of variable expected to yield greater primacy effect. Therefore, in addition to the coding described above, the demographic variables were coded as follows: computer experience was coded 1 if less (including both low and medium groups), 0 if more; educational attainment was coded 1 if less than postgraduate degree, 0 if postgraduate degree or beyond; income level was coded 2 if the lower income level, 1 if mid income level, 0 if income higher income level; gender was coded 1 if female and 0 if male; and age was coded 0 if low age group, 1 if mid age group, and 2 if high age group. A stepwise regression, with computer experience entered first, was to have been conducted to determine if the demographic variables added further explanation to the variance.

Satisficing in individual questions. Regressions were conducted to determine satisficing in an open-ended question format. Only those questions that exhibited a significant difference between computer experience groups were to be used in the regression model. A stepwise regression would have determined if the other demographics added to the variance explained.

Summary

This study was conducted to determine if Internet survey respondents with little computer experience exhibit greater primacy effect and satisficing on question formats that require greater use of the mouse and keyboard and on question formats that require more thought to complete or navigate than Internet survey respondents

with more computer experience. This was accomplished by sending one of the 10 survey links to a sample of alumni from a southern U.S. HBCU public Masters I university. Data was collected for approximately two weeks per e-mail address. Respondents received via e-mail a pre-survey letter, a letter with the survey link, and a reminder letter with the link. Data was analyzed first using hierarchical cluster analysis and *t-tests* to determine groups of computer experience, and then by regression analysis to predict primacy effect and satisficing. The results of the study are described in Chapter 4.

CHAPTER FOUR: RESULTS

This chapter reports the findings that relate the computer experience of respondents from a HBCU private Masters I (Carnegie classification system) in the southern United States to primacy effect and satisficing in online surveys. These results are reported in four sections: The first section reports on survey distribution and response rates for each survey and an overall response rate. The second section reports on demographics of the respondents, including the analysis used to determine the reliability of the questions. (This is appropriate because computer experience is a respondent characteristic.) The third section reports on the research question relating to the contribution computer experience has to respondents' propensity to exhibit primacy effect, and the fourth section reports on the research question relating to the contribution computer experience has to respondents' propensity to exhibit satisficing. The contents of these four sections are briefly outlined below.

The data described in this chapter shows that the null hypothesis for both research questions could not be rejected. For parts A and B of the first research question investigating primacy effect, it was found that primacy effect was evident in some survey formats; however, a positive and significant relationship between primacy effect and the interaction of answer order and survey format could not be found. A positive and significant relationship between primacy effect and the interaction would have indicated that primacy effect is more evident in one survey format over another. Because this was not the case, it was unnecessary to determine the amount of variance in primacy effect that is accounted for by computer experience. For part C of the first research question, computer experience was found

not to have a positive and significant relationship to primacy effect. The null hypothesis to the second research question also could not be rejected for a similar reason. Although a positive and significant relationship was prevalent between survey format and satisficing, computer experience did not significantly add to the explanation of the variance in satisficing. In addition, respondents with greater computer experience did not significantly use more words to open-ended questions than did those with less computer experience. The results of analyses of these two research questions are explained in greater detail in the third and fourth sections below. Contents of each section of this chapter are summarized in Table 3 below.

Table 3: Summary of Chapter Sections		
Section	Subsection	Contents
First		Survey distribution and response rates
Second		Descriptive statistics used to report demographics
	First	Educational attainment, major, age, gender, and income level.
	Second	Statistics used to determine computer experience score
Third		Results of analysis
	First	Research question one results
	Second	Results of regression analysis testing for primacy effect in each question
	Third	Results of analysis of primacy effect in visible vertical survey format versus horizontal vertical format
	Fourth	Results of analysis of primacy effect in visible vertical survey format versus pull-down menu format
	Fifth	Results of analysis of primacy effect in visible vertical survey format versus pull-down menu format
Fourth		Results of analysis
	First	Results of analysis of satisficing in visible vertical survey format versus matrix format

Table 3: Summary of Chapter Sections (continued)		
Section	Subsection	Contents
Fourth	Second	Results of analysis of satisficing in open-ended survey format
	Third	Summary of results for research question two

This chapter describes the process of the distribution of the survey, including distribution dates and adjustments that were made due to low response rates. Descriptive statistics are used to summarize the response rates for each survey and the total response rate for all surveys combined.

This chapter continues to summarize the respondents' demographics is organized as follows: First, the basic demographics that affect one's computer experience are reported—educational attainment, major, age, gender, and income level. Descriptive statistics are used here as well to display the similarities of these characteristics between the different surveys. The results of the crosstab analyses that were used to determine differences in the distribution of demographics among the surveys reveal no significant differences.

To complete the discussion on respondent demographics that relate to the study, the next section will contain the analysis that was used to determine the respondents' computer experience score. The individual questions and the reliability statistics that indicate these questions are indeed a measure of computer experience is discussed. This is followed by a description of the results of the hierarchical cluster

analysis used to generate the computer experience score. Descriptive statistics will be used to demonstrate the variability in the respondents' answers to the survey questions.

This is followed by a presentation of the results of this study's research questions related to computer experience and its relationship to primacy effect and satisficing. This is accomplished through a series of regression analyses. First there is a summarization the findings for research question one. This is followed by the results from the first set of regression analyses that were conducted to determine which individual questions indeed exhibited primacy effect. Next is a presentation of the results of the analysis used to determine whether there was a correlation between vertically or horizontally listed answer choices and primacy effect. Because a positive and significant interaction between the survey formats and the answer choice order was not found, further regression analysis which would include computer experience as a predictor was not conducted. This is followed by an examination of the relationship between vertically listed answer choices and those displayed in a pull-down menu. Again, a positive and significant interaction between survey format and answer order was not found so computer experience was not entered into a regression model. The section ends with a presentation of the results of the regression analysis used to determine if primacy effect was evident in check-all-that-apply questions and if computer experience is a predictor of primacy effect.

The fourth portion of the chapter displays the results of regression analysis series that report the effect of computer experience on the respondents' propensity to exhibit satisficing. First is a display the results of the regression analyses used to

determine the correlation between satisficing and the two question formats, that in which the answer choices for individual questions are listed vertically and that in which the answer choices are displayed in a matrix. Second is a display of the results of the regression analyses used to determine the relationship between computer experience and the number of words used to answer open-ended questions. Finally the results that relate to research question two subsection are summarized.

Table 4 below summarizes the findings of this study.

Table 4: Summary of Findings			
Response Effect	Procedure	beta	Significance
Primacy effect			
	Visible vertical versus horizontal vertical	.281	.276
	Visible vertical versus pull-down menu	-.080	.744
	Check-all-that-apply with computer experience	-.016	.833
Satisficing			
	Matrix with computer experience	-.133	.152
	Open-ended with computer experience	Two questions significant but with negative betas.	

Response Rate

The Virginia Tech Institutional Review Board approved (Appendix B) the ten surveys that were distributed to 5,774 alumni e-mail addresses in the Grambling State

University Office of Alumni Affairs database. In March 2005, an initial random sample of 2,000 e-mail addresses was selected; 200 alumni e-mail addresses were randomly selected to receive a link to one of the ten surveys. Every effort was made to deliver the electronic survey, however not enough surveys were returned in the initial distribution to provide for statistically valid analysis. Therefore additional e-mail addresses were selected to receive surveys until the database was exhausted. This was done in an attempt to gather data from at least 60 respondents per survey. This process will be explained in greater detail below.

On March 8, 2005, the researcher sent an invitational e-mail letter to 2,002 alumni. The e-mail described the survey and indicated that a second e-mail including the link to the survey would arrive in a few days (Appendix E). Because some e-mail addresses were rejected, replacement addresses (first replacement) were selected and sent the following day. The e-mail with the survey links was sent to the first 2,002 e-mail addresses on March 10, 2005. A greater number of e-mail addresses were rejected with this mailing even though these were all accepted with the initial e-mail. Another sample of e-mail addresses was randomly selected to receive the first letter (second replacement). It was beyond the scope of this study to determine why a greater number of addresses were rejected in the second mailing. The researcher makes the assumption that including the link in the e-mail caused the e-mail to be rejected by the addressees' spam filters. At any rate, an attempt was again made to verify returned e-mail addresses. A final e-mail reminding alumni to complete the survey was e-mailed on March 21, 2005.

After nearly one week, only one of the surveys yielded the required 50 responses. It was evident that the number of responses needed was not going to be acquired for any of the other surveys. Based on the return rate achieved on the first mailing an additional 1,800 e-mail addresses were randomly selected and sent the initial contact e-mail letter on March 14, 2005. These e-mail addresses were sent the same letters following the same procedures as the first group. The only difference was that this sample received links to only the nine remaining surveys. This was sent on March 22, 2005, and the reminder letter was sent on March 28, 2005. Again the required number of responses was received for only one of the nine surveys. Based on the proportion of responses still needed, the remainder of the e-mail addresses (1,700) was randomly placed into groups to receive one of the remaining eight survey links that had not yet yielded the required 50 responses. The initial e-mail was sent to these remaining addresses on March 21, 2005, the link was e-mailed on March 23, 2005, and the reminder e-mail on March 28, 2005(See Table 5 below).

Table 5: Process of Survey Link Distribution					
Mailing	Date first letter	Date Second Letter	Date Reminder	Sample	Returned
Original	March 8, 2005	March 10, 2005	March 21, 2005	2,002	222
First replacement	March 9, 2005	March 10, 2005	March 21, 2005	16	3
Second replacement	March 11, 2005	March 14, 2005	March 21, 2005	239	62
Third replacement	March 14, 2005	March 15, 2005	March 21, 2005	1,803	202
Fourth replacement	March 21, 2005	March 22, 2005	April 4, 2005	1,714	209

Even though the number of remaining e-mail addresses was divided proportionally the ultimate numbers of responses among the ten surveys varied slightly, and the required response rate was not achieved for 1 of the 10 surveys. By April 9, 2005, 778 alumni had completed the surveys for an overall response rate of 15.3%. Considering that a response rate of approximately 25% is typical for Internet surveys, this response rate is not exceptional. The response rates for each survey are provided below in Table 6.

Table 6: Response Rates					
Survey	Sample Size	Number Returned	Final Sample Size	Completed Surveys	Response Rate
LVVP2N	479	52	427	69	16.2
LVVN2P	410	66	344	72	20.9
LVHP2N	476	53	422	54	12.8
LVHN2P	606	62	544	79	14.7
PDP2N	577	70	508	80	15.8
PDN2P	889	105	784	111	14.0
CAAF	512	80	432	78	17.8
CAAR	610	69	541	76	14.0
LMAT	448	59	389	71	18.3
OPEN	767	81	686	88	12.8
Total	5,774	697	5,077	778	15.3

Demographics

All demographic data along with respondent identification number and survey format (coded as in the table above) was downloaded in an SPSS data file. Variations among the data yielded for each survey was tested by conducting crosstab analysis for each variable to ensure that there was no difference in the respondent characteristics among the 10 surveys. Crosstab is a technique for examining the relationship between

categorical variables, in this case the survey format and the demographic variables. Cramer's V is the crosstab statistic used and measures the strength of association between two nominal categorical variables. A weak association is evident with a Cramer's V of .30 or less, a moderate association is between .40 and .50, and a strong association is .60 or greater.

Respondent Characteristics

The demographic variables were measured in the survey because past studies have indicated that some demographic variables are predictors for primacy effect and satisficing (see Chapter 2, pg 20). The purpose of measuring these variables was to enter the data into the regression model to determine if they added to the explained the variance beyond what was explained by computer experience. Below is a summary of the range of those variables among the respondents.

Educational attainment. Only about 2% of the respondents overall had attended college but received no degree, 39% had earned a four-year degree, 19% had attended graduate school, 29% had earned a graduate degree, and 11% had attended college beyond earning a graduate degree. Educational attainment did not differ significantly among the separate surveys as was evident by the small Cramer's V of .118 at a significance of .210. (See Appendix G, Table G1 for a comparison among the different surveys.) Because the fields were collapsed for analysis, 40% of the respondents overall had an undergraduate degree or only some undergraduate experience, compared with 59.9% who had earned beyond an undergraduate degree.

This comparison also produced a nonsignificant and small Cramer's V (.122, $p=.245$).

This comparison among the different surveys is found in Appendix G in Table G2.

Major. Most respondents said they had majored in business (21%), education (20%), or computer technology (12%). This information was gathered to further explain computer experience. The assumption was made that those alumni who had degrees in such fields as computer science and engineering would have the greatest computer experience; those in fields such as business, law, and science would have medium computer experience; and those in such fields as education, nursing, and social work would have the least amount of computer experience. The Cramer's V yielded for this comparison was small (.096) and not significant (.772). See Appendix G, Tables G3 and G4 for a comparison among the different surveys.

Age. Forty percent of the overall respondents were under 34 years of age, 51% were 34 to 50 years of age, and 10% of the respondents were over 50 years of age. Age did not differ significantly among the separate surveys (Cramer's V =.097, $p=.710$). See Appendix G, Table G5 for a comparison among the different surveys.

Gender. Sixty-six percent of the respondents overall were female and 34% were male. Gender did not differ significantly among the separate surveys (Cramer's V = .070, $p=.926$). See Appendix G, Table G6 for a comparison among the different surveys.

Income Level. Thirty-seven percent of the respondents overall had an annual household income level of less than \$50,000, 46% had an annual household income of \$50,001 to \$100,000, and 18% of the respondents had an annual household income of over \$100,000. Income level did not differ significantly among the separate

surveys (Cramer's $V = .124$, $p = .185$). See Appendix G, Table G7 for a comparison among the different surveys.

Computer Experience

The measure of computer experience is essential to this study; however there is no clear-cut measure. Therefore several questions were asked about the respondents' experience with several aspects of computer use. The data yielded from these questions were entered into a hierarchical cluster analysis to create a measure of computer experience. Below is a description of the process that investigated each respondent's computer experience and yielded the computer experience score for each respondent.

Individual Question Items. Respondent computer experience level was not measured directly but rather was derived from the answers to several questions that gauged respondents' experience with several common tasks and programs that typical computer users might encounter. These questions gathered such information as the number of places respondents have computer access, the frequency and length of their computer use, the number of Internet activities in which they have been engaged, frequency of e-mail access, comfort with computers in general, comfort with different programs (Word documents, spreadsheets, and gaming), self-reported computer skill level in general, and skill level with common computer programs and activities (multi-tasking, file management, Word documents, spreadsheets, and Internet activities). Because computer experience data from all surveys was analyzed together, the Cramer's V statistic for each of the questions is not provided; only the distribution

of computer experience questions among the different surveys is provided (Appendix F, Tables F8-21). There was very little variation among the separate surveys in computer experience scores (Cramer's $V=.110$, $p=.412$).

Reliability. Reliability is the proportion of variability in the survey responses that can be accounted for by differences in the respondents. In other words, reliability is the variability that occurs because respondents have different opinions, not because the survey is confusing or interpreted differently by respondents. Therefore, reliability analysis was conducted on the computer-experience questions to ensure that the measurements used for the questions resulted in a good approximation for the overall computer experience score. Through the reliability analysis, the relationship between individual items and the computer experience score was studied. A Cronbach's alpha of .770 was achieved indicating that these items are a good measure of computer experience. Most of the questions correlated weakly with each other but some correlated moderately indicating that some of the questions may have been redundant.

Hierarchical Cluster Analysis. This procedure clusters cases (or respondents) into homogenous groups based on respondent characteristics. In this study, the characteristics are the subject of the different questions regarding computer experience, and the groups are computer experience levels or scores (i.e., least, medium, or great).

The answers to the computer-experience questions were categorically coded 1 through 3 where respondents were asked to rate themselves on computer tasks. There were three sets of "yes/no" questions. One set asked respondents where they accessed computers. Another set asked respondents what Internet activities they engaged in.

The final set asked respondents about their comfort with several common types of computer programs. For items in these groups of questions, respondents checked “yes” or “no.” Items checked “yes” were tallied and reverse coded so that the greatest amount of items checked were coded with the lower numbers. This was done so that coding was consistent in that “1” indicated the most computer experience regardless of the format of the question.

All computer-experience questions were subjected to hierarchical cluster analysis to separate respondents into three groups: those with low, medium, or high computer experience, to determine computer experience score. SPSS saves the result automatically for each case when running the analyses. The results indicated that 63% of the respondents had great computer experience, 35 % had medium computer experience, and 2% had low computer experience. The low and medium computer experience groups were collapsed into one group due to the few respondents (14) categorized as having low computer experience. The percentages of computer experience levels among the different surveys with the collapsed fields are displayed in Table 7 below.

Survey	High		Medium/Low	
	Number	Percent	Number	Percent
LVVP2N	38	55	31	45
LVVN2P	50	69	22	31
LVHP2N	33	61	21	39
LVHN2P	44	56	35	44
PDP2N	51	64	29	36
PDN2P	70	63	41	37
CAAF	52	67	26	33
CAAR	48	63	28	37
LMAT	48	65	25	34
OPEN	59	67	29	33
Total	491	63	287	39

Research Question 1: Primacy Effect

The first research question had three parts that investigated the contribution of different levels of respondent computer experience on primacy effect in one survey format compared to another. The question was, “Will respondents with little computer experience exhibit primacy effect (a tendency to choose answer options toward the beginning of a list) more frequently than respondents with more computer

experience regardless of age, educational level, gender, and income level?” Three conditions include:

- a. Fully visible vertical lists versus fully visible horizontal lists
- b. Vertical lists in a pull-down format versus fully visible vertical lists
- c. The amount of answers checked toward the beginning of the list of check-all-that-apply questions versus those checked throughout the list

Summary Research Question 1: Primacy Effect

The final analysis reveals that for this group of respondents, although primacy effect is evident in question format and in answer order, there is not a positive and significant relationship between the interaction of question format and answer order with primacy effect. However, the check-all-that-applies format reveals primacy effect; therefore only this format was used in further analysis to determine the effect of computer experience on primacy effect.

Results showed that the interaction between answer order and the two survey formats—the survey format where the answer choices are listed fully visible to the respondent but horizontally in a row and the survey format where the answer choices are listed vertically in a pull-down menu proved to not have a positive and significant relationship with primacy effect. However, a positive and significant relationship between primacy effect and check-all-that-applies survey format where the answer choices are listed in an opposite order (negative to positive order, greatest to least, or least desirable to most desirable) compared to those in the more traditional order is evident. Possibly due to the lack of variability in computer experience in this group of

respondents (i.e., very few respondents with little experience), computer experience showed no influence on primacy effect.

Determining Primacy Effect

Before the research questions could be tested, it had to be determined which of the 85 survey questions did in fact produce a primacy effect. To determine this, the data collected from the two control surveys—those with the answer choices listed in fully visible vertical format (one positive to negative, the other negative to positive) were entered in a regression analyses; one regression analysis for each survey question. Six questions displayed a significant and positive primacy effect and were therefore the only ones used in further analyses. The beta (showing positive or negative relationship) and significance are displayed in Appendix G, Table G22.

Vertical Lists in a Fully Visible Format Versus Fully Visible Horizontal Lists

The six questions in Appendix G Table G22 that exhibited primacy effect by yielding a positive and significant beta were used in the regression analysis testing the relationship between primacy effect and the two survey formats. An overall primacy score was derived for each case in the database by combining the scores for the questions. A multiple regression analysis was performed using survey format, positive versus negative answer format, and the interaction between survey and answer format to determine the influence of computer experience on the occurrence of primacy effect. Although the multiple regression model ($R^2 = .161$,

$F_{3, 274} = 17.341, P = .000$) with the three predictors revealed a linear relationship overall with a positive beta for the interaction, the interaction was not significant (see Table 8 below). Therefore primacy effect is not significantly more evident in the question format with horizontal answer lists than question format with vertical answer lists for this group of respondents. The predictors explained 16% of the variance in the primacy effect. A non-significant interaction measuring the effect of computer experience on primacy effect made further analysis not worthwhile.

Question	beta	Significance
Answer order	.217	.216
Survey format	-.256	.164
Interaction	.281	.276

Fully Visible Vertical Lists Versus Vertical Lists in a Pull-Down Format

The six questions in the Appendix G Table G22 that exhibited a positive and significant primacy effect were used in the regression analysis testing the relationship between primacy effect and the two survey formats. An overall primacy score was derived for each case in the database by combining the scores for the questions. A regression analysis was conducted using survey format, positive versus negative answer order, and an interaction term between the two variables. Even though the multiple regression model ($R^2 = .110, F_{3, 331} = 13.509, P = .000$) with the three predictors revealed a linear relationship overall, an insignificant negative beta for the

interaction (see Table 9 below) reveals that primacy effect is not significantly more evident in the question format where answer lists were displayed in a pull-down menu than in the question format where answer lists were displayed vertically. The three predictors did explain 11% of the variance in primacy effect. A non-significant interaction measuring the effect of computer experience on primacy effect made further analysis not worthwhile.

Table 9: Interaction Between Vertically Fully Visible and Pull-Down Menu Survey Format and Positively and Negatively Listed Answer Order		
Question	beta	Significance
Answer order	.386	.027
Survey format	.040	.814
Interaction	-.080	.744

Check-All-That-ApPLY Questions Answers Checked Toward The Beginning of the List Versus Those Checked Throughout The List

Each of the questions in Appendix G Table G23 was tested between the two check-all-that-apply survey formats – forward order and reverse order – for primacy effect. Appendix G, Table G23 displays the beta and significance for each of the questions. A positive and significant beta reveals a relationship with primacy effect. The two questions that exhibited a positive and significant beta were combined to determine an overall primacy effect between the two survey formats. The regression analysis that was conducted using check-all-that-apply survey format showed an overall positive and significant relationship primacy effect indicating that the check-

all-that-apply survey format with the answer options in reverse order are more likely to result in primacy effect (See Appendix G Table G23). Although the multiple regression model ($R^2 = .091$, $F_{2, 151} = 7.583$, $P = .001$) with the two predictors revealed a linear relationship overall, the negative not significant beta for computer experience ($\beta = -.016$, $p = .833$) reveals that primacy effect is not significantly more evident in the question format where answer lists were displayed in negative to positive order than in the question format where answer lists were displayed in positive to negative order when computer experience is taken into account (see Table 10 below). The two predictors did explain 11% of the variance in primacy effect.

Table 10: Regression Between Check-All-That-Apply Answer Choices Listed in Forward Order and Check-All-That-Apply Answer Choices Listed in Backward Order		
Question	beta	Significance
Survey format	.302	.000
Computer experience	-.016	.833

Research Question 2: Satisficing

Research question 2 investigated the incidence of satisficing in two cases. One case investigated satisficing in two survey formats for respondents with different levels of computer experience. The other investigated the number of words used in open-ended questions for respondents with varying levels of computer experience. Before the research questions could be tested, it had to be determined if the survey questions did in fact produce satisficing. To determine this, the survey with the

answer choices listed in fully visible vertical format and the answer choices formed in a matrix were entered into regression analyses and only those questions that resulted in a positive and significant relationship were used in further analysis. Also, for the open-ended questions, the number of significant words used to answer the questions was measured and compared for respondents with varying levels of computer experience. Only items that displayed a significant and positive relationship were used for further analyses.

Summary Research Question 2: Satisficing

When the survey formats where answer choices are listed in a visible vertical format and in a matrix format were compared, seven of the survey questions – one group – proved to exhibit satisficing. Results revealed that a linear relationship ($R^2 = .077$, $F_{7,112} = 4.620$, $P = .012$) exists between the two survey formats – the format where the answer choices are fully visible and vertically in a column and the format where the answer choices are listed vertically in matrix – and satisficing. However, when the data from the survey questions were entered into a regression model to determine if there is a relationship between a respondent's computer experience and satisficing, computer experience does not produce a positive and significant relationship. Therefore, for this group of respondents, computer experience had no influence on satisficing. Because the contribution of computer experience did not show a significant relationship with satisficing no further analysis was conducted.

Likert Scale Question-and-Answer Lists Formatted In Matrices Versus Separate Question-and-Answer Lists

The question in the Table G24 that exhibited a positive and significant relationship with satisficing in the t-test was the only one used in the regression analysis therefore satisficing data for that question only was used in further analysis that examine the relationship between satisficing and computer experience for surveys where answer lists were displayed in a matrix and question format where answer lists were displayed vertically. Although the multiple regression model ($R^2 = .078$, $F_{2, 112} = 4.650$, $P = .012$) with the two predictors (survey format and computer experience) revealed a linear relationship overall, computer experience revealed a negative relationship with satisficing (see Table 11 below) that was not significant. Therefore it cannot be said that satisficing is more common in surveys with a matrix format compared to surveys with all questions listed vertically and the answer choices listed in positive to negative order for this group of respondents.

Table 11: Regression Between Vertically Fully Visible and Matrix Question Format		
Question	beta	Significance
Survey format	.231	.014
Computer experience	-.133	.152

Open-Ended Questions Using Fewer Words Versus More Words

Table G25 exhibits the results of the analysis conducted to determine whether greater satisficing occurs when respondents have less computer experience. The

number of significant words used to answer questions was counted using Microsoft Word's word count function. A t-test revealed that there was no difference in the number of words used by respondent with great computer experience and those with less computer experience. Therefore, computer experience did not reveal a contribution to satisficing for any of the open-ended questions for this group of respondents.

CHAPTER FIVE: SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Online surveys are fast and inexpensive methods of collecting information and data. Because increasing numbers of organizations, companies, and institutions are using online surveys and information-gathering forms, it is important to understand the effects various factors will have on the accurate gathering of data. In some cases it may be inappropriate to rely solely on online surveys or forms; therefore, the investigation of factors such as computer experience on response effects will equip researchers with information that will enable them to design surveys. The purpose of this study was to assess the contribution of computer experience on primacy effect and satisficing—two response effects that may be related to a respondent’s ability, motivation, and perceived task difficulty—with various online survey formats.

This study, conducted in the Spring of 2005, assessed the contribution of computer experience on primacy effect and satisficing in online surveys for alumni answering questions about experiences with their alma mater. Primacy effect is the tendency of respondents to choose answers from the beginning of a list on written surveys. Satisficing is an attempt to minimize the cognitive effort respondents need to answer survey questions. Several survey formats were used including formats known to produce primacy effect and satisficing, and pull-down menu, an additional survey format unique to online forms. In addition, this study investigated whether respondent computer experience contributed to primacy effect and satisficing more so in some survey formats than others.

Summary

The following section presents a summary of the research findings based on the two response effects of primacy effect and satisficing. In order to measure primacy effect, three survey formats were used: vertical, horizontal, and pulldown, an additional format was used to measure satisficing, and check-all-that-apply. Further, two answer orders were used in each of the survey formats: strongly agree to strongly disagree and strongly disagree to strongly agree. This resulted in eight different survey instruments. In order to measure satisficing, three survey formats were used: matrix, vertical (from the primacy group), and open-ended. Thus, a total of 10 different survey instruments were developed: eight for primacy effect, one of which is included in the three for satisficing. Content of the different survey instruments remained the same across all 10 instruments. The screen shots illustrate the different versions.

Vertical Positive to Negative

4. I would like to see my chapter offer the following program choices:

a. Featured campus speakers

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

Vertical Negative to Positive

4. I would like to see my chapter offer the following program choices:

a. Featured campus speakers

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

Horizontal Positive to Negative

4. I would like to see my chapter offer the following program choices:

a. Featured campus speakers

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

Horizontal Negative to Positive

4. I would like to see my chapter offer the following program choices:

a. Featured campus speakers

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

Pull-down Positive to Negative

4. I would like to see my chapter offer the following program choices.

a. Featured campus speakers

-- Select --

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

Pull-down Negative to Positive

4. I would like to see my chapter offer the following program choices.

a. Featured campus speakers

-- Select --

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

Check-All-That-Apply Forward

4. I would like to see my chapter offer the following program choices: (Check all that apply)

- a. Featured campus speakers
- b. Social events for club members
- c. Local cultural events
- d. Local sporting events
- e. Grambling State University sporting events
- f. Admissions receptions
- g. Send-off events for new students
- h. Are there any other programs you would like to see offered by your chapter? Please list below.

Check-All-That-Apply Reverse

4. I would like to see my chapter offer the following program choices: (Check all that apply)

- a. Send-off events for new students
- b. Admissions receptions
- c. Grambling State University sporting events
- d. Local sporting events
- e. Local cultural events
- f. Social events for club members
- g. Featured campus speakers
- h. Are there any other programs you would like to see offered by your chapter? Please list below.

Matrix

4. I would like to see my chapter offer the following program choices:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
a. Featured campus speakers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Social events for club members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Local cultural events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Local sporting events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Grambling State University sporting events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Admissions receptions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Send-off events for new students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Open-Ended

4. I would attend the following program choices offered by my chapter:

Surveys were distributed online at random to alumni from a historically black college. A total of 778 respondents answered 85 questions related to various aspects of their experiences as alumni. Response rates varied from 13% in the horizontal

positive to negative and open-ended surveys to 21% percent in the vertical negative to positive survey. Response rates for the other seven surveys were as follows: check-all-that-apply reverse and pull-down negative to positive, both 14%; horizontal negative to positive, 15%; vertical positive to negative and pull-down positive to negative, both 16%; and check-all-that-apply forward and matrix, both 18%.

In general, primacy effect was not evident in responses. Of the 85 questions, only 6 of the 85 questions demonstrated a primacy effect. All further analyses were conducted on the 6 questions. The contribution of computer experience on primacy effect was then investigated. There was no evidence that computer experience contributed to primacy effect.

Additional analyses were conducted to explore the relationship between survey format, answer order and the interaction between the two. In the first analysis three predictors (answer order, survey format, and the interaction between the two) were entered into the regression model. A positive and significant relationship between primacy effect and the interaction between answer order and survey format would indicate that the horizontal visible survey format had a better chance of producing primacy effect than did the vertical visible survey format. Although a linear relationship was found among primacy effect, answer order, survey format, and the interaction ($R^2 = .161$, $F_{3, 274} = 17.341$, $P = .000$) primacy effect did not exhibit a positive and significant relationship with the interaction of survey format and answer choice format.

This process was repeated using the pull-down menu survey format in place of the horizontal visible survey format and again resulted in a significant linear

relationship ($R^2 = .110$, $F(3, 331) = 13.509$, $P = .000$). The interaction of the survey format and answer order format resulted in a not significant relationship. Therefore neither survey format—horizontal visible or pull-down menu—was found to be more likely to result in primacy effect than the vertical visible survey format. Consequently it was not prudent to add the remaining predictors (computer experience and other respondent demographics) into the regression model because they would not aid in the prediction of primacy effect for these respondents thus the contribution of computer experience would not be made evident.

Results from the check-all-that apply questions were not compared to the fully visible vertical answer format. Instead, check-all-that-apply questions where the answer choices were listed in a forward order were compared with answer choices that were listed in the reverse order. This procedure was fashioned after a study (Dillman, Tortora, Conradt, & Bowker, 1998) that tested the check-all-that-apply format for primacy effect. Therefore the regression model for check-all-that-apply survey format included answer order and computer experience only. Although the regression model in this study revealed that primacy effect had a linear relationship with check-all-that-apply survey formats ($R^2 = .091$, $F(2, 151) = 7.583$, $P = .001$), the predictor of computer experience did not yield a significant relationship with primacy effect.

In summary, primacy effect was found in all four survey formats—vertical, horizontal, pull-down menu, and check-all-that-apply—but was not greater in either the horizontal, pull-down menu, or check-all-that-apply than it was in the vertical as was suggested by the hypotheses. Because of this, it was not necessary to continue the

investigation of the contribution of computer experience to primacy effect. However this finding still has significance for Internet survey designers in that if one wanted to bias a survey the desired answers would be placed at the beginning of the list of answer choices.

Satisficing

Satisficing was measured differently for two of the survey formats used. In the matrix format, satisficing was measured by counting the number of answers that were marked similarly in the matrix, e.g. how many times the respondents answered “Somewhat agree.” The visible vertical survey format was the comparison survey and satisficing was measured in the same manner in the corresponding separately listed questions. Satisficing was found to occur in one matrix of the eleven matrix questions. A positive and significant correlation between satisficing and survey format (beta = .246, $P = .009$) reveals that satisficing is more likely to occur in survey formats with the answer choices listed in a matrix than in the vertical survey format. However, when computer experience was entered into the equation it was not found to be a predictor for satisficing.

Measuring satisficing in open-ended questions was not as straightforward. As alluded to in a few studies (Schaefer & Dillman, 1998; Paolo, Bonaminio, Gibson, Partridge, & Kallail, 2000; Shermis & Lombard, 1999), answering open-ended questions requires greater cognitive effort, and therefore if one was not satisficing, one would answer these questions using significantly more words. Because the hypothesis was that a respondent with less computer experience would be more likely

to satisfice, the regression model was developed to predict satisficing based on computer experience. The analysis conducted on each of the open-ended questions revealed no significant correlation between satisficing and computer experience.

It should be noted that Bosnjak and Tuten (2001) suggested respondents who are uncomfortable with their computer skills will tend to quit a survey early when open-ended questions are presented. Therefore an examination of the point at which respondents dropped out of the survey might have provided some insight into the lack of evidence of the contribution of computer experience to satisficing in these questions. In the case of the open-ended survey used for this study, 13 of 88 (14.8%) respondents completed none of the open-ended questions, another two (2.3%) quit about halfway through the survey, and an additional three (3.4%) quit about one-third of the way through. This might lead the researcher to be suspicious of the results if it were not that the dispersion of computer experience among these drop-out respondents was distributed fairly even (great experience = 10 dropouts; least experience = 8 dropouts). Therefore even though Schaefer and Dillman (1998) found that Internet survey respondents answer open-ended questions more thoroughly, if they quit the survey early the benefit of more thorough answers is nonexistent.

In summary, the respondents satisficed more in the matrix survey format than in the visible vertical survey format; computer experience however did not contribute to satisficing in these surveys. Furthermore computer experience did not contribute to satisficing in open-ended survey questions.

Discussion

This research prompts a few ideas that warrant further discussion. The first idea takes into account the sample and the response rate that was achieved. The second addresses primacy effect and satisficing and computer experience.

Sample and Response Rate

As reported in Chapter 4, originally 2,000 e-mail addresses were selected from the database of 5,800 and were randomly assigned to receive links to 1 of the 10 surveys. It was necessary to receive at least 50 responses for each survey to achieve an adequate number of replies for the regression equations. When it appeared as though the required 50 replies were not going to be returned, additional e-mail addresses were selected and randomly assigned to receive 1 of the 10 links. Based on the supposition that some survey formats may be more enticing for respondents to complete than others, the number of e-mail addresses chosen for each additional selection was based on the response rate already achieved for each survey. Therefore a larger number of e-mail addresses were assigned for those surveys that had fewer responses. This process resulted in exhausting the database. As a consequence the number of valid surveys received varied between 54 and 111 for each of the 10 surveys.

This modification of the procedures in the research study resulted in a change from using a sample of the alumni database to a census of all the alumni for whom the Office of Alumni Affairs had valid e-mail addresses. However, because one of the reasons researchers use samples rather than a census of an entire population is to

reduce the cost of the research project. Due to the nature of Internet survey dispersion cost is not an important aspect (e-mailing the link to 100 respondents is no more costly than e-mailing to 1,000). Also, because data provided in Internet surveys is automatically entered into a database, mistakes in data entry are nonexistent. Therefore research costs are further reduced due to the decreased effort required for database maintenance. For that reason the modification of procedures mid-way through the study does not greatly affect the overall results.

Despite the fact that the entire database was used, the total response rate for each of the surveys was disappointing to say the least. The overall response rate was 15% with rates for individual surveys ranging between 13% and 21%. Based on research cited in chapter 2 (page 23), a response rate of about 25% should be expected for Internet surveys. It is unknown what could have been the reason for such a low response rate, but some speculation can be made based on the characteristics of this sample.

While we can find research about response rates for internet surveys research about expected response rates for alumni is difficult to find. Anecdotal evidence collected by the Council for Advancement and Support of Education (CASE) suggests that response rates tend to be low for any alumni survey despite the survey mode. Research indicates (Gasman & Anderson-Thompkins, 2003 pp. 10-11) that garnering responses from HBCU alumni is especially difficult. Personal communications with some of the alumni in this sample indicate that perhaps the low response rate was due to a lack of faith that completing the survey would result in improvement or change.

Response Effects

Earlier in this study two types of response effects were discussed—primacy effect and satisficing. The following discussion focuses on the results regarding the investigation of these two response effects. Even though most of the pertinent correlations in this research were not significant, the results suggest several points could be investigated further by speculating about the meaning.

Primacy Effect. The results of the research show that primacy effect was evident in all three survey formats. Although it was expected that primacy effect would be more evident in the horizontal and pull-down menu formats than it was in the vertical format, none of the survey formats exhibited greater primacy effect.

Just as Dillman, Phelps, Tortora, Swift, Kohrell, and Berck (2001) found response order effects in their study using different survey modes, the researcher found 6 of the 85 questions in this study exhibited primacy effect. These results, however, raise concern. Because only 6 of the 85 questions (7 percent) resulted in a positive and significant relationship between primacy effect and answer order, it is doubtful if the hypotheses can truly be rejected or if rejection of the null based on these 6 questions alone causes a Type I error. Therefore, as noted in Chapter 4, even if the alpha level had been set at .01 rather than .05, a positive and significant relationship would have been produced in 4 of the 85 questions. Therefore increasing the power of the analysis does not help clarify the Type I error issue and it is likely that the primacy effect that was found in the six questions may have been due to chance variance rather than true primacy effect..

Aside from that, even though the correlation between survey format and primacy effect in the regression model using the vertical format and the horizontal format was not significant the researcher can speculate that if primacy effect had been detected in one format over the other, it would have been more likely in the vertical answer format. This suspicion is not in agreement with the Dillman, Tortora, & Bowker (1998) hypothesis that the more familiar format of vertically aligned question-and-answer choices requires less cognitive effort for respondents, and therefore has a lower incidence of primacy effect. That hypothesis however, applies to paper-and-pencil surveys, not Internet surveys. In Internet surveys the cognitive effort is reduced when the steps necessary to complete the survey are reduced. Therefore reducing the amount of scrolling that is needed to complete the survey reduces the cognitive effort. This suggests that, as Bowker and Dillman (2000) indicated, the horizontal format allows for less navigation through the survey thereby reducing the respondent's cognitive effort and resulting in a lower incidence of primacy effect.

Also, the correlation between survey format and primacy effect in the regression model using the vertical format and pull-down menu format was not significant. The researcher speculated that if survey format had significantly correlated with primacy effect, it would more likely have occurred in the pull-down menu format. This hypothesis had been based on the idea of top-down processing. Top-down processing (Bowker & Dillman, 2000; Dillman, Tortora, & Bowker, 1998) theorizes that too many required steps to answer questions might reduce a respondent's ability to fully comprehend survey questions. Thus, although not

specifically mentioned, greater cognitive effort would be required to complete surveys with a pull-down menu than would be required to complete vertical format surveys.

Finally, in check-all-that-apply questions, only two of the questions revealed a positive and significant correlation between answer order and primacy effect. The correlation between primacy effect and computer experience in the check-all-that-apply question format in the final regression model was not significant.

Satisficing. The positive and significant relationship ($b = .231, p = .014$) between satisficing and survey format reveals that satisficing is more likely to occur in survey formats with answer choices listed in a matrix than in the vertical survey format. However, the correlation between computer experience and satisficing was not significant. Even though this concurs with what Jenkins and Dillman (1995) found in paper-and-pencil surveys, the result is not in agreement with the argument made in Chapter 2 (pages 48-49) as it relates to of the contribution of computer experience.

Because computer experience did not significantly correlate with satisficing in open-ended questions (measured by the number of words used to answer), it is impossible to draw any conclusions; however it is worth noting that for most questions, respondents with less computer experience used fewer words. These results seem to suggest that the principles set forth by Dillman, Tortora, and Bowker (1998) support the statement that it is best to avoid open-ended questions, even though in the same year Dillman, Tortora, Conradt, and Bowker (1998).

Summary

According to Dillman's theories (1998, 2002), in part, the survey respondent will provide more meaningful accurate data if the survey is relatively easy to navigate. As far as Internet surveys are concerned, navigation involves much more than constructing a survey in such a manner that the respondent can easily comprehend the steps needed to move through the survey. The respondent must also have the ability to comprehend how to take those steps when using a tool that is more manually difficult than paper and pencil. Krosnick's theory (1991) of satisficing complements Dillman's theory by adding that the respondent must have motivation, and ability (knowledge), and that the task necessary to complete the survey must be of a difficulty level that the respondent can manage for the data provided to be accurate and meaningful. With this in mind, it stands to reason that a respondent's computer experience—a proposed measure of skill—would affect the respondent's ability to answer the survey questions, thereby influencing primacy effect and satisficing. However, this study was unsuccessful in supporting this idea.

Increased technology in Internet surveys provides the survey researcher with the flexibility to create surveys with greater variety of question formats than those that are available to the researcher using traditional survey modes. Some of these features may prove to be a greater challenge for those who have not had as much experience with computers. Some of these features include:

- answer choices listed vertically, horizontally, in a matrix, or in a pull-down menu,

- open-ended questions where the answers are automatically recorded in a database, and
- check-all-that-apply answers.

These answer formats may result in primacy effect and satisficing therefore the survey researcher needs to consider more than what is necessary for traditional survey modes. Specifically the researcher needs to understand how the ability to accomplish the necessary manual steps to navigate the Internet survey may affect the results.

Limitations

The motivation of those who responded to pay close attention to the survey questions and complete the survey with great care and accuracy was high for those who responded. This was evident by the feedback the researcher received from some respondents via telephone and e-mail. In addition, because the sample was comprised of university alumni, computer experience was greater and less variable than what might be found in the general population. In the case of this sample, 63% of the respondents were categorized as having great computer experience by hierarchical cluster analysis, 35% as having medium computer experience, and only 2% as having low computer experience. The fact that these respondents were relatively computer proficient coupled with increased motivation resulted in less primacy effect and satisficing than might be expected with other sample frames. Similarly, Bowker and Dillman (2000) were unable to find differences in respondents' cognitive burden because all their respondents were found to be moderate to great computer users. Also with such a specific sampling frame, it is impossible to generalize these results. In

addition, regardless of the motivation to complete the survey, about 75% of the respondents had not experienced some of the events that were the basis of parts of the survey. As a result, those respondents left some sections blank, thereby reducing the amount of usable data.

Besides, the moderate correlations between some of the questions used to gauge computer experience indicate that some of those questions may have been redundant and could possibly have been deleted.

Conclusions

Although both primacy effect and satisficing were evident in all survey formats as expected based on theory discussed in Chapter 2 (Bowker & Dillman, 2000; Dillman, Phelps, Tortora, Swift, Kohrell, & Berck, 2001; Dillman, Tortora, & Bowker, 1998; Dillman, Tortora, Conratt, & Bowker, 1998; Jenkins & Dillman, 1995), the results of the analysis revealed that computer experience was not found to be a predictor for this group of respondents. Despite the fact that the interactions between answer order and the varying survey formats were not significantly correlated with primacy effect, linear relationships did exist in all the regression models that included these formats as predictors. Furthermore, when computer experience was added to the regression model where appropriate, it was not significantly correlated with primacy effect or satisficing. Based on the interpretations of Dillman's theories regarding the construction of "respondent friendly" surveys (Bowker & Dillman, 2000; Dillman & Bowker, 2000; Dillman, Tortora, & Bowker, 1998; Jenkins & Dillman, 1997; Redline & Dillman, 1999; Schaefer & Dillman,

1996) and Krosnick's theory of satisficing—particularly the factors of ability and task difficulty (Krosnick, 1991; Krosnick, Holbrook, Berent, Carson, et al., 2002; Krosnick, Narayan, & Smith, 1996)—it stands to reason that computer experience would contribute to primacy effect and satisficing. However, this was not the case in the present study.

This study showed that primacy effect and satisficing do indeed occur in Internet surveys. It has been evident in studies using modes of surveying other than Internet surveys (Chang, 2001; Dillman, Phelps, Tortora, Swift, Kohrell, & Berck, 2001; Dillman, Tortora, Conradt, & Bowker, 1998; Krosnick, Holbrook, Berent, Carson, et al., 2002) that primacy effect and satisficing are less likely to occur when the task of answering survey questions requires less cognitive effort from the respondent. For example, when survey answers are listed in a familiar manner (e.g., from positive to negative, smaller to larger, more desirable to less desirable) the cognitive effort required from the respondent is less than when answer choices are listed in a manner that may be unfamiliar. What this study failed to show is that the interaction of answer order and the expected survey formats are more likely to yield primacy effect and satisficing, and furthermore that computer experience contributes to the variance between those factors.

Through several studies (Bowker & Dillman, 2000; Jenkins & Dillman, 1995; Redline & Dillman, 1999), Dillman's theory of respondent friendly surveys suggested that survey formats that might be perceived as requiring greater cognitive effort would have a greater tendency to yield primacy effect and satisficing. Speculation can be made based on the significant regression models that survey format might

contribute to the variance, but without the significant and positive correlation between the interaction of survey and answer formats and primacy effect, it cannot be determined that any survey format yields greater primacy effect or satisficing.

Internet surveys allow researchers to conduct their studies in a faster, less expensive manner than other survey modes. In addition, many answer formats—some that are not possible in other survey modes—can be used. The choices researchers make as to which format will be used should be based on research. Moreover the choices made can help the researcher gain different types of information—detailed comments in open-ended questions, greater variety of choices in check-all-apply questions, or specific answers in either horizontal, vertical, or pull-down menu answer choices. Different survey formats can yield data with a range of information.

However, the survey designer needs to consider not only which format will yield desired results but also which survey formats will yield the least biased results. Survey design theory does not dismiss the importance of respondents' abilities in dictating which survey formats will yield the most accurate data. Yet basic cognitive effort required to answer survey questions in different formats does not quite explain all the variance that can occur in responses. Constructing surveys that take into account the respondent's computer experience as well as cognitive abilities might be important when determining which survey format to use. As in the case of vertical format compared to horizontal format, survey design methodology will suggest that a vertical format is best, whereas for Internet surveys, horizontal format may be cognitively easier due to less scrolling. However, this research failed to indicate any of the tested survey formats was more effective.

Recommendations

This research suggests promising opportunities for further research as it relates to primacy effect and satisficing, and in particular, the effect of computer experience on each of them. Below are several avenues of research one could take:

- Investigate the contribution of computer experience on primacy effect and satisficing with respondents who have a broader range of computer experience from greatest to least.
- Investigate the effect of computer experience on primacy effect and satisficing with respondents for whom the survey is not quite as relevant.
- Investigate the effect of computer experience on primacy effect and satisficing in branching questions (additional questions dependent upon respondent answers) or long scrolling pages.
- Investigate the effect of very long lists of answer choices on primacy effect.

APPENDICES

Appendix A: Computer Experience And Demographic Questions

26% Complete

Grambling State University Alumni Survey

Computer Experience

The answers to the questions in this portion of the survey will be used for categorization purposes. For this survey, someone with less computer experience would be able to engage in basic computer operations. Someone with medium computer would also be able to conduct minor troubleshooting tasks. Some with great computer experience would be able to load programs onto their computer and conduct major troubleshooting tasks.

1. Do you have access to a computer at any of the following:

	Yes	No
a. Home	<input type="radio"/>	<input type="radio"/>
b. Work	<input type="radio"/>	<input type="radio"/>
c. Library	<input type="radio"/>	<input type="radio"/>
d. Computer lab	<input type="radio"/>	<input type="radio"/>
e. Computer cafe	<input type="radio"/>	<input type="radio"/>

Please list any additional places you use a computer.

2. How often do you use a computer?

- Every day
- Once a week
- Monthly or less often

3. When did you first begin using a computer?

- More than eight years ago
- Four to eight years ago
- Within the past on to three years

4. Do you engage in any of the following activities with a computer?

	Yes	No
a. E-mail	<input type="radio"/>	<input type="radio"/>
b. Instant messenger	<input type="radio"/>	<input type="radio"/>
c. Surfing the Internet	<input type="radio"/>	<input type="radio"/>
d. Job and/or school work	<input type="radio"/>	<input type="radio"/>

Please list additional computer activities in which you engage.

5. How often do you access your e-mail account(s)?

- Every day
- A few times a week
- Once a month or less

6. Are you comfortable using any of the following types of software?

	Yes	No
a. Internet browser	<input type="radio"/>	<input type="radio"/>
b. E-mail software	<input type="radio"/>	<input type="radio"/>
c. Word processing (MS Word, Lotus, etc.)	<input type="radio"/>	<input type="radio"/>
d. Spreadsheet (Excel, Access, etc.)	<input type="radio"/>	<input type="radio"/>
e. Gaming software	<input type="radio"/>	<input type="radio"/>

Please list additional software with which you are comfortable using.

7. How comfortable do you feel using a computer?

- Very comfortable
- Somewhat comfortable
- Not at all comfortable

8. In general, how would you classify your skill level with computers:

- Great
- Medium
- Beginner

9. What is your level of achievement in basic computer operation?

- I run two programs simultaneously, and have several windows open at the same time.
- I use the computer to run a few specific, pre-loaded programs.
- I need help with new programs.

10. What is your level of achievement in file management?

- I move files between folders and drives, and I maintain my network storage size within acceptable limits.
- I select, open and save documents on different drives.
- I do not save any documents I create using the computer.

11. What is your level of achievement in word processing?

- I edit, spell-check, and change the format of a document.
- I occasionally use a word processing program for simple documents.
- I do not use a word processing program.

12. What is your level of achievement in spreadsheet use?

- I use labels, formulas, cell references and formatting tools in my spreadsheets.
- I create simple spreadsheets.
- I do not use a spreadsheet.

13. What is your level of achievement in Internet use?

- I follow links from these sites to various Internet resources.
- I access school and chapter websites to find information.
- I do not use the Internet.

14. What is your level of achievement in Internet use?

- I check my e-mail account on a regular basis and maintain my mail folders in an organized manner.
- I send messages using e-mail - mostly to district colleagues, friends, and family.
- I have an e-mail account but I rarely use it.

Continue

Please contact cross@case.org if you have any questions regarding this survey.

SURVEY PROFESSIONALS
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35% Complete

Grambling State University Alumni Survey

Demographic Information

1. What is the highest educational level you have attained?

- Some college
- Four-year degree
- Attended graduate school
- Post-graduate degree
- Beyond post-graduate degree

Please choose your age category.

- Up to 34
- 34 to 54
- 55 or above

3. What is your gender?

- Female
- Male

4. What is the income level of your household?

- Less than \$50,000
- \$50,001 - \$100,000
- More than \$100,000

5. What was/is your major?

- Business
- Computer Science and Technology
- Criminal Justice
- Education
- Nursing
- Social Work
- Other

Continue

Please contact cross@case.org if you have any questions regarding this survey.

Appendix B: Surveys

LVVP2N	121
LVVN2P.....	142
LVHP2N.....	163
LVHN2P	174
PDP2N.....	185
PDN2P.....	195
CAAF.....	205
CAAR	214
LMAT	223
OPEN	232

Survey LVVP2N

100% Complete

Grambling State University Alumni Survey

Alumni Questions

1. I am aware of alumni chapter activities in my area.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

2. I try to attend alumni chapter meetings.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

3. Regarding the alumni chapter activities in my area, I am satisfied with:

a. Quality

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

b. Variety

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

c. Frequency

- Strongly agree
- Agree

- Undecided
- Disagree
- Strongly disagree

4. I would like to see my chapter offer the following program choices:

a. Featured campus speakers

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

b. Social events for club members

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

c. Local cultural events

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

d. Local sporting events

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

e. Grambling State University sporting events

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

f. Admissions receptions

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

g. Send-off events for new students

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

5. Have you ever attended a reunion of your class at Grambling State University?

- Yes
- No

b. If yes, what was the most recent year?

6. Are you aware of reunion activities for your class?

- Yes
- No

7. How satisfied are you with the following aspects of reunion:

a. Class programs

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

b. General education programs

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied

Very dissatisfied

c. Meals

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

d. Housing

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

e. Length of reunion

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

f. Pre-reunion information

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

g. Staff assistance and support

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

8. Have you ever attended a homecoming at Grambling State University?

- Yes
- No

b. If yes, what was the most recent year?

9. What homecoming opportunities would you like to see offered?

a. Educational programs featuring professors

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

b. Campus tours

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

c. Panel discussions involving students, faculty, and administrators

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

d. Social gatherings, including tailgates

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

e. All-campus dinner

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

f. Concerts, plays, musical affairs

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

10. Has your child ever applied to Grambling State University?

- Yes
- No

11. I am satisfied with Grambling State University's handling of legacy admissions.

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Dissatisfied

12. How satisfied are you with the following characteristics of Grambling State University's merchandising program:

a. Costs

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

b. Variety of merchandise

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

c. Availability

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied

Very dissatisfied

13. Have you had an opportunity to discuss a program activity/idea with staff members from the Office of Alumni Affairs?

Yes

No

b. If yes, was the staff person helpful, polite, and courteous?

Yes

No

14. Please rate the importance of each of the following. Rank the most important item "1".

a. Alumni chapter activities

1

2

3

4

5

6

7

8

9

10

11

b. Reunions

1

2

3

4

5

6

7

8

9

10

11

c. Homecomings

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

d. Alumni admissions activity

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

e. Continuing education program

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

f. Undergraduate training and relations

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
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g. Class efforts

- 1
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h. Travel programs

- 1
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i. Merchandising

- 1
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j. Alumni directory

- 1
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k. Athletic promotions

- 1
- 2
- 3
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- 10
- 11

15. How many different alumni events would you be willing to attend in one year?

- None
- 1 – 2
- 3 – 4
- 5 – 6
- 7 or more

16. What is the best time for you to attend Grambling State University alumni events?

- Weekdays
- Evenings
- Weekend days
- Weekend evenings

17. How do you prefer being invited to events?

- Mail
- Telephone
- Notice in Visions Magazine
- E-mail
- I do not wish to be invited to events

18. The most important reason to attend alumni events is:

- To see alumni
- The pleasure attained from the event/program itself
- Giving back to Grambling State University
- Learning experience

19. How important is it for you to stay connected with former classmates?

- Very important
- Somewhat important
- Undecided
- Somewhat unimportant
- Very unimportant

20. Which of the following factors hinder you from attending Grambling State University events?

a. Costs

- Strongly agree
- Agree

- Undecided
- Disagree
- Strongly disagree

b. Distance

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

c. Experiences at Grambling State University

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

d. Time

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

e. Events are not appealing

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

f. Do not hear about them

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

21. Have you received any publication(s) from the Office of Alumni Affairs?

- Yes
- No

b. If yes, did it arrive in a timely fashion?

- Yes
- No

22. The University Alumni Magazine is designed and published to keep our alumni informed about the university.

In your opinion is the magazine reaching its goal?

- Yes
- No

b. If not please, explain why you feel it is not reaching its goal and purpose:

23. Overall, how satisfied are you with the information presented in Visions Magazine?

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

24. How likely would you be to subscribe to the magazine or recommend the publication to an alumnus or associate?

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

25. When you receive Visions Magazine, how much of it do you usually read?

- Cover-to-cover
- Most of it
- About half of it
- Only a little of it
- None of it

26. When you receive Visions Magazine, do you usually:

- Read it as soon as it arrives
- Set it aside to read later
- Read some sections right away, others later
- Read none of it

27. Typically, how long do you keep an issue of Visions Magazine?

- A day
- A week
- A month
- More than a month
- Forever

28. In viewing/reading materials produced by the Office of Alumni Affairs, were they:

a. Helpful

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

b. Informative

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

c. Appealing

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

d. Relevant

- Strongly agree
- Agree
- Undecided

- Disagree
- Strongly disagree

e. Please offer additional comments:

29. Please give your general opinion of the Office of Alumni Affairs on several attributes. Please rate the job you believe the office is doing in the areas set forth below.

a. The Office of Alumni Affairs provides quality programs and services.

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

b. The Office of Alumni Affairs provides invaluable information that keeps you informed about the University and its alumni.

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

c. The Office of Alumni Affairs is an office that understands the needs of the alumni.

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

d. The Office of Alumni Affairs is an organization you can trust.

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

e. The Office of Alumni Affairs staff go out of their way to meet alumni needs.

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

f. Alumni staff treat you as if they care about you as an alumnus.

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

30. Is the Office of Alumni Affairs web page adequately designed to meet alumni needs?

- Yes
- No

31. How many times have you visited the Grambling State University website in the past year?

- Haven't at all
- 1 - 5 times
- 6 - 10 times
- More than 10 times

Fund-raising Programs

1. At what level of support did you contribute to Grambling State University in 2004?

- Less than \$100
- \$100 - \$499
- \$500 - \$999
- \$1,000 - \$4,999
- \$5,000 plus
- Did not contribute

2. Which of the following best describes your reasons for giving:

a. I appreciate the education I received at Grambling State University.

- Strongly agree
- Agree

- Undecided
- Disagree
- Strongly disagree

b. The financial needs of Grambling State University are compelling.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

c. I want to ensure a quality education for future students.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

d. I responded to a solicitation letter and/or phonathon call.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

e. I responded to a volunteer solicitation request.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

3. Listed below are some specific needs at Grambling State University to which donations could be directed. Please indicate those to which you are most likely to support.

a. Unrestricted Annual fund

- Very likely
- Likely
- Neutral
- Unlikely

Very unlikely

b. General endowment

Very likely

Likely

Neutral

Unlikely

Very unlikely

c. Academic programs

Very likely

Likely

Neutral

Unlikely

Very unlikely

d. Athletic support groups

Very likely

Likely

Neutral

Unlikely

Very unlikely

e. Financial aid

Very likely

Likely

Neutral

Unlikely

Very unlikely

f. Student residence construction/improvement

Very likely

Likely

Neutral

Unlikely

Very unlikely

g. Off-campus study group support

Very likely

Likely

- Neutral
- Unlikely
- Very unlikely

h. Library book/periodic support

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

i. Athletic facility construction/renovation

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

j. Technology

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

k. Facility support

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

4. How important are the "perks" (i.e. dinners, special listings, invitations, etc.) to you in determining the amount of your support?

- Very important
- Somewhat important
- Undecided
- Somewhat unimportant
- Very unimportant

5. Please provide any additional comments:

Continue

Please contact cross@case.org if you have any questions regarding this survey.

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Grambling State University Alumni Survey

Alumni Questions

1. I am aware of alumni chapter activities I my area.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

2. I try to attend alumni chapter meetings.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

3. Regarding the alumni chapter activities in my area, I am satisfied with:

a. Quality

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

b. Variety

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

c. Frequency

- Strongly disagree
- Disagree

- Undecided
- Agree
- Strongly agree

4. I would like to see my chapter offer the following program choices:

a. Featured campus speakers

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

b. Social events for club members

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

c. Local cultural events

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

d. Local sporting events

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

e. Grambling State University sporting events

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

f. Admissions receptions

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

g. Send-off events for new students

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

5. Have you ever attended a reunion of your class at Grambling State University?

- Yes
- No

b. If yes, what was the most recent year?

6. Are you aware of reunion activities for your class?

- Yes
- No

7. How satisfied are you with the following aspects of reunion:

a. Class programs

- Very dissatisfied
- Somewhat dissatisfied
- Neutral
- Somewhat satisfied
- Very satisfied

b. General education programs

- Very dissatisfied
- Somewhat dissatisfied
- Neutral
- Somewhat satisfied

Very satisfied

c. Meals

Very dissatisfied

Somewhat dissatisfied

Neutral

Somewhat satisfied

Very satisfied

d. Housing

Very dissatisfied

Somewhat dissatisfied

Neutral

Somewhat satisfied

Very satisfied

e. Length of reunion

Very dissatisfied

Somewhat dissatisfied

Neutral

Somewhat satisfied

Very satisfied

f. Pre-reunion information

Very dissatisfied

Somewhat dissatisfied

Neutral

Somewhat satisfied

Very satisfied

g. Staff assistance and support

Very dissatisfied

Somewhat dissatisfied

Neutral

Somewhat satisfied

Very satisfied

8. Have you ever attended a homecoming at Grambling State University?

Yes

No

b. If yes, what was the most recent year?

9. What homecoming opportunities would you like to see offered?

a. Educational programs featuring professors

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

b. Campus tours

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

c. Panel discussions involving students, faculty, and administrators

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

d. Social gatherings, including tailgates

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

e. All-campus dinner

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

f. Concerts, plays, musical affairs

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

10. Has your child ever applied to Grambling State University?

- Yes
- No

11. I am satisfied with Grambling State University's handling of legacy admissions.

- Very dissatisfied
- Somewhat dissatisfied
- Neutral
- Somewhat satisfied
- Very satisfied

12. How satisfied are you with the following characteristics of Grambling State University's merchandising program:

a. Costs

- Very dissatisfied
- Somewhat dissatisfied
- Neutral
- Somewhat satisfied
- Very satisfied

b. Variety of merchandise

- Very dissatisfied
- Somewhat dissatisfied
- Neutral
- Somewhat satisfied
- Very satisfied

c. Availability

- Very dissatisfied
- Somewhat dissatisfied
- Neutral
- Somewhat satisfied

Very satisfied

13. Have you had an opportunity to discuss a program activity/idea with staff members from the Office of Alumni Affairs?

Yes

No

b. If yes, was the staff person helpful, polite, and courteous?

Yes

No

14. Please rate the importance of each of the following. Rank the most important item "1".

a. Alumni chapter activities

11

10

9

8

7

6

5

4

3

2

1

b. Reunions

11

10

9

8

7

6

5

4

3

2

1

c. Homecomings

- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

d. Alumni admissions activity

- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

e. Continuing education program

- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

f. Undergraduate training and relations

- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

g. Class efforts

- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

h. Travel programs

- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

i. Merchandising

- 11
- 10
- 9
- 8
- 7
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- 5
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- 2
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- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

k. Athletic promotions

- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

15. How many different alumni events would you be willing to attend in one year?

- 7 or more
- 5 - 6
- 3 - 4
- 1 - 2
- None

16. What is the best time for you to attend Grambling State University alumni events?

- Weekend evenings
- Weekend days
- Evenings
- Weekdays

17. How do you prefer being invited to events?

- I do not wish to be invited to events
- E-mail
- Notice in Visions Magazine
- Telephone
- Mail

18. The most important reason to attend alumni events is:

- Learning experience
- Giving back to Grambling State University
- The pleasure attained from the event/program itself
- To see alumni

19. How important is it for you to stay connected with former classmates?

- Very unimportant
- Somewhat unimportant
- Undecided
- Somewhat important
- Very important

20. Which of the following factors hinder you from attending Grambling State University events?

a. Costs

- Strongly disagree
- Disagree

- Undecided
- Agree
- Strongly agree

b. Distance

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

c. Experiences at Grambling State University

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

d. Time

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

e. Events are not appealing

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

f. Do not hear about them

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

21. Have you received any publication(s) from the Office of Alumni Affairs?

- Yes
- No

b. If yes, did it arrive in a timely fashion?

- Yes
- No

22. The University Alumni Magazine is designed and published to keep our alumni informed about the university.

In your opinion is the magazine reaching its goal?

- Yes
- No

b. If not please, explain why you feel it is not reaching its goal and purpose:

23. Overall, how satisfied are you with the information presented in Visions Magazine?

- Very dissatisfied
- Somewhat dissatisfied
- Neutral
- Somewhat satisfied
- Very satisfied

24. How likely would you be to subscribe to the magazine or recommend the publication to an alumnus or associate?

- Not likely at all
- Somewhat unlikely
- Neutral
- Somewhat likely
- Extremely likely

25. When you receive Visions Magazine, how much of it do you usually read?

- None of it
- Only a little of it
- About half of it
- Most of it
- Cover-to-cover

26. When you receive Visions Magazine, do you usually:

- Read none of it
- Read some sections right away, others later
- Set it aside to read later
- Read it as soon as it arrives

27. Typically, how long do you keep an issue of Visions Magazine?

- Forever
- More than a month
- A month
- A week
- A day

28. In viewing/reading materials produced by the Office of Alumni Affairs, were they:

a. Helpful

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

b. Informative

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

c. Appealing

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

d. Relevant

- Strongly disagree
- Disagree
- Undecided

- Agree
- Strongly agree

e. Please offer additional comments:

29. Please give your general opinion of the Office of Alumni Affairs on several attributes. Please rate the job you believe the office is doing in the areas set forth below.

a. The Office of Alumni Affairs provides quality programs and services.

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c. The Office of Alumni Affairs is an office that understands the needs of the alumni.

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- Somewhat satisfied
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d. The Office of Alumni Affairs is an organization you can trust.

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- Somewhat satisfied
- Very satisfied

e. The Office of Alumni Affairs staff go out of their way to meet alumni needs.

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- Very satisfied

f. Alumni staff treat you as if they care about you as an alumnus.

- Very dissatisfied
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- Neutral
- Somewhat satisfied
- Very satisfied

30. Is the Office of Alumni Affairs web page adequately designed to meet alumni needs?

- Yes
- No

31. How many times have you visited the Grambling State University website in the past year?

- More than 10 times
- 6 - 10 times
- 1 - 5 times
- Haven't at all

Fund-raising Programs

1. At what level of support did you contribute to Grambling State University in 2004?

- Did not contribute
- \$5,000 plus
- \$1,000 - \$4,999
- \$500 - \$999
- \$100 - \$499
- Less than \$100

2. Which of the following best describes your reasons for giving:

a. I appreciate the education I received at Grambling State University.

- Strongly disagree
- Disagree

- Undecided
- Agree
- Strongly agree

b. The financial needs of Grambling State University are compelling.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

c. I want to ensure a quality education for future students.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

d. I responded to a solicitation letter and/or phonathon call.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

e. I responded to a volunteer solicitation request.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree

3. Listed below are some specific needs at Grambling State University to which donations could be directed. Please indicate those to which you are most likely to support.

a. Unrestricted Annual fund

- Very unlikely
- Unlikely
- Neutral
- Likely

Very likely

b. General endowment

Very unlikely

Unlikely

Neutral

Likely

Very likely

c. Academic programs

Very unlikely

Unlikely

Neutral

Likely

Very likely

d. Athletic support groups

Very unlikely

Unlikely

Neutral

Likely

Very likely

e. Financial aid

Very unlikely

Unlikely

Neutral

Likely

Very likely

f. Student residence construction/improvement

Very unlikely

Unlikely

Neutral

Likely

Very likely

g. Off-campus study group support

Very unlikely

Unlikely

- Neutral
- Likely
- Very likely

h. Library book/periodic support

- Very unlikely
- Unlikely
- Neutral
- Likely
- Very likely

i. Athletic facility construction/renovation

- Very unlikely
- Unlikely
- Neutral
- Likely
- Very likely

j. Technology

- Very unlikely
- Unlikely
- Neutral
- Likely
- Very likely

k. Facility support

- Very unlikely
- Unlikely
- Neutral
- Likely
- Very likely

4. How important are the "perks" (i.e. dinners, special listings, invitations, etc.) to you in determining the amount of your support?

- Very unimportant
- Somewhat unimportant
- Undecided
- Somewhat important
- Very important

5. Please provide any additional comments:

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Gramling State University Alumni Survey

Alumni Questions

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- Strongly agree Agree Undecided Disagree Strongly disagree

2. I try to attend alumni chapter meetings.

- Strongly agree Agree Undecided Disagree Strongly disagree

3. Regarding the alumni chapter activities in my area, I am satisfied with:

a. Quality

- Strongly agree Agree Undecided Disagree Strongly disagree

b. Variety

- Strongly agree Agree Undecided Disagree Strongly disagree

c. Frequency

- Strongly agree Agree Undecided Disagree Strongly disagree

4. I would like to see my chapter offer the following program choices:

a. Featured campus speakers

- Strongly agree Agree Undecided Disagree Strongly disagree

b. Social events for club members

- Strongly agree Agree Undecided Disagree Strongly disagree

c. Local cultural events

- Strongly agree Agree Undecided Disagree Strongly disagree

d. Local sporting events

- Strongly agree Agree Undecided Disagree Strongly

disagree

e. Grambling State University sporting events

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

f. Admissions receptions

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

g. Send-off events for new students

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

5. Have you ever attended a reunion of your class at Grambling State University?

- Yes
 No

b. If yes, what was the most recent year?

6. Are you aware of reunion activities for your class?

- Yes
 No

7. How satisfied are you with the following aspects of reunion:

a. Class programs

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

b. General education programs

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

c. Meals

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

d. Housing

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

e. Length of reunion

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

f. Pre-reunion information

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

g. Staff assistance and support

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

8. Have you ever attended a homecoming at Grambling State University?

- Yes
 No

b. If yes, what was the most recent year?

9. What homecoming opportunities would you like to see offered?

a. Educational programs featuring professors

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

b. Campus tours

- Strongly agree
 Agree
 Undecided
 Disagree
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c. Panel discussions involving students, faculty, and administrators

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

d. Social gatherings, including tailgates

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

e. All-campus dinner

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

f. Concerts, plays, musical affairs

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

10. Has your child ever applied to Grambling State University?

- Yes
 No

11. I am satisfied with Grambling State University's handling of legacy admissions.

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Dissatisfied

12. How satisfied are you with the following characteristics of Grambling State University's merchandising program:

a. Costs

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

b. Variety of merchandise

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

c. Availability

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

13. Have you had an opportunity to discuss a program activity/idea with staff members from the Office of Alumni Affairs?

- Yes
 No

b. If yes, was the staff person helpful, polite, and courteous?

- Yes
 No

14. Please rate the importance of each of the following. Rank the most important item "1".

a. Alumni chapter activities

- 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11

b. Reunions

- 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11

c. Homecomings

- 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11

d. Alumni admissions activity

- 1
 2
 3
 4
 5
 6
 7
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 9
 10
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e. Continuing education program

- 1
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 10
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f. Undergraduate training and relations

- 1 2 3 4 5 6 7 8 9 10 11

g. Class efforts

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h. Travel programs

- 1 2 3 4 5 6 7 8 9 10 11

i. Merchandising

- 1 2 3 4 5 6 7 8 9 10 11

j. Alumni directory

- 1 2 3 4 5 6 7 8 9 10 11

k. Athletic promotions

- 1 2 3 4 5 6 7 8 9 10 11

15. How many different alumni events would you be willing to attend in one year?

- None 1-2 3-4 5-6 7 or more

16. What is the best time for you to attend Grambling State University alumni events?

- Weekdays Evenings Weekend days Weekend evenings

17. How do you prefer being invited to events?

- Mail Telephone Notice in Visions Magazine E-mail I do not wish to be invited to events

18. The most important reason to attend alumni events is:

- To see alumni The pleasure attained from the event/program itself Giving back to Grambling State University Learning experience

19. How important is it for you to stay connected with former classmates?

- Very important Somewhat important Undecided Somewhat unimportant Very unimportant

20. Which of the following factors hinder you from attending Grambling State University events?

a. Costs

- Strongly agree Agree Undecided Disagree Strongly disagree

b. Distance

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

c. Experiences at Grambling State University

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

d. Time

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

e. Events are not appealing

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

f. Do not hear about them

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

21. Have you received any publication(s) from the Office of Alumni Affairs?

- Yes
 No

b. If yes, did it arrive in a timely fashion?

- Yes
 No

22. The University Alumni Magazine is designed and published to keep our alumni informed about the university.

In your opinion is the magazine reaching its goal?

- Yes
 No

b. If not please, explain why you feel it is not reaching its goal and purpose:

23. Overall, how satisfied are you with the information presented in Visions Magazine?

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

24. How likely would you be to subscribe to the magazine or recommend the publication to an alumnus or

associate?

- Very likely Likely Neutral Unlikely Very unlikely

25. When you receive Visions Magazine, how much of it do you usually read?

- Cover-to-cover Most of it About half of it Only a little of it None of it

26. When you receive Visions Magazine, do you usually:

- Read it as soon as it arrives Set it aside to read later Read some sections right away, others later Read none of it

27. Typically, how long do you keep an issue of Visions Magazine?

- A day A week A month More than a month... Forever

28. In viewing/reading materials produced by the Office of Alumni Affairs, were they:

a. Helpful

- Strongly agree Agree Undecided Disagree Strongly disagree

b. Informative

- Strongly agree Agree Undecided Disagree Strongly disagree

c. Appealing

- Strongly agree Agree Undecided Disagree Strongly disagree

d. Relevant

- Strongly agree Agree Undecided Disagree Strongly disagree

e. Please offer additional comments:

29. Please give your general opinion of the Office of Alumni Affairs on several attributes. Please rate the job you believe the office is doing in the areas set forth below.

a. The Office of Alumni Affairs provides quality programs and services.

- Very satisfied Somewhat satisfied Neutral Somewhat dissatisfied Very dissatisfied

b. The Office of Alumni Affairs provides invaluable information that keeps you informed about the University and its alumni.

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

c. The Office of Alumni Affairs is an office that understands the needs of the alumni.

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

d. The Office of Alumni Affairs is an organization you can trust.

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

e. The Office of Alumni Affairs staff go out of their way to meet alumni needs.

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

f. Alumni staff treat you as if they care about you as an alumnus.

- Very satisfied
 Somewhat satisfied
 Neutral
 Somewhat dissatisfied
 Very dissatisfied

30. Is the Office of Alumni Affairs web page adequately designed to meet alumni needs?

- Yes
 No

31. How many times have you visited the Grambling State University website in the past year?

- Haven't at all
 1 - 5 times
 6 - 10 times
 More than 10 times

Fund-raising Programs

1. At what level of support did you contribute to Grambling State University in 2004?

- Less than \$100
 \$100 - \$499
 \$500 - \$999
 \$1,000 - \$4,999
 \$5,000 plus
 Did not contribute

2. Which of the following best describes your reasons for giving:

a. I appreciate the education I received at Grambling State University.

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

b. The financial needs of Grambling State University are compelling.

- Strongly agree
 Agree
 Undecided
 Disagree
 Strongly disagree

c. I want to ensure a quality education for future students.

- Strongly agree Agree Undecided Disagree Strongly disagree

d. I responded to a solicitation letter and/or phonathon call.

- Strongly agree Agree Undecided Disagree Strongly disagree

e. I responded to a volunteer solicitation request.

- Strongly agree Agree Undecided Disagree Strongly disagree

3. Listed below are some specific needs at Grambling State University to which donations could be directed. Please indicate those to which you are most likely to support.

a. Unrestricted Annual fund

- Very likely Likely Neutral Unlikely Very unlikely

b. General endowment

- Very likely Likely Neutral Unlikely Very unlikely

c. Academic programs

- Very likely Likely Neutral Unlikely Very unlikely

d. Athletic support groups

- Very likely Likely Neutral Unlikely Very unlikely

e. Financial aid

- Very likely Likely Neutral Unlikely Very unlikely

f. Student residence construction/improvement

- Very likely Likely Neutral Unlikely Very unlikely

g. Off-campus study group support

- Very likely Likely Neutral Unlikely Very unlikely

h. Library book/periodic support

- Very likely Likely Neutral Unlikely Very unlikely

i. Athletic facility construction/renovation

- Very likely Likely Neutral Unlikely Very unlikely

j. Technology

- Very likely Likely Neutral Unlikely Very unlikely

k. Facility support

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

4. How important are the "perks" (i.e. dinners, special listings, invitations, etc.) to you in determining the amount of your support?

- Very important
- Somewhat important
- Undecided
- Somewhat unimportant
- Very unimportant

5. Please provide any additional comments:

Continue

Please contact cross@case.org if you have any questions regarding this survey.

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Grambling State University Alumni Survey

Alumni Questions

1. I am aware of alumni chapter activities I my area.

- Strongly disagree Disagree Undecided Agree Strongly agree

2. I try to attend alumni chapter meetings.

- Strongly disagree Disagree Undecided Agree Strongly agree

3. Regarding the alumni chapter activities in my area, I am satisfied with:

a. Quality

- Strongly disagree Disagree Undecided Agree Strongly agree

b. Variety

- Strongly disagree Disagree Undecided Agree Strongly agree

c. Frequency

- Strongly disagree Disagree Undecided Agree Strongly agree

4. I would like to see my chapter offer the following program choices:

a. Featured campus speakers

- Strongly disagree Disagree Undecided Agree Strongly agree

b. Social events for club members

- Strongly disagree Disagree Undecided Agree Strongly agree

c. Local cultural events

- Strongly disagree Disagree Undecided Agree Strongly agree

d. Local sporting events

- Strongly disagree Disagree Undecided Agree Strongly agree

disagree

e. Grambling State University sporting events

- Strongly disagree Disagree Undecided Agree Strongly agree

f. Admissions receptions

- Strongly disagree Disagree Undecided Agree Strongly agree

g. Send-off events for new students

- Strongly disagree Disagree Undecided Agree Strongly agree

5. Have you ever attended a reunion of your class at Grambling State University?

- Yes
 No

b. If yes, what was the most recent year?

6. Are you aware of reunion activities for your class?

- Yes
 No

7. How satisfied are you with the following aspects of reunion:

a. Class programs

- Very dissatisfied Somewhat dissatisfied Neutral Somewhat satisfied Very satisfied

b. General education programs

- Very dissatisfied Somewhat dissatisfied Neutral Somewhat satisfied Very satisfied

c. Meals

- Very dissatisfied Somewhat dissatisfied Neutral Somewhat satisfied Very satisfied

d. Housing

- Very dissatisfied Somewhat dissatisfied Neutral Somewhat satisfied Very satisfied

e. Length of reunion

- Very dissatisfied Somewhat dissatisfied Neutral Somewhat satisfied Very satisfied

f. Pre-reunion information

- Very dissatisfied
 Somewhat dissatisfied
 Neutral
 Somewhat satisfied
 Very satisfied

g. Staff assistance and support

- Very dissatisfied
 Somewhat dissatisfied
 Neutral
 Somewhat satisfied
 Very satisfied

8. Have you ever attended a homecoming at Grambling State University?

- Yes
 No

b. If yes, what was the most recent year?

9. What homecoming opportunities would you like to see offered?

a. Educational programs featuring professors

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

b. Campus tours

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

c. Panel discussions involving students, faculty, and administrators

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

d. Social gatherings, including tailgates

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

e. All-campus dinner

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

f. Concerts, plays, musical affairs

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

10. Has your child ever applied to Grambling State University?

- Yes
 No

11. I am satisfied with Grambling State University's handling of legacy admissions.

- Very dissatisfied
 Somewhat dissatisfied
 Neutral
 Somewhat satisfied
 Very satisfied

12. How satisfied are you with the following characteristics of Grambling State University's merchandising program:

a. Costs

- Very dissatisfied
 Somewhat dissatisfied
 Neutral
 Somewhat satisfied
 Very satisfied

b. Variety of merchandise

- Very dissatisfied
 Somewhat dissatisfied
 Neutral
 Somewhat satisfied
 Very satisfied

c. Availability

- Very dissatisfied
 Somewhat dissatisfied
 Neutral
 Somewhat satisfied
 Very satisfied

13. Have you had an opportunity to discuss a program activity/idea with staff members from the Office of Alumni Affairs?

- Yes
 No

b. If yes, was the staff person helpful, polite, and courteous?

- Yes
 No

14. Please rate the importance of each of the following. Rank the most important item "1".

a. Alumni chapter activities

- 11
 10
 9
 8
 7
 6
 5
 4
 3
 2
 1

b. Reunions

- 11
 10
 9
 8
 7
 6
 5
 4
 3
 2
 1

c. Homecomings

- 11
 10
 9
 8
 7
 6
 5
 4
 3
 2
 1

d. Alumni admissions activity

- 11
 10
 9
 8
 7
 6
 5
 4
 3
 2
 1

e. Continuing education program

- 11
 10
 9
 8
 7
 6
 5
 4
 3
 2
 1

f. Undergraduate training and relations

- 11 10 9 8 7 6 5 4 3 2 1

g. Class efforts

- 11 10 9 8 7 6 5 4 3 2 1

h. Travel programs

- 11 10 9 8 7 6 5 4 3 2 1

i. Merchandising

- 11 10 9 8 7 6 5 4 3 2 1

j. Alumni directory

- 11 10 9 8 7 6 5 4 3 2 1

k. Athletic promotions

- 11 10 9 8 7 6 5 4 3 2 1

15. How many different alumni events would you be willing to attend in one year?

- 7 or more 5-6 3-4 1-2 None

16. What is the best time for you to attend Grambling State University alumni events?

- Weekend evenings Weekend days Evenings Weekdays

17. How do you prefer being invited to events?

- I do not wish to be invited to events E-mail Notice in Visions Magazine Telephone Mail

18. The most important reason to attend alumni events is:

- Learning experience Giving back to Grambling State University The pleasure attained from the event/program itself To see alumni

19. How important is it for you to stay connected with former classmates?

- Very unimportant Somewhat unimportant Undecided Somewhat important Very important

20. Which of the following factors hinder you from attending Grambling State University events?

a. Costs

- Strongly disagree Disagree Undecided Agree Strongly agree

b. Distance

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

c. Experiences at Grambling State University

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

d. Time

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

e. Events are not appealing

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

f. Do not hear about them

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

21. Have you received any publication(s) from the Office of Alumni Affairs?

- Yes
 No

b. If yes, did it arrive in a timely fashion?

- Yes
 No

22. The University Alumni Magazine is designed and published to keep our alumni informed about the university.

In your opinion is the magazine reaching its goal?

- Yes
 No

b.If not please, explain why you feel it is not reaching its goal and purpose:

23. Overall, how satisfied are you with the information presented in Visions Magazine?

- Very dissatisfied
 Somewhat dissatisfied
 Neutral
 Somewhat satisfied
 Very satisfied

24. How likely would you be to subscribe to the magazine or recommend the publication to an alumnus or

associate?

- Not likely at all
 Somewhat unlikely
 Neutral
 Somewhat likely
 Extremely likely

25. When you receive Visions Magazine, how much of it do you usually read?

- None of it
 Only a little of it
 About half of it
 Most of it
 Cover-to-cover

26. When you receive Visions Magazine, do you usually:

- Read none of it
 Read some sections right away, others later
 Set it aside to read later
 Read it as soon as it arrives

27. Typically, how long do you keep an issue of Visions Magazine?

- Forever
 More than a month
 A month
 A week
 A day

28. In viewing/reading materials produced by the Office of Alumni Affairs, were they:

a. Helpful

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

b. Informative

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

c. Appealing

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

d. Relevant

- Strongly disagree
 Disagree
 Undecided
 Agree
 Strongly agree

e. Please offer additional comments:

29. Please give your general opinion of the Office of Alumni Affairs on several attributes. Please rate the job you believe the office is doing in the areas set forth below.

a. The Office of Alumni Affairs provides quality programs and services.

- Very dissatisfied
 Somewhat dissatisfied
 Neutral
 Somewhat satisfied
 Very satisfied

b. The Office of Alumni Affairs provides invaluable information that keeps you informed about the University and its alumni.

- Very dissatisfied Somewhat dissatisfied Neutral Somewhat satisfied Very satisfied

c. The Office of Alumni Affairs is an office that understands the needs of the alumni.

- Very dissatisfied Somewhat dissatisfied Neutral Somewhat satisfied Very satisfied

d. The Office of Alumni Affairs is an organization you can trust.

- Very dissatisfied Somewhat dissatisfied Neutral Somewhat satisfied Very satisfied

e. The Office of Alumni Affairs staff go out of their way to meet alumni needs.

- Very dissatisfied Somewhat dissatisfied Neutral Somewhat satisfied Very satisfied

f. Alumni staff treat you as if they care about you as an alumnus.

- Very dissatisfied Somewhat dissatisfied Neutral Somewhat satisfied Very satisfied

30. Is the Office of Alumni Affairs web page adequately designed to meet alumni needs?

- Yes
 No

31. How many times have you visited the Grambling State University website in the past year?

- More than 10 times 6 - 10 times 1 - 5 times Haven't at all

Fund-raising Programs

1. At what level of support did you contribute to Grambling State University in 2004?

- Did not contribute \$5,000 plus \$1,000 - \$4,999 \$500 - \$999 \$100 - \$499 Less than \$100

2. Which of the following best describes your reasons for giving:

a. I appreciate the education I received at Grambling State University.

- Strongly disagree Disagree Undecided Agree Strongly agree

b. The financial needs of Grambling State University are compelling.

- Strongly disagree Disagree Undecided Agree Strongly agree

c. I want to ensure a quality education for future students.

- Strongly disagree Disagree Undecided Agree Strongly agree

d. I responded to a solicitation letter and/or phonathon call.

- Strongly disagree Disagree Undecided Agree Strongly agree

e. I responded to a volunteer solicitation request.

- Strongly disagree Disagree Undecided Agree Strongly agree

3. Listed below are some specific needs at Grambling State University to which donations could be directed. Please indicate those to which you are most likely to support.

a. Unrestricted Annual fund

- Very unlikely Unlikely Neutral Likely Very likely

b. General endowment

- Very unlikely Unlikely Neutral Likely Very likely

c. Academic programs

- Very unlikely Unlikely Neutral Likely Very likely

d. Athletic support groups

- Very unlikely Unlikely Neutral Likely Very likely

e. Financial aid

- Very unlikely Unlikely Neutral Likely Very likely

f. Student residence construction/improvement

- Very unlikely Unlikely Neutral Likely Very likely

g. Off-campus study group support

- Very unlikely Unlikely Neutral Likely Very likely

h. Library book/periodic support

- Very unlikely Unlikely Neutral Likely Very likely

i. Athletic facility construction/renovation

- Very unlikely Unlikely Neutral Likely Very likely

j. Technology

- Very unlikely Unlikely Neutral Likely Very likely

k. Facility support

- Very unlikely Unlikely Neutral Likely Very likely

4. How important are the "perks" (i.e. dinners, special listings, invitations, etc.) to you in determining the amount of your support?

- Very unimportant Somewhat unimportant Undecided Somewhat important Very important

5. Please provide any additional comments:

5. What was/is your major?

- Business
 Computer Science and Technology
 Criminal Justice
 Education
 Nursing
 Social Work
 Other

Continue

Please contact cross@case.org if you have any questions regarding this survey.

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Grambling State University Alumni Survey

Alumni Questions

1. I am aware of alumni chapter activities I my area.

2. I try to attend alumni chapter meetings.

3. Regarding the alumni chapter activities in my area, I am satisfied with:

a. Quality

b. Variety

c. Frequency

4. I would like to see my chapter offer the following program choices.

a. Featured campus speakers

b. Social events for club members

c. Local cultural events

d. Local sporting events

e. Grambling State University events

f. Admissions receptions

-- Select --

g. Send off events for new students

-- Select --

5. Have you ever attended a reunion of your class at Grambling State University?

- Yes
- No

b. If yes, what was the most recent year?

6. Are you aware of reunion activities for your class?

- Yes
- No

7. How satisfied are you with the following aspects of reunion:

a. Class programs

-- Select --

b. General education programs

-- Select --

c. Meals

-- Select --

d. Housing

-- Select --

e. Length of reunion

-- Select --

f. Pre-reunion information

-- Select --

g. Staff assistance and support

-- Select --

8. Have you ever attended a homecoming at Grambling State University?

- Yes

No

b. If yes, what was the most recent year?

9. What homecoming opportunities would you like to see offered?

a. Educational programs featuring professors

b. Campus tours

c. Panel discussions involving students, faculty, and administrators

d. Social gatherings, including tailgates

e. All-campus dinner

f. Concerts, plays, musical affairs

10. Has your child ever applied to Grambling State University?

Yes

No

11. How satisfied are you with Grambling State University's handling of legacy admissions.

12. How satisfied are you with the following characteristics of Grambling State University's merchandising program:

a. Costs

b. Variety of merchandise

c. Availability

-- Select --

13. Have you had an opportunity to discuss a program activity/idea with staff members from the Office of Alumni Affairs?

- Yes
 No

b. If yes, was the staff person helpful, polite, and courteous?

- Yes
 No

14. Please rate the importance of each of the following. Rank the most important item "1" and "11" as the least important.

a. Alumni chapter activities

-- Select --

b. Reunions

-- Select --

c. Homecomings

-- Select --

d. Alumni admissions activity

-- Select --

e. Continuing education program

-- Select --

f. Undergraduate training and relations

-- Select --

g. Class efforts

-- Select --

h. Travel programs

-- Select --

i. Merchandising

-- Select --

j. Alumni directory

-- Select --

k. Athletic promotions

15. How many different alumni events would you be willing to attend in one year?

16. What is the best time for you to attend Grambling State University alumni events?

17. How do you prefer being invited to events?

18. The most important reason to attend alumni events is:

19. How important is it for you to stay connected with former classmates?

20. Which of the following factors hinder you from attending Grambling State University events?

a. Costs

b. Distance

c. Experiences at Grambling State University

d. Time

e. Events are not appealing

f. Do not hear about them

21. Have you received any publication(s) from the Office of Alumni Affairs?

Yes

No

b. If yes, did it arrive in a timely fashion?

Yes

No

22. The University Alumni Magazine is designed and published to keep our alumni informed about the university.

In your opinion is the magazine reaching its goal?

Yes

No

b. If not please, explain why you feel it is not reaching its goal and purpose:

23. Overall, how satisfied are you with the information presented in Visions Magazine?

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Please offer additional comments:

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30. Is the Office of Alumni Affairs web page adequately designed to meet alumni needs?

Yes

No

31. How many times have you visited the Grambling State University website in the past year?

Fund-raising Programs

1. At what level of support did you contribute to Grambling State University in 2004?

-- Select --

2. Which of the following best describes your reasons for giving:

a. I appreciate the education I received at Grambling State University.

-- Select --

b. The financial needs of Grambling State University are compelling.

-- Select --

c. I want to ensure a quality education for future students.

-- Select --

d. I responded to a solicitation letter and/or phonathon call.

-- Select --

e. I responded to a volunteer solicitation request.

-- Select --

3. Listed below are some specific needs at Grambling State University to which donations could be directed. Please indicate those to which you are most likely to support.

a. Unrestricted Annual fund

-- Select --

b. General endowment

-- Select --

c. Academic programs

-- Select --

d. Athletic support groups

-- Select --

e. Financial aid

-- Select --

f. Student residence construction/improvement

-- Select --

g. Off-campus study group support

h. Library book/periodic support

i. Athletic facility construction/renovation

j. Technology

k. Facility support

4. How important are the "perks" (i.e. dinners, special listings, invitations, etc.) to you in determining the amount of your support?

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Continue

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c. Local cultural events

d. Local sporting events

e. Grambling State University sporting events

f. Admissions receptions

-- Select --

g. Send-off events for new students

-- Select --

5. Have you ever attended a reunion of your class at Grambling State University?

- Yes
 No

b. If yes, what was the most recent year?

6. Are you aware of reunion activities for your class?

- Yes
 No

7. How satisfied are you with the following aspects of reunion:

a. Class programs

-- Select --

b. General education programs

-- Select --

c. Meals

-- Select --

d. Housing

-- Select --

e. Length of reunion

-- Select --

f. Pre-reunion information

-- Select --

g. Staff assistance and support

-- Select --

8. Have you ever attended a homecoming at Grambling State University?

- Yes

No

b. If yes, what was the most recent year?

9. What homecoming opportunities would you like to see offered?

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c. Panel discussions involving students, faculty, and administrators

d. Social gatherings, including tailgates

e. All-campus dinner

f. Concerts, plays, musical affairs

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No

11. I am satisfied with Grambling State University's handling of legacy admissions.

12. How satisfied are you with the following characteristics of Grambling State University's merchandising program:

a. Costs

b. Variety of merchandise

c. Availability

-- Select --

13. Have you had an opportunity to discuss a program activity/idea with staff members from the Office of Alumni Affairs?

- Yes
 No

b. If yes, was the staff person helpful, polite, and courteous?

- Yes
 No

14. Please rate the importance of each of the following. Rank the most important item "1".

a. Alumni chapter activities

-- Select --

b. Reunions

-- Select --

c. Homecomings

-- Select --

d. Alumni admissions activity

-- Select --

e. Continuing education program

-- Select --

f. Undergraduate training and relations

-- Select --

g. Class efforts

-- Select --

h. Travel programs

-- Select --

i. Merchandising

-- Select --

j. Alumni directory

-- Select --

k. Athletic promotions

-- Select --

15. How many different alumni events would you be willing to attend in one year?

-- Select --

16. What is the best time for you to attend Grambling State University alumni events?

-- Select --

17. How do you prefer being invited to events?

-- Select --

18. The most important reason to attend alumni events is:

-- Select --

19. How important is it for you to stay connected with former classmates?

-- Select --

20. Which of the following factors hinder you from attending Grambling State University events?

a. Costs

-- Select --

b. Distance

-- Select --

c. Experiences at Grambling State University

-- Select --

d. Time

-- Select --

e. Events are not appealing

-- Select --

f. Do not hear about them

-- Select --

21. Have you received any publication(s) from the Office of Alumni Affairs?

- Yes
- No

b. If yes, did it arrive in a timely fashion?

- Yes
- No

22. The University Alumni Magazine is designed and published to keep our alumni informed about the university.

In your opinion is the magazine reaching its goal?

- Yes
- No

b. If not please, explain why you feel it is not reaching its goal and purpose:

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-- Select --

24. How likely would you be to subscribe to the magazine or recommend the publication to an alumnus or associate?

-- Select --

25. When you receive Visions Magazine, how much of it do you usually read?

-- Select --

26. When you receive Visions Magazine, do you usually:

-- Select --

27. Typically, how long do you keep an issue of Visions Magazine?

-- Select --

28. In viewing/reading materials produced by the Office of Alumni Affairs, were they:

a. Helpful

-- Select --

b. Informative

-- Select --

c. Appealing

-- Select --

d. Relevant

-- Select --

e. Please offer additional comments:

[Empty text box for comments]

29. Please give your general opinion of the Office of Alumni Affairs on several attributes. Please rate the job you believe the office is doing in the areas set forth below.

a. The Office of Alumni Affairs provides quality programs and services.

-- Select --

b. The Office of Alumni Affairs provides invaluable information that keeps you informed about the University and its alumni.

-- Select --

c. The Office of Alumni Affairs is an office that understands the needs of the alumni.

-- Select --

d. The Office of Alumni Affairs is an organization you can trust.

-- Select --

e. The Office of Alumni Affairs staff go out of their way to meet alumni needs.

-- Select --

f. Alumni staff treat you as if they care about you as an alumnus.

-- Select --

30. Is the Office of Alumni Affairs web page adequately designed to meet alumni needs?

- Yes
- No

31. How many times have you visited the Grambling State University website in the past year?

-- Select --

[Empty rectangular box]

Fund-raising Programs

1. At what level of support did you contribute to Grambling State University in 2004?

-- Select --

2. Which of the following best describes your reasons for giving:

a. I appreciate the education I received at Grambling State University.

-- Select --

b. The financial needs of Grambling State University are compelling.

-- Select --

c. I want to ensure a quality education for future students.

-- Select --

d. I responded to a solicitation letter and/or phonathon call.

-- Select --

e. I responded to a volunteer solicitation request.

-- Select --

3. Listed below are some specific needs at Grambling State University to which donations could be directed. Please indicate those to which you are most likely to support.

a. Unrestricted Annual fund

-- Select --

b. General endowment

-- Select --

c. Academic programs

-- Select --

d. Athletic support groups

-- Select --

e. Financial aid

-- Select --

f. Student residence construction/improvement

-- Select --

g. Off-campus study group support

h. Library book/periodic support

i. Athletic facility construction/renovation

j. Technology

k. Facility support

4. How important are the "perks" (i.e. dinners, special listings, invitations, etc.) to you in determining the amount of your support?

5. Please provide any additional comments:

Continue

Please contact cross@case.org if you have any questions regarding this survey.

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Grambling State University Alumni Survey

Alumni Questions

1. I am aware of alumni chapter activities in my area.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

2. I try to attend alumni chapter meetings.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

3. Regarding the alumni chapter activities in my area, I am satisfied with: (Check all that apply)

- a. Quality
- b. Variety
- c. Frequency

4. I would like to see my chapter offer the following program choices: (Check all that apply)

- a. Featured campus speakers
- b. Social events for club members
- c. Local cultural events
- d. Local sporting events
- e. Grambling State University sporting events
- f. Admissions receptions
- g. Send-off events for new students
- h. Are there any other programs you would like to see offered by your chapter? Please list

below.

--

5. Have you ever attended a reunion of your class at Grambling State University?

- Yes
- No

b. If yes, what was the most recent year?

6. Are you aware of reunion activities for your class?

- Yes
- No

7. Which of the following aspects of reunion are you satisfied: (Check all that apply)

- a. Class programs
- b. General education programs
- c. Meals
- d. Housing
- e. Length of reunion
- f. Pre-reunion information
- g. Staff assistance and support

8. Have you ever attended a homecoming at Grambling State University?

- Yes
- No

b. If yes, what was the most recent year?

9. What homecoming opportunities would you like to see offered: (Check all that apply)

- a. Educational programs featuring professors
- b. Campus tours
- c. Panel discussions involving students, faculty, and administrators
- d. Social gatherings, including tailgates
- e. All-campus dinner
- f. Concerts, plays, musical affairs

10. Has your child ever applied to Grambling State University?

- Yes
- No

11. I am satisfied with Grambling State University's handling of legacy admissions.

- Very satisfied
- Somewhat satisfied
- Undecided
- Somewhat dissatisfied
- Dissatisfied

12. With which of the following characteristics of Grambling State University's merchandising program are you satisfied: (Check all that apply)

- a. Costs
- b. Variety of merchandise
- c. Availability

13. Have you had an opportunity to discuss a program activity/idea with staff members from the Office of Alumni Affairs?

- Yes
- No

b. If yes, was the staff person helpful, polite, and courteous?

- Yes
- No

14. Which of the following do you consider important? (Check all that apply)

- a. Alumni chapter activities
- b. Reunions
- c. Homecomings
- d. Alumni admissions activity
- e. Continuing education program
- f. Undergraduate training and relations
- g. Class efforts
- h. Travel programs
- i. Merchandising
- j. Alumni directory
- k. Athletic promotions

15. How many different alumni events would you be willing to attend in one year?

- None
- 1 - 2
- 3 - 4
- 5 - 6

7 or more

16. What is the best time for you to attend Grambling State University alumni events? (Check all that apply)

- Weekdays
- Evenings
- Weekend days
- Weekend evenings

17. How do you prefer being invited to events? (Check all that apply)

- Mail
- Telephone
- Notice in Visions Magazine
- E-mail
- I do not wish to be invited to events

18. The most important reason to attend alumni events is: (Check all that apply)

- To see alumni
- The pleasure attained from the event/program itself
- Giving back to Grambling State University
- Learning experience

19. How important is it for you to stay connected with former classmates?

- Very important
- Somewhat important
- Undecided
- Somewhat unimportant
- Very unimportant

20. Which of the following factors hinder you from attending Grambling State University events? (Check all that apply)

- a. Costs
- b. Distance
- c. Experiences at Grambling State University
- d. Time
- e. Events are not appealing
- f. Do not hear about them

21. Have you received any publication(s) from the Office of Alumni Affairs?

- Yes
- No

b. If yes, did it arrive in a timely fashion?

- Yes
- No

22. The University Alumni Magazine is designed and published to keep our alumni informed about the university.

In your opinion is the magazine reaching its goal?

- Yes
- No

b.If not please, explain why you feel it is not reaching its goal and purpose:

23. Overall, how satisfied are you with the information presented in Visions Magazine?

- Extremely satisfied
- Somewhat satisfied
- Neutral
- Somewhat not satisfied
- Not satisfied at all

24. How likely would you be to subscribe to the magazine or recommend the publication to an alumnus or associate?

- Extremely likely
- Somewhat Likely
- Neutral
- Somewhat unlikely
- Not likely at all

25. When you receive Visions Magazine, how much of it do you usually read?

- Cover-to-cover
- Most of it
- About half of it
- Only a little of it
- None of it

26. When you receive the Grambling State University Magazine, do you usually:

- Read it as soon as it arrives
- Set it aside to read later
- Read some sections right away, others later
- Read none of it

27. Typically, how long do you keep an issue of the Grambling State University Magazine?

- A day
- A week
- A month
- More than a month
- Forever

28. In viewing/reading materials produced by the Office of Alumni Affairs, were they: (Check all that apply)

- a. Helpful
- b. Informative
- c. Appealing
- d. Relevant

e. Please offer additional comments:

29. Please indicate which attributes of the Office of Alumni Affairs you believe are strong: (Check all that apply)

- a. The Office of Alumni Affairs provides quality programs and services.
- b. The Office of Alumni Affairs provides invaluable information that keeps you informed about the University and its alumni.
- c. The Office of Alumni Affairs is an office that understands the needs of the alumni.
- d. The Office of Alumni Affairs is an organization you can trust.
- e. The Office of Alumni Affairs staff go out of their way to meet alumni needs.
- f. Alumni staff treat you as if they care about you as an alumnus.

30. Is the Office of Alumni Affairs web page adequately designed to meet alumni needs?

- Yes
- No

31. How many times have you visited the Grambling State University website in the past year?

- Haven't at all
- 1 - 5 times
- 6 - 10 times
- More than 10 times

Fund-raising Programs

1. At what level of support did you contribute to Grambling State University in 2004?

- Less than \$100
- \$100 - \$499
- \$500 - \$999
- \$1,000 - \$4,999
- \$5,000 plus
- Did not contribute

2. Which of the following best describes your reasons for giving: (Check all that apply)

- a. I appreciate the education I received at Grambling State University.
- b. The financial needs of Grambling State University are compelling.
- c. I want to ensure a quality education for future students.
- d. I responded to a solicitation letter and/or phonathon call.
- e. I responded to a volunteer solicitation request.

3. Listed below are some specific needs at Grambling State University to which donations could be directed. Please indicate those to which you are most likely to support. (Check all that apply)

- a. Unrestricted Annual fund
- b. General endowment
- c. Academic programs
- d. Athletic support groups
- e. Financial aid
- f. Student residence construction/improvement
- g. Off-campus study group support
- h. Library book/periodic support
- i. Athletic facility construction/renovation
- j. Technology
- k. Facility support

4. How important are the "perks" (i.e. dinners, special listings, invitations, etc.) to you in determining the amount of your support?

- Very important
- Somewhat important
- Undecided
- Somewhat unimportant
- Very unimportant

5. Please provide any additional comments:

Continue

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Grambling State University Alumni Survey

Alumni Questions

1. I am aware of alumni chapter activities in my area.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

2. I try to attend alumni chapter meetings.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

3. Regarding the alumni chapter activities in my area, I am satisfied with: (Check all that apply)

- a. Frequency
- b. Variety
- c. Quality

4. I would like to see my chapter offer the following program choices: (Check all that apply)

- a. Send-off events for new students
- b. Admissions receptions
- c. Grambling State University sporting events
- d. Local sporting events
- e. Local cultural events
- f. Social events for club members
- g. Featured campus speakers
- h. Are there any other programs you would like to see offered by your chapter? Please list below.

5. Have you ever attended a reunion of your class at Grambling State University?

- Yes
- No

b. If yes, what was the most recent year?

6. Are you aware of reunion activities for your class?

- Yes
- No

7. Which of the following aspects of reunion are you satisfied: (Check all that apply)

- a. Staff assistance and support
- b. Pre-reunion information
- c. Length of reunion
- d. Housing
- e. Meals
- f. General education programs
- g. Class programs

8. Have you ever attended a homecoming at Grambling State University?

- Yes
- No

b. If yes, what was the most recent year?

9. What homecoming opportunities would you like to see offered: (Check all that apply)

- a. Concerts, plays, musical affairs
- b. All-campus dinner
- c. Social gatherings, including tailgates
- d. Panel discussions involving students, faculty, and administrators
- e. Campus tours
- f. Educational programs featuring professors

10. Has your child ever applied to Grambling State University?

- Yes
- No

11. I am satisfied with Grambling State University's handling of legacy admissions.

- Very satisfied
- Somewhat satisfied
- Undecided
- Somewhat dissatisfied
- Dissatisfied

12. With which of the following characteristics of Grambling State University's merchandising program are you satisfied? (Check all that apply)

- a. Availability
- b. Variety of merchandise
- c. Costs

13. Have you had an opportunity to discuss a program activity/idea with staff members from the Office of Alumni Affairs?

- Yes
- No

b. If yes, was the staff person helpful, polite, and courteous?

- Yes
- No

14. Which of the following do you consider important? (Check all that apply)

- a. Athletic promotions
- b. Alumni directory
- c. Merchandising
- d. Travel programs
- e. Class efforts
- f. Undergraduate training and relations
- g. Continuing education program
- h. Alumni admissions activity
- i. Homecomings
- j. Reunions
- k. Alumni chapter activities

15. How many different alumni events would you be willing to attend in one year?

- None
- 1 - 2
- 3 - 4
- 5 - 6

7 or more

16. What is the best time for you to attend Grambling State University alumni events? (Check all that apply)

- Weekend evenings
- Weekend days
- Evenings
- Weekdays

17. How do you prefer being invited to events? (Check all that apply)

- I do not wish to be invited to events
- E-mail
- Notice in Visions Magazine
- Telephone
- Mail

18. The most important reason to attend alumni events is: (Check all that apply)

- Learning experience
- Giving back to Grambling State University
- The pleasure attained from the event/program itself
- To see alumni

19. How important is it for you to stay connected with former classmates?

- Very important
- Somewhat important
- Undecided
- Somewhat unimportant
- Very unimportant

20. Which of the following factors hinder you from attending Grambling State University events? (Check all that apply)

- a. Do not hear about them
- b. Events are not appealing
- c. Time
- d. Experiences at Grambling State University
- e. Distance
- f. Costs

21. Have you received any publication(s) from the Office of Alumni Affairs?

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- A day
- A week
- A month
- More than a month
- Forever

28. In viewing/reading materials produced by the Office of Alumni Affairs, were they: (Check all that apply)

- a. Relevant
- b. Appealing
- c. Informative
- d. Helpful

e. Please offer additional comments:

29. Please indicate which attributes of the Office of Alumni Affairs you believe are strong: (Check all that apply)

- a. Alumni staff treat you as if they care about you as an alumnus.
- b. The Office of Alumni Affairs staff go out of their way to meet alumni needs.
- c. The Office of Alumni Affairs is an organization you can trust.
- d. The Office of Alumni Affairs is an office that understands the needs of the alumni.
- e. The Office of Alumni Affairs provides invaluable information that keeps you informed about the University and its alumni.
- f. The Office of Alumni Affairs provides quality programs and services.

30. Is the Office of Alumni Affairs web page adequately designed to meet alumni needs?

- Yes
- No

31. How many times have you visited the Grambling State University website in the past year?

- Haven't at all
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- 6 - 10 times
- More than 10 times

Fund-raising Programs

1. At what level of support did you contribute to Grambling State University in 2004?

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- \$500 - \$999
- \$1,000 - \$4,999
- \$5,000 plus
- Did not contribute

2. Which of the following best describes your reasons for giving: (Check all that apply)

- a. I responded to a volunteer solicitation request.
- b. I responded to a solicitation letter and/or phonathon call.
- c. I want to ensure a quality education for future students.
- d. The financial needs of Grambling State University are compelling.
- e. I appreciate the education I received at Grambling State University.

3. Listed below are some specific needs at Grambling State University to which donations could be directed. Please indicate those to which you are most likely to support. (Check all that apply)

- a. Facility support
- b. Technology
- c. Athletic facility construction/renovation
- d. Library book/periodic support
- e. Off-campus study group support
- f. Student residence construction/improvement
- g. Financial aid
- h. Athletic support groups
- i. Academic programs
- j. General endowment
- k. Unrestricted Annual fund

4. How important are the "perks" (i.e. dinners, special listings, invitations, etc.) to you in determining the amount of your support?

Survey LMAT

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Grambling State University Alumni Survey

Alumni Questions

Alumni Chapter

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1. I am aware of alumni chapter activities I my area.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I try to attend alumni chapter meetings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Regarding the alumni chapter activities in my area, I am satisfied with:					
	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
a. Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Variety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Frequency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I would like to see my chapter offer the following program choices:					
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
a. Featured campus speakers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Social events for club members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Local cultural events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Local sporting events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Grambling State University sporting events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Admissions receptions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Send-off events for new students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

h. Are there any other programs you would like to see offered by your chapter? Please list below.

5. Have you ever attended a reunion of your class at Grambling State University?

- Yes
- No

b. If yes, what was the most recent year?

6. Are you aware of reunion activities for your class?

- Yes
- No

7. How satisfied are you with the following aspects of reunion:

	Very satisfied	Somewhat satisfied	Undecided	Somewhat dissatisfied	Very dissatisfied
a. Class programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. General education programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Meals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Housing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Length of reunion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Pre-reunion information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Staff assistance and support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Have you ever attended a homecoming at Grambling State University?

- Yes
- No

b. If yes, what was the most recent year?

9. What homecoming opportunities would you like to see offered?

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
a. Educational programs featuring professors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Campus tours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Panel discussions involving students, faculty, and administrators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Social gatherings, including tailgates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. All-campus dinner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Concerts, plays, musical affairs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Has your child ever applied to Grambling State University?

- Yes
- No

11. I am satisfied with Grambling State University's handling of legacy admissions.

- Very satisfied
- Somewhat satisfied
- Undecided
- Somewhat dissatisfied
- Dissatisfied

12. How satisfied are you with the following characteristics of Grambling State University's merchandising program:

	Very satisfied	Somewhat satisfied	Undecided	Somewhat dissatisfied	Very dissatisfied
a. Costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Variety of merchandise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Availability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Have you had an opportunity to discuss a program activity/idea with staff members from the Office of Alumni Affairs?

- Yes
- No

b. If yes, was the staff person helpful, polite, and courteous?

- Yes
- No

14. Please rate the importance of each of the following. Rank the most important item "1" and "11" as the least important.

	1	2	3	4	5	6	7	8	9	10	11
a. Alumni chapter activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Reunions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Homecomings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Alumni admissions activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Continuing education program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Undergraduate training and relations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Class efforts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Travel programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Merchandising	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Alumni directory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Athletic promotions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. How many different alumni events would you be willing to attend in one year?

- None

- 1 - 2
- 3 - 4
- 5 - 6
- 7 or more

16. What is the best time for you to attend Grambling State University alumni events?

- Weekdays
- Evenings
- Weekend days
- Weekend evenings

17. How do you prefer being invited to events?

- Mail
- Telephone
- Notice in Visions Magazine
- E-mail
- I do not wish to be invited to events

18. The most important reason to attend alumni events is:

- To see alumni
- The pleasure attained from the event/program itself
- Giving back to Grambling State University
- Learning experience

19. How important is it for you to stay connected with former classmates?

- Very important
- Somewhat important
- Undecided
- Somewhat unimportant
- Very unimportant

20. Which of the following factors hinder you from attending Grambling State University events?

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
a. Costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Distance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Experiences at Grambling State University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- e. Events are not appealing
- f. Do not hear about them

21. Have you received any publication(s) from the Office of Alumni Affairs?

- Yes
 No

b. If yes, did it arrive in a timely fashion?

- Yes
 No

22. The University Alumni Magazine is designed and published to keep our alumni informed about the university.

In your opinion is the magazine reaching its goal?

- Yes
 No

b. If not please, explain why you feel it is not reaching its goal and purpose:

23. Overall, how satisfied are you with the information presented in Visions Magazine?

- Extremely satisfied
 Somewhat satisfied
 Neutral
 Somewhat not satisfied
 Not satisfied at all

24. How likely would you be to subscribe to the magazine or recommend the publication to an alumnus or associate?

- Extremely likely
 Somewhat Likely
 Neutral
 Somewhat unlikely
 Not likely at all

25. When you receive Visions Magazine, how much of it do you usually read?

- Cover-to-cover
 Most of it

- About half of it
- Only a little of it
- None of it

26. When you receive Visions Magazine, do you usually:

- Read it as soon as it arrives
- Set it aside to read later
- Read some sections right away, others later
- Read none of it

27. Typically, how long do you keep an issue of Visions Magazine?

- A day
- A week
- A month
- More than a month
- Forever

28. In viewing/reading materials produced by the Office of Alumni Affairs, were they:

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
a. Helpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Informative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Appealing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Relevant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

e. Please offer additional comments:

29. Please give your general opinion of the Office of Alumni Affairs on several attributes. Please rate the job you believe the office is doing in the areas set forth below.

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
a. The Office of Alumni Affairs provides quality programs and services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. The Office of Alumni Affairs provides invaluable information that keeps you informed about the University and its alumni.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. The Office of Alumni Affairs is an office that understands the needs of the alumni.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- d. The Office of Alumni Affairs is an organization you can trust.
- e. The Office of Alumni Affairs staff go out of their way to meet alumni needs.
- f. Alumni staff treat you as if they care about you as an alumnus.

30. Is the Office of Alumni Affairs web page adequately designed to meet alumni needs?

- Yes
- No

31. How many times have you visited the Grambling State University website in the past year?

- Haven't at all
- 1 - 5 times
- 6 - 10 times
- More than 10 times

Fund-raising Programs

1. At what level of support did you contribute to Grambling State University in 2004?

- Less than \$100
- \$100 - \$499
- \$500 - \$999
- \$1,000 - \$4,999
- \$5,000 plus
- Did not contribute

2. Which of the following best describes your reasons for giving:

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
a. I appreciate the education I received at Grambling State University.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. The financial needs of Grambling State University are compelling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I want to ensure a quality education for future students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I responded to a solicitation letter and/or phonathon call.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I responded to a volunteer solicitation request.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Listed below are some specific needs at Grambling State University to which donations could be directed. Please indicate those to which you are most likely to support.

	Very likely	Likely	Neutral	Not likely	Not at all likely
a. Unrestricted Annual fund	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. General endowment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Academic programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Athletic support groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Financial aid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Student residence construction/improvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Off-campus study group support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Library book/periodic support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Athletic facility construction/renovation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Facility support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How important are the "perks" (i.e. dinners, special listings, invitations, etc.) to you in determining the amount of your support?

- Very important
- Somewhat important
- Undecided
- Somewhat unimportant
- Very unimportant

5. Please provide any additional comments:

Continue

Please contact cross@case.org if you have any questions regarding this survey.

SURVEY PROFESSIONALS
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Survey OPEN

100% Complete

Grambling State University Alumni Survey

Alumni Questions

1. I am aware of the following chapter activities in my area:

2. I try to attend alumni chapter meetings.

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

3. Regarding the alumni chapter activities in my area, I am satisfied with:

a. Quality

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

b. Variety

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

c. Frequency

- Strongly agree
- Agree
- Undecided

- Disagree
- Strongly disagree

4. I would attend the following program choices offered by my chapter:

5. Have you ever attended a reunion of your class at Grambling State University?

- Yes
- No

b. If yes, what was the most recent year?

6. Are you aware of reunion activities for your class?

- Yes
- No

7. How satisfied are you with the following aspects of reunion:

a. Class programs

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

b. General education programs

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

c. Meals

- Strongly agree
- Agree
- Undecided

- Disagree
- Strongly disagree

d. Housing

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

e. Length of reunion

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

f. Pre-reunion information

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

g. Staff assistance and support

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

8. Have you ever attended a homecoming at Grambling State University?

- Yes
- No

b. If yes, what was the most recent year?

9. I would like to see the following homecoming choices offered:

10. Has your child ever applied to Grambling State University?

- Yes
 No

11. I am satisfied with Grambling State University's handling of legacy admissions.

- Very satisfied
 Somewhat satisfied
 Undecided
 Somewhat dissatisfied
 Dissatisfied

12. How do you feel about the characteristics of Grambling State University's merchandising program:

a. Costs

b. Variety of merchandise

c. Availability

13. Have you had an opportunity to discuss a program activity/idea with staff members from the Office of Alumni Affairs?

- Yes
 No

b. If yes, was the staff person helpful, polite, and courteous?

- Yes
 No

14. Please discuss the importance to you of each of the following:

a. Alumni chapter activities

b. Reunions

c. Homecomings

d. Alumni admissions activity

e. Continuing education program

f. Undergraduate training and relations

g. Class efforts

h. Travel programs

i. Merchandising

j. Alumni directory

k. Athletic promotions

15. How many different alumni events would you be willing to attend in one year?

- None
- 1 - 2
- 3 - 4
- 5 - 6
- 7 or more

16. What is the best time for you to attend Grambling State University alumni events?

- Weekdays
- Evenings
- Weekend days
- Weekend evenings

17. How do you prefer being invited to events?

- Mail
- Telephone
- Notice in Visions Magazine
- E-mail
- I do not wish to be invited to events

18. The most important reason to attend alumni events is:

- To see alumni
- The pleasure attained from the event/program itself
- Giving back to Grambling State University
- Learning experience

19. How important is it for you to stay connected with former classmates?

- Very important
- Somewhat important

- Undecided
- Somewhat unimportant
- Very unimportant

20. What factors hinder you from attending Grambling State University events?

21. Have you received any publication(s) from the Office of Alumni Affairs?

- Yes
- No

b. If yes, did it arrive in a timely fashion?

- Yes
- No

22. The University Alumni Magazine is designed and published to keep our alumni informed about the university.

In your opinion is the magazine reaching its goal?

- Yes
- No

b. If not please, explain why you feel it is not reaching its goal and purpose:

23. Overall, how satisfied are you with the information presented in Visions Magazine?

- Extremely satisfied
- Somewhat satisfied
- Neutral
- Somewhat not satisfied
- Not satisfied at all

24. How likely would you be to subscribe to the magazine or recommend the publication to an alumnus or associate?

- Extremely likely
- Somewhat Likely
- Neutral

- Somewhat unlikely
- Not likely at all

25. When you receive Visions Magazine, how much of it do you usually read?

- Cover-to-cover
- Most of it
- About half of it
- Only a little of it
- None of it

26. When you receive Visions Magazine, do you usually:

- Read it as soon as it arrives
- Set it aside to read later
- Read some sections right away, others later
- Read none of it

27. Typically, how long do you keep an issue of the Grambling State University Magazine?

- A day
- A week
- A month
- More than a month
- Forever

28. In viewing/reading materials produced by the Office of Alumni Affairs, were they:

a. Helpful

b. Informative

c. Appealing

d. Relevant

e. Please offer additional comments:

--

29. Please give your general opinion of the Office of Alumni Affairs on several attributes. Please rate the job you believe the office is doing in the areas set forth below.

a. The Office of Alumni Affairs provides quality programs and services.

-- Select --

b. The Office of Alumni Affairs provides invaluable information that keeps you informed about the University and its alumni.

-- Select --

c. The Office of Alumni Affairs is an office that understands the needs of the alumni.

-- Select --

d. The Office of Alumni Affairs is an organization you can trust.

-- Select --

e. The Office of Alumni Affairs staff go out of their way to meet alumni needs.

-- Select --

f. Alumni staff treat you as if they care about you as an alumnus.

-- Select --

30. Is the Office of Alumni Affairs web page adequately designed to meet alumni needs?

- Yes
 No

31. How many times have you visited the Grambling State University website in the past year?

- Haven't at all
 1 - 5 times
 6 - 10 times
 More than 10 times

Fund-raising Programs

1. At what level of support did you contribute to Grambling State University in 2004?

- Less than \$100

- \$100 - \$499
- \$500 - \$999
- \$1,000 - \$4,999
- \$5,000 plus
- Did not contribute

2. For what reasons do you give to Grambling State University?

3. Listed below are some specific needs at Grambling State University to which donations could be directed. Please indicate those to which you are most likely to support.

a. Unrestricted Annual fund

- Very likely
- Likely
- Neutral
- Not likely
- Not very likely

b. General endowment

- Very likely
- Likely
- Neutral
- Not likely
- Not very likely

c. Academic programs

- Very likely
- Likely
- Neutral
- Not likely
- Not very likely

d. Athletic support groups

- Very likely
- Likely
- Neutral

- Not likely
- Not very likely

e. Financial aid

- Very likely
- Likely
- Neutral
- Not likely
- Not very likely

f. Student residence construction/improvement

- Very likely
- Likely
- Neutral
- Not likely
- Not very likely

g. Off-campus study group support

- Very likely
- Likely
- Neutral
- Not likely
- Not very likely

h. Library book/periodic support

- Very likely
- Likely
- Neutral
- Not likely
- Not very likely

i. Athletic facility construction/renovation

- Very likely
- Likely
- Neutral
- Not likely
- Not very likely

j. Technology

- Very likely

- Likely
- Neutral
- Not likely
- Not very likely

k. Facility support

- Very likely
- Likely
- Neutral
- Not likely
- Not very likely

4. How important are the "perks" (i.e. dinners, special listings, invitations, etc.) to you in determining the amount of your support?

-- Select --

5. Please provide any additional comments:

[Empty text input box]

Continue

Please contact cross@case.org if you have any questions regarding this survey.

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Appendix C: Institutional Review Board Approval

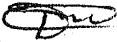
**Institutional Review Board**

Dr. David M. Moore
IRB (Human Subjects) Chair
Assistant Vice President for Research Compliance
CVM Phase II- Duckpond Dr., Blacksburg, VA 24061-0442
Office: 540/231-4991; FAX: 540/231-6033
email: moored@vt.edu

DATE: March 4, 2005

MEMORANDUM

TO: Marilyn Lichtman ELPS
Freddie Cross

FROM: David Moore 

SUBJECT: **IRB Exempt Approval:** "The effect of respondent computer experience on primacy effect and satisficing in the internet surveys" IRB # 05-161

I have reviewed your request to the IRB for exemption for the above referenced project. I concur that the research falls within the exempt status. Approval is granted effective as of March 4, 2005.

Virginia Tech has an approved Federal Wide Assurance (FWA00000572, exp. 7/20/07) on file with OHRP, and its IRB Registration Number is IRB00000667.

cc: File

Department Reviewer: M. D. Alexander

Appendix D: Memorandum of Understanding

**FREDDIE CROSS
AND
THE OFFICE OF ALUMNI AFFAIRS
GRAMBLING STATE UNIVERSITY
GRAMBLING, LOUISIANA**

MEMORANDUM OF UNDERSTANDING

THIS UNDERSTANDING is made as of this 5th day of September 2004 between Freddie Cross, hereinafter referred to as the "Researcher"; and the Office of Alumni Affairs at Grambling State University, Grambling, Louisiana, hereinafter referred to as the "Resource Subject."

WITNESSETH:

WHEREAS, the Researcher desires to survey alumni of Grambling State University for the purposes and upon the conditions set forth below; and,

WHEREAS, the Researcher has delivered or will cause to be delivered the information described in Schedule A, attached hereto and incorporated by reference in an understood time frame; and

WHEREAS, the Resource Subject agrees to hold, administer and distribute all of the aforesaid property, together with all additions thereto, hereinafter referred to as the "Alumni Database" in accordance with the terms and provisions hereinafter set forth.

NOW, THEREFORE, in consideration of the premises, mutual covenants, and conditions hereinafter set forth, the parties agree as follows:

1. The Resource Subject is the owner of the data provided to the Researcher.
2. The Researcher shall provide the name and summary of dissertation to Resource Subject.
3. The Researcher shall administer the survey in the name of the Office of Alumni Affairs, Grambling State University, Grambling, Louisiana.
4. The Researcher shall provide a written definition of methods to obtain survey data (i.e., online, e-mail, USPS, etc.) to Resource Subject.
5. The Researcher shall provide the time frame for completion/compilation of survey to Resource Subject.
6. The Researcher shall provide a copy of the survey that will be administered to Grambling State University alumni to the Resource Subject.
7. Upon receipt of a minimum of 7,000 names from the Alumni Database, the Researcher shall administer and distribute a survey to said Grambling State University alumni in the name of Grambling State University;

8. The Researcher shall provide said alumni a requisite amount of time to respond to survey questions and return for statistical compilation.
9. Upon return of survey from alumni, the Researcher shall compile statistical data according to the questions posed to alumni on the survey.
10. The Researcher will provide access to statistically compiled results, however obtained, to Resource Subject.
11. The Researcher will provide copies of all completed surveys to Resource Subject.
12. The Researcher will provide a copy of analysis and final report to Resource Subject.
13. This Understanding and the Survey hereby created shall be irrevocable and this Understanding shall not be altered, revoked, or terminated, in whole or in part by the Researcher. No part of the survey, data, or alumni database shall ever revert or be used for the benefit of the Researcher, except for the terms stated herein with respect to the Researcher's dissertation.
14. If any term of provision or any portion thereof of this Understanding shall to any extent be deemed invalid or unenforceable, the remainder of this Understanding shall not be affected thereby and each term and provision of this Understanding shall be valid and enforceable to the full extent permitted by law.

SCHEDULE A

THE OFFICE OF ALUMNI AFFAIRS
GRAMBLING STATE UNIVERSITY

Provisions for the alumni survey conducted by Researcher in the name of the Resource subject shall be made in its entirety within the understood time frame and are agreed upon as follows:

- The Resource Subject is the owner of data provided to Researcher
- Administering of survey shall be in the name of the Resource Subject
- Name and Summary of dissertation shall be provided to Resource Subject
- Written definition of methods to obtain survey data shall be provided to Resource Subject
- Time frame of completion/compilation shall be provided to Resource Subject
- A copy of survey shall be provided to Resource Subject
- Access of compilation of statistical results shall be provided to Resource Subject
- A copy of all completed surveys shall be provided to Resource Subject
- A copy of analysis and final report shall be provided to Resource Subject

Arrangements for survey, as described herein, will be completed through The Office of Alumni Affairs, Grambling State University, Grambling, Louisiana.

WITNESS the following signatures and seal:

	By: _____
Witness	Freddie Cross, Researcher
	17651 Horizon Place
Witness	Derwood, MD 20855

Sworn to and subscribed before me, Notary on this _____ day of September 2004.

NOTARY

For Resource Subject:

	By: _____
Witness	Herbert Simmons, Jr., J.D.
	The Office of Alumni Affairs
Witness	Grambling State University
	346 RWE Jones Drive
	Grambling, Louisiana 71245

Sworn to and subscribed before me, Notary on this _____ day of September, 2004.

NOTARY

Appendix E: Letters To Participants

Dear alumnus,

As a Grambling State University alumnus you have been randomly chosen to participate in a research study that will both benefit the Office of Alumni Affairs and a Virginia Tech doctoral candidate. Freddie Cross, a Virginia Tech doctoral candidate, will conduct the survey. The survey will collect information that will help the Office of Alumni Affairs better serve alumni. Ms. Cross will utilize the data from this research for her dissertation.

In approximately one day you will receive an e-mail that will include a link to a questionnaire. The questionnaire will collect information regarding your computer experience, demographics, and your alumni involvement.

Although the Office of Alumni Affairs supports this research, they will in no way have access to the identity or responses provided by the respondents to the questionnaire. Please know that your privacy and the confidentiality of your responses will be protected. No personally identifying information, including e-mail addresses, will be collected.

I hope you will take a few moments of your time to assist us in our research. The questionnaire should take no more than 15 minutes to complete. Results will be available to you at the completion of the study made available.

If you have any questions regarding participation in this research, please contact Freddie Cross at (202) 478-5570, or cross@case.org.

Thank you for assisting us in this research project.

Sincerely,

Herbert Simmons

Director

Grambling State University, Office of Alumni Affairs

Freddie Cross

Doctoral Candidate

Virginia Tech University

Dear alumnus,

Grambling State University Office of Alumni Affairs is conducting a survey of graduates. The purpose of the survey is to collect information regarding your computer experience, your academic experience at Grambling State University, and your alumni involvement.

Your participation is important to the Grambling State University and your input is valuable to us. The results of the survey will help the Grambling State University Office of Alumni Affairs better serve alumni.

Freddie Cross, a Virginia Tech doctoral candidate, will conduct the survey. The survey will collect information that will help Grambling State University Office of Alumni Affairs better serve the members. Ms. Cross will utilize the data from this research for her dissertation.

Please participate by going to [survey URL] on the World Wide Web. The online questionnaire will take approximately 15 minutes to complete. The data will be submitted electronically. Your submission is completely anonymous. No identifying information will be collected in the database and therefore no one at the Grambling State University Office of Alumni Affairs will be able to identify specific participants.

The deadline for completing the survey is March 25, 2005. However, we urge you to take a few minutes and do it right away. The research report will be completed by spring of 2005. As a participant, results will be available to you at that time.

If you have any questions regarding participation in this research, please contact Freddie Cross at (202) 478-5570, or cross@case.org.

Thank you for your participation!

Sincerely,

Herbert Simmons, Jr.

Director

Grambling State University, Office of Alumni Affairs

Freddie Cross

Doctoral Candidate

Virginia Tech University

Dear alumnus,

Recently you received an e-mail requesting your participation in a research project sponsored by the Grambling State University Office of Alumni Affairs. If you have not completed the online questionnaire, please take 15 minutes and complete the questionnaire at [survey URL]. [Date] is the last day the survey will be available online. Please remember, your input is vital for developing Grambling State University Alumni programs, events, and services that meet your needs.

If you have any questions regarding participation in this research, please contact Freddie Cross at (202) 478-5570, or cross@case.org.

Sincerely,

Grambling State University Office of Alumni Affairs

Appendix F: Field Study

THE EFFECT OF RESPONDENT COMPUTER EXPERIENCE AND OTHER
DEMOGRAPHIC VARIABLES ON RESPONSE EFFECTS IN INTERNET
SURVEYS:

General survey concepts can be applied to any survey mode, be it face-to-face, telephone, paper-and-pencil, or Internet. Much of the research on Internet surveys has focused on increasing response rates (e.g., Dillman, Phelps, Tortora, Swift, Kohrell, & Berck, 2001; Hallowell, Patel, Bales, & Gerber, 2000; Paolo, Bonaminio, Gibson, Partridge, & Kallail, 2000; Soloman, 2001; Zhang, 2000). However, researchers have found that certain demographic variables (age, race, gender, educational attainment, income level) of Internet users are not the same as those of the general population (Best, Krueger, Hubbard, & Smith, 2001; Matz, 1999; White, 1996). With this in mind, research investigating primacy effect and satisficing conducted via telephone, face-to-face, and paper-and-pencil surveys has found that the aforementioned demographic variables have an effect on how respondents answer surveys (Chang, 2001; Krosnick, Holbrook, Berent, & Carson, et al., 2002). Further, Jenkins and Dillman (1995) used the term "top-down processing" to describe the occurrence of recall from previous experience with completing surveys interfering with respondents' knowledge about how to use computers. Even so the variable that has not been investigated in Internet surveys is the effect of a respondent's computer experience on how a respondent answers an Internet survey.

Background

Completing forms or surveys online requires eye-hand coordination that is not necessary when completing surveys in any other mode. Whereas for the most part, Internet-survey respondents might have acquired that coordination, many might not have. Greater numbers of online surveys are being used to add to or replace other survey modes. Yet although researchers have found that other various demographics have an affect on respondents' answers, the effect computer experience has on respondents' survey answers has not been investigated. Because the effect of computer experience on respondents' survey answers is unknown, it is hard to be certain that the differences found in the survey answers can be attributed to differences in respondents' computer experience or to differences in other demographics. This field study will first determine respondents' computer experience level, then it will correlate other respondent demographics with computer experience. Because of this, the difference of response effects typically found in written surveys (primacy effect and satisficing) will be measured between two levels of computer experience.

Primacy effect describes a respondent's tendency to choose answer items that are toward the beginning of a list. Satisficing is an attempt by respondents to minimize the cognitive effort they expend to answer questions on a survey. Satisficing, as identified by Krosnick (1991), is composed of three factors: motivation, ability, and task difficulty. Motivation refers to the respondent's motivation to complete a survey. Ability refers to the respondent's mental ability to understand what the question is asking and possessing the knowledge to respond.

Task difficulty refers to the effect of the survey's complexity on the respondent's ability to navigate it. Because additional skills are required to answer questions on a computer, question formats that require greater mouse and keyboard action should result in greater primacy effect or satisficing. The justification being that, in Internet surveys, a respondent's computer experience can equate with ability, and the navigation required to complete the survey can equate with task difficulty. The respondent must possess the knowledge or ability to answer questions and must possess the ability to coordinate hand and eye to answer those questions in formats that might be different from those used in paper-and-pencil surveys. This research is based on the review of related literature and the findings of relevant studies.

Methodology

The overarching question this research attempted to answer is: Despite age, gender, income level, and level of education, Internet survey respondents with little computer experience will exhibit greater primacy effect and satisficing on question formats that require greater use of the mouse and keyboard and on question formats that require more thought to complete or navigate than will Internet survey respondents with considerable computer experience.

There are seven models used to answer the question. The first three test whether or not an Internet survey respondent with little computer experience will exhibit primacy effect more frequently when compared with respondents with considerable computer experience regardless of age, level of education, gender, and income level. The three models used will compare: fully visible horizontal lists versus fully visible

vertical lists; lists in a pull-down menu format versus fully visible vertical lists; and the amount of answers checked toward the beginning of a list of check-all-that-apply questions compared with those checked throughout the entire list. The four remaining models test whether or not an Internet survey respondent with little computer experience will exhibit greater satisficing compared to those with considerable computer experience regardless of age, level of education, gender, and income level. The four models used will compare: Likert scale questions formatted in matrices vs. Likert scale questions with each question and answer list separate; the number of significant words used to answer open-ended questions; the use of directional navigation vs. branching; and the use of a single scrolling page vs. questions grouped on separate pages.

Description of the Survey

The surveys consisted of several sections. In the first section contained questions that gauged the respondent's computer experience. The second section gathered demographic information (age, gender, level of education, and income level). The third and fourth sections contained questions that were relevant to the respondents (alumni experiences and fund raising). The formatting of the questions was altered in the seven separate surveys to answer the research questions.

Demographic variables were to be correlated with computer experience level to be assured that they were not confounding. The salient questions were composed of various formats.

The surveys were created using a survey tool called Surveypro developed by Survey Professionals, Inc. The surveys were created in HTML and a link to the

surveys was e-mailed to respondents. Survey one was created to answer research question 1a. Survey two was created to answer research question 1b. Survey three was created to answer research questions 2a, 2c, and 2d. Survey four was created to answer research question 2b. Survey five was created to answer research question 1c. Survey six, in conjunction with survey three, was to be used to answer research question 2c. Survey six was identical to survey three in question formats; the difference was that survey six had branching questions as opposed to the directional navigation used in survey three. Survey seven, in conjunction with survey three, was used to answer research question 2d. Survey seven was identical to survey three in question formats; the difference was that survey three consisted of one single scrolling page, and survey seven had questions grouped on 24 separate pages. Explanations are provided below.

Independent Variables

The independent variables in this study were the respondent's computer experience score, age category, sex, income level, level of education, and question format. Race was not used because there was no variation in the sample. Age was categorized into low (up to 34), mid (34 to 54), and high (55 or above). Sex was categorized into female and male. Income level was categorized into lower (annual household income \$50,000 or below), middle (\$50,001 to \$100,000), and high (above \$100,000). Level of education was categorized into undergraduate degree and postgraduate degree.

Computer Experience Score

Computer experience and demographic data from all seven versions of the survey were analyzed together in one SPSS file. The questions in the computer experience section asked respondents to self report where they use computers, the frequency of use, for how long they have been using computers, and their comfort level with several of the most common program types. In addition, questions asked respondents in what activities they engage while online and how often they check e-mail (See Table E1). The answers to the questions were categorically coded 1 or 0, or 1 through 3, depending on the format of the answer choices. For the check-all-that-apply questions, the items checked were tallied and reverse coded so that greater levels of computer experience were coded "1" regardless of the format of the question. All computer-experience questions were subjected to hierarchical cluster analysis to separate respondents into three groups: those with little, medium, and great experience with computers, thus the computer experience score was determined.

Dependent Variable

The dependent variables in this study were primacy effect and satisficing. There were several question formats used to determine the degree of primacy effect and satisficing. Primacy effect was measured in research question one. Satisficing was measured in research question two.

Primacy Effect. Answer choices in questions that measured primacy effect were in the form of Likert scales and check-all-that-apply questions. The answers to

these questions were coded dichotomously such that when one of the first two answers in the list was chosen the question was coded 1. If any of the other responses were chosen, the question was coded 0. The check-all-that-apply questions were coded such that if the respondent chose the first one-third of answers only, the question was coded 1. If any of the latter two-thirds of answer choices were chosen, the question was coded 0.

Satisficing. Satisficing was measured in research question 2a by comparing answers given in matrix questions with those for singly listed questions. It was measured by counting the number of items on the Likert scale matrix that the respondent rated the same; The greatest number was the person's score. The same coding method was used for corresponding groups of single questions. Research question 2b used open-ended questions. This variable was measured by counting all the significant words, i.e., not counting "a", "the", etc. and using that number as the score.

Sample Selection

The sample for this study was 27 university alumni association chapter presidents with valid e-mail addresses from a public Masters I (Carnegie classification system) Historically Black College or University (HBCU) in the southern United States. The limitations of using this group were that there was no variance in race and very little in level of education. As a result, race was not used in the analysis. Approximately four chapter presidents were randomly assigned to each

survey. Nine chapter presidents responded to the surveys yielding a response rate of 33%. A response rate of 33% is generally good for Internet surveys; unfortunately with 27 in the sample base and seven surveys returned, 33% results in an average of two respondents per survey.

Data Collection

An e-mail letter was sent to each of the chapter presidents requesting participation and explaining the value that the answers provide to the Office of Alumni Affairs and the researcher. A link to one of the seven versions of the survey was included in the e-mail. A second letter was e-mailed three days later, and a third e-mail was sent from the president of the Office of Alumni Affairs six days after that (nine days after the original e-mail) in an effort to increase the response rate. Data was collected in an online comma delimited database as respondents submitted their surveys. The data was downloaded into an SPSS database approximately two weeks after the initial e-mailing of the links.

Analyses Used

Computer Experience

The computer experience section of the survey consisted of fourteen questions. For three of these questions the answer choices were in matrix format that included an open-ended answer box to provide additional information when "other" is chosen; the answer choices for the other eleven questions were in fully visible vertical format. These questions gathered information about respondents' computer use

frequency, locations, number of years, variety of programs, and comfort level. The data gathered from these questions was subjected to hierarchical cluster analysis to place respondents into groups of low computer experience, medium computer experience, or high computer experience.

Research has shown that level of education, sex, age, race, and income level have an effect on computer experience (National Telecommunications & Information Administration, 2000). Therefore, the demographic section consisted of six questions, five of which were in visible vertical format. These questions asked respondents about their education level, sex, age, and income level. In an open-ended format question, respondents were asked to enter their college major. Originally, all variables were going to be subjected to logistic regression analysis to determine the correlation between computer experience and the demographic variables and to predict primacy effect or satisficing. However, due to the lack of responses, the regression could not be run.

The regression statement was as follows:

Over and above the influences of age, sex, income level, and education level, computer experience regulates the amount of satisficing and primacy effect in online surveys.

$$Y1 = (a_1U1 \times a_2U2) + c_1EA + c_2IL + c_4G + c_5A$$

Y1 = primacy effect, satisficing

U1 = 1 if U1 is from a member of the low computer experience group, 2 if U1 is from a member of the medium computer experience group, 3 if U1 is from a member of the high computer experience group

U2 = depending on the format being tested, 1 if U2 is a survey format item expected to yield greater primacy effect or satisficing of the two formats used, 0 if U2 is a survey format item expected to yield lesser primacy effect or satisficing of the two formats used

EA = Educational attainment, 1 if less than postgraduate, 0 if postgraduate

IL = 1 if IL is low income level, 2 if middle income level, 3 if high income level

G = 1 if G is female, 0 if male

A = 1 if A is high age group, 2 if age is mid age group, 3 if age is low age group

Results

The response rate, although just about what is to be expected for online surveys, was low. As a result, there was not enough data to run the regression. Only 9 of the 27 alumni association chapter presidents responded, resulting in a 33.3% response rate. Unfortunately, with only three or four chapter presidents assigned to each survey, the distribution of respondents was zero respondents for survey two, one respondent each for surveys one, three and seven, and two respondents each for surveys four, five, and six. Data was combined from different surveys where possible to maximize the number of questions in each format, and yet, there was still not enough data to analyze. The lack of data made it impossible to exhibit variance in the different questionnaire item formats. However, the hierarchical cluster analysis could be conducted and demographics of the respondents could be examined. A basic

snapshot of the typical respondent is in the mid-income range, middle-aged or younger, possesses a post-graduate degree, and has middle to high computer experience levels. The demographics coincide with demographics reported in other research studies. A summary of the results is discussed below.

Computer Experience

Although not enough data was collected to analyze primacy effect and satisficing, valuable information was acquired from conducting the study. Since all respondents answered the computer experience and demographic questions, there was enough data to conduct the hierarchical cluster analysis to determine a computer experience score for each respondent.

The hierarchical cluster analysis was run with a range of two to three groups. The output table indicating cluster membership is shown below (see Table F1).

Case	3 Clusters	2 Clusters
1	Mid	Mid
2	Mid	Mid
3	Mid	Mid
4	Low	Low
5	High	Mid
6	High	Mid
7	High	Mid
8	Low	Low
9	High	Mid

Table F1 shows cluster membership when three clusters are determined and when two clusters are determined. It can be observed that if only two clusters are determined, all of the respondents that would be placed in the high cluster when three clusters are used are placed in the mid cluster when only two clusters are used.

The scores were cross-referenced using discriminant analysis to verify that the groups were valid. Discriminant analysis analyzes data groups to determine if the cases (respondents) were placed in the correct groups—in this case computer experience levels. All cases were correctly placed.

Other Demographic Variables

In addition to determining a computer experience score, other demographic variables were measured. These include educational attainment, age, race, gender, and income level. As expected, there was no variation in race. The distribution of the other demographics is displayed below.

Educational Attainment. Since the sample was from an alumni database, all respondents had some college experience. The greatest percentage (55.6%) had a post-graduate degree. Table F2 below shows the distribution.

Degree	Frequency	Percent
Four year	3	33.3
Post-graduate	5	55.6
Beyond post-graduate	1	11.1

Age. Most of the respondents were middle-aged (44.4%) or younger (44.4%).

Table F3 below shows the distribution.

Age category	Frequency	Percent
Up to 34	4	44.4
34 - 54	4	44.4
55 or above	1	11.1

Gender. The distribution of gender was fairly even, with 44.4% female and 55.6% male. Table F4 below shows the distribution.

Gender	Frequency	Percent
Female	4	44.4
Male	5	55.6

Income Level. The distribution of income level was also fairly even. The larger proportion of respondents had household incomes in the \$50,000 to \$100,000 range (44.4%), followed by the lower range of less than \$50,000 (33.3%), with the fewest in the upper range (22.2%). Table F5 below shows the distribution.

Household Income	Frequency	Percent
Less than \$50,000	3	33.3
\$50,000 to \$100,000	4	44.4
Greater than \$100,000	2	22.2

Summary

This study was conducted to determine if Internet survey respondents with little computer experience will exhibit greater primacy effect and satisficing on question formats that require greater use of the mouse and keyboard and on question formats that require more thought to complete or navigate than will Internet survey respondents with medium or high computer experience. This was attempted by sending the seven survey links to a sample of alumni from a southern U.S. public Masters I Historically Black College Or University (HBCU). Data was collected for approximately two weeks. Respondents received via e-mail a pre-letter, a letter with the initial link, and a reminder letter. Data was analyzed using hierarchical cluster analysis to determine groups of computer experience, and then groups were verified by discriminant analysis.

Although there was not enough data collected to conduct further analysis, this field study was valuable. The study provided a useful exercise for hands-on practice with coding data, entering data in the database in the most useful manner, and determining what analysis would be useful. This allowed for further consideration for analysis that might be used if more data were available. The study provided practice conducting analyses, showed where surveys needed revising, and helped make decisions about the appropriate analyses for the full study.

Appendix G: Tables

Table G1: Educational Attainment

Survey	Some college		Four-year degree		Attended graduate school		Post-graduate degree		Beyond post graduate degree		Did not answer	
	N	%	N	%	N	%	N	%	N	%	N	%
LVVP2N	--	--	26	37.7	16	23.2	21	30.4	5	7.2	1	1.4
LVVN2P	1	1.4	27	37.5	15	20.8	22	30.6	5	6.9	2	2.8
LVHP2N	--	--	19	35.2	15	27.8	14	25.9	3	5.6	3	5.6
LVHN2P	1	1.3	30	38.0	19	24.1	19	24.1	9	11.4	1	1.3
PDP2N	--	--	25	31.3	21	26.3	23	28.8	11	13.8	--	--
PDN2P	6	5.4	41	36.9	15	13.5	33	29.7	14	12.6	2	1.8
CAAF	2	2.6	31	39.7	13	16.7	26	33.3	6	7.7	--	--
CAAR	2	2.6	31	40.8	12	15.8	22	28.9	8	10.5	1	1.3
LMAT	1	1.4	38	53.5	11	15.5	15	21.1	6	8.5	--	--
OPEN	1	1.1	29	33.3	12	13.6	29	33.0	16	18.2	1	1.1
Total	14	1.8	297	38.2	149	19.2	224	28.8	83	10.7	11	1.4

Table G2: Educational Attainment

Survey	Undergraduate or less		Graduate school attendance or beyond	
	N	%	N	%
LVVP2N	26	38.2	42	61.8
LVVN2P	28	40.0	42	60.0
LVHP2N	19	37.3	32	62.7
LVHN2P	31	39.7	47	60.3
PDP2N	25	31.3	55	68.8
PDN2P	47	43.1	62	56.9
CAAF	33	42.3	45	57.7
CAAR	33	43.4	42	55.3
LMAT	39	54.9	32	45.1
OPEN	30	34.5	57	65.5
Total	311	40.5	456	59.5

Table G3: Major

Survey	Business		Computer Science and Technology		Criminal Justice		Education		Nursing		Social Work		Did Not Answer	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
LVVP2N	13	18.8	8	11.6	2	2.9	16	23.2	2	2.9	3	4.3	2	2.9
LVVN2P	13	18.1	4	5.6	7	9.7	16	22.2	1	1.4	4	5.6	3	4.2
LVHP2N	6	11.1	8	14.8	8	14.8	10	18.5	2	3.7	6	11.1	3	5.6
LVHN2P	17	21.5	6	7.6	9	11.4	12	15.2	5	6.3	4	5.1	4	5.1
PDP2N	16	20.0	10	12.5	5	6.3	17	21.3	--	--	3	3.8	1	1.3
PDN2P	25	22.5	11	9.9	10	9.0	26	23.4	5	4.5	5	4.5	1	0.9
CAAF	14	17.9	9	11.5	7	9.0	15	19.2	1	1.3	2	2.6	2	2.6
CAAR	19	25.0	9	11.8	3	3.9	11	14.5	1	1.3	3	3.9	1	1.3
LMAT	16	22.5	10	14.1	5	7.0	15	21.1	2	2.8	4	5.6	1	1.4
OPEN	21	23.9	14	15.9	6	6.8	13	14.8	3	3.4	3	3.4	1	1.1
Total	160	20.6	89	11.4	62	8.0	151	19.4	22	2.8	37	4.8	19	2.4

Table G4: Major, Other

Survey	Biology		Mass Communications		Political Science		Psychology		Public Administration		Assorted Other	
	N	%	N	%	N	%	N	%	N	%	N	%
LVVP2N	2	2.9	1	1.4	2	2.9	3	4.3	--	--	15	21.7
LVVN2P	2	2.8	4	5.6	4	5.6	2	2.8	2	2.8	10	13.9
LVHP2N	2	3.7	3	5.6	--	--	--	--	3	5.6	3	5.6
LVHN2P	7	8.9	4	5.1	3	3.8	2	2.5	1	1.3	5	6.3
PDP2N	3	3.8	2	2.5	5	6.3	--	--	4	5.0	14	17.5
PDN2P	3	2.7	4	3.6	5	4.5	4	3.6	1	0.9	11	9.9
CAAF	4	5.1	1	1.3	2	2.6	4	5.1	--	--	17	21.8
CAAR	5	6.6	5	6.6	2	2.6	4	5.3	--	--	13	17.1
LMAT	1	1.4	7	9.9	3	4.2	--	--	--	--	7	9.9
OPEN	4	4.5	2	2.3	1	1.1	2	2.3	1	1.1	17	19.3
Total	33	4.2	33	4.2	27	3.5	21	2.7	12	1.5	11 2	14.4

Survey	Under 34		34 to 50		Over 50		Did not answer	
	N	%	N	%	N	%	N	%
LVVP2N	34	49.3	30	43.5	4	5.8	1	1.4
LVVN2P	28	38.9	37	51.4	4	5.6	3	4.2
LVHP2N	19	35.2	24	44.4	6	11.1	5	9.3
LVHN2P	31	39.2	41	51.9	5	6.3	2	2.5
PDP2N	36	45.0	36	45.0	8	10.0	--	--
PDN2P	41	36.9	53	47.7	16	14.4	1	0.9
CAAF	30	38.5	41	52.6	7	9.0	--	--
CAAR	27	35.5	41	53.9	7	9.2	1	1.3
LMAT	30	42.3	36	50.7	5	7.0	--	--
OPEN	27	30.7	49	55.7	11	12.5	1	1.1
Total	303	38.9	388	49.9	73	9.4	14	1.8

Survey	Female		Male		Did not answer	
	N	%	N	%	N	%
LVVP2N	44	63.8	24	34.8	1	1.4
LVVN2P	49	68.1	20	27.8	3	4.2
LVHP2N	32	59.3	18	33.3	4	7.4
LVHN2P	47	59.5	30	38.0	2	2.5
PDP2N	49	61.3	30	37.5	1	1.3
PDN2P	73	65.8	36	32.4	2	1.8
CAAF	53	67.9	24	30.8	1	1.3
CAAR	50	65.8	25	32.9	1	1.3
LMAT	46	64.8	25	35.2	--	--
OPEN	62	70.5	25	28.4	1	1.1
Total	505	64.9	257	33.0	16	2.1

Survey	Less than \$50,000		\$50,001 to \$100,000		Over \$100,000		Did not answer	
	N	%	N	%	N	%	N	%
LVVP2N	27	39.1	27	39.1	14	20.3	1	1.4
LVVN2P	30	41.7	33	45.8	7	9.7	2	2.8
LVHP2N	24	44.4	18	33.3	9	16.7	3	5.6
LVHN2P	22	27.8	34	43.0	18	22.8	5	6.3
PDP2N	31	38.8	30	37.5	16	20.0	3	3.8
PDN2P	39	35.1	54	48.6	16	14.4	2	1.8
CAAF	28	35.9	35	44.9	12	15.4	3	3.8
CAAR	27	35.5	35	46.1	12	15.8	2	2.6
LMAT	24	33.8	40	56.3	6	8.5	1	1.4
OPEN	25	28.4	38	43.2	23	26.1	2	2.3
Total	277	35.6	344	44.2	133	17.1	24	3.1

Table G8: Do you have access to a computer at any of the following?

Survey	Home		Work		Library		Computer lab		Computer cafe		Other	
	N	%	N	%	N	%	N	%	N	%	N	%
LVVP2N	63	91.3	62	89.9	42	60.9	22	31.9	6	8.7	3	4.3
LVVN2P	65	90.3	64	88.9	49	68.1	30	41.7	15	20.8	4	5.6
LVHP2N	48	88.9	42	77.8	30	55.6	15	27.8	5	9.3	2	3.7
LVHN2P	75	94.9	72	91.1	53	67.1	28	35.4	20	25.3	1	1.3
PDP2N	75	93.8	74	92.5	59	73.8	32	40.0	19	23.8	7	8.8
PDN2P	95	85.6	98	88.3	81	73.0	45	40.5	17	15.3	12	10.8
CAAF	73	93.6	73	93.6	49	62.8	24	30.8	15	19.2	5	6.4
CAAR	72	94.7	65	85.5	48	63.2	25	32.9	15	19.7	6	7.9
LMAT	67	94.4	68	95.8	54	76.1	26	36.6	16	22.5	3	4.2
OPEN	85	96.6	79	89.8	63	71.6	33	37.5	18	20.5	6	6.8
Total	718	92.3	697	89.6	528	67.9	280	36.0	146	18.8	49	6.3

Table G9: How often do you use a computer?

Survey	Everyday		Once a Week		Monthly or less often	
	N	%	N	%	N	%
LVVP2N	64	92.8	5	7.2	--	--
LVVN2P	66	91.7	4	5.6	--	--
LVHP2N	49	90.7	5	9.3	--	--
LVHN2P	72	92.3	6	7.7	--	--
PDP2N	78	97.5	1	1.3	--	--
PDN2P	104	94.5	5	4.5	1	0.9
CAAF	75	96.2	3	3.8	--	--
CAAR	70	92.1	5	6.6	1	1.3
LMAT	71	100.0	--	--	--	--
OPEN	87	98.9	1	1.1	--	--
Total	736	95.2	35	4.5	2	0.3

Table G10: When did you first begin using a computer?

Survey	More than eight years ago		Four to eight years ago		Within the past one to three years	
	N	%	N	%	N	%
LVVP2N	59	85.5	9	13.0	1	1.4
LVVN2P	65	90.3	6	8.3	1	1.4
LVHP2N	42	77.8	11	20.4	1	1.9
LVHN2P	70	88.6	9	11.4	--	--
PDP2N	69	86.3	9	11.3	2	2.5
PDN2P	94	84.7	15	13.5	2	1.8
CAAF	67	85.9	10	12.8	1	1.3
CAAR	71	93.4	4	5.3	1	1.3
LMAT	63	88.7	8	11.3	--	--
OPEN	77	87.5	11	12.5	--	--
Total	677	87.0	92	11.8	9	1.2

Table G11: Do you engage in any of the following activities with a computer?

Survey	E-mail		Instant messenger		Surfing the Internet		Job and/or school work		Other	
	N	%	N	%	N	%	N	%	N	%
LVVP2N	68	98.6	42	60.9	67	97.1	65	94.2	9	13.0
LVVN2P	70	97.2	46	63.9	64	88.9	69	95.8	5	6.9
LVHP2N	52	96.3	32	59.3	49	90.7	48	88.9	4	7.4
LVHN2P	78	98.7	48	60.8	74	93.7	75	94.9	6	7.6
PDP2N	80	100.0	57	71.3	78	97.5	76	95.0	9	11.3
PDN2P	110	99.1	66	59.5	103	92.8	100	90.1	13	11.7
CAAF	78	100.0	48	61.5	74	94.9	73	93.6	10	12.8
CAAR	75	98.7	53	69.7	74	97.4	70	92.1	10	13.2
LMAT	71	100.0	44	62.0	70	98.6	68	95.8	7	9.9
OPEN	88	100.0	58	65.9	86	97.7	87	98.9	16	18.2
Total	770	99.0	494	63.5	739	95.0	731	94.0	89	11.4

Table G12: How often do you access your e-mail account(s)?

Survey	Every day		A few times a week		Once a month or less	
	N	%	N	%	N	%
LVVP2N	55	79.7	12	17.4	2	2.9
LVVN2P	58	80.6	14	19.4	--	--
LVHP2N	39	72.2	14	25.9	1	3.8
LVHN2P	58	73.4	18	22.8	3	3.8
PDP2N	68	85.0	12	15.0	--	--
PDN2P	86	77.5	24	21.6	1	0.9
CAAF	66	84.6	12	15.4	--	--
CAAR	66	86.8	10	13.2	--	--
LMAT	58	81.7	13	18.3	--	--
OPEN	75	85.2	11	12.5	2	2.3
Total	629	80.8	140	18.0	9	1.2

Table G13: Are you comfortable using any of the following types of software?

Survey	Internet browser		E-mail software		Word processing		Spread sheet		Gaming software		Additional Software	
	N	%	N	%	N	%	N	%	N	%	N	%
LVVP2N	66	95.7	67	97.1	65	94.2	52	75.4	36	52.2	6	8.7
LVVN2P	63	87.5	64	88.9	68	94.4	56	77.8	35	48.6	7	9.7
LVHP2N	50	92.6	47	87.0	49	90.7	40	74.1	30	55.6	1	1.9
LVHN2P	74	93.7	76	96.2	73	92.4	60	75.9	35	44.3	1	1.3
PDP2N	78	97.5	76	95.0	78	97.5	63	78.8	54	67.5	9	11.3
PDN2P	108	97.3	102	91.9	107	96.4	81	73.0	54	48.6	9	8.1
CAAF	75	96.2	68	87.2	71	91.0	60	76.9	42	53.8	3	3.8
CAAR	72	94.7	71	93.4	74	97.4	64	84.2	40	52.6	7	9.2
LMAT	68	95.8	67	94.4	67	94.4	58	81.7	36	50.7	3	4.2
OPEN	84	95.5	84	95.5	88	100.0	71	80.7	45	51.1	4	4.5
Total	738	94.9	722	92.8	740	95.1	605	77.8	407	52.3	50	6.4

Table G14: How comfortable do you feel using a computer?

Survey	Very comfortable		Somewhat comfortable		Not at all comfortable	
	N	%	N	%	N	%
LVVP2N	56	82.4	12	17.6	--	--
LVVN2P	64	88.9	6	8.3	--	--
LVHP2N	41	78.8	11	20.4	--	--
LVHN2P	63	80.8	15	19.2	--	--
PDP2N	73	92.4	6	7.6	--	--
PDN2P	82	75.2	27	24.8	--	--
CAAF	66	85.7	11	14.3	--	--
CAAR	67	89.3	8	10.7	--	--
LMAT	60	85.7	10	14.3	--	--
OPEN	73	84.9	13	15.1	--	--
Total	645	84.4	119	15.6	--	--

Table G15: In general, how would you classify your skill level with computers:

Survey	Great		Medium		Beginner	
	N	%	N	%	N	%
LVVP2N	32	47.1	34	50	2	2.9
LVVN2P	39	55.7	29	41.4	2	2.9
LVHP2N	29	55.8	20	38.5	3	5.6
LVHN2P	43	55.1	31	39.7	4	5.1
PDP2N	52	65.0	28	35.0	--	--
PDN2P	51	46.4	54	49.1	5	4.5
CAAF	38	49.4	37	48.1	2	2.6
CAAR	39	52.0	36	48.0	--	--
LMAT	43	60.6	26	36.6	2	2.8
OPEN	54	61.4	33	37.5	1	1.1
Total	420	54.6	328	42.7	21	2.7

Survey	I run two programs simultaneously, and have several windows open at the same time		I use the computer to run a few specific, pre-loaded programs		I need help with new programs	
	N	%	N	%	N	%
LVVP2N	45	67.2	18	26.9	4	6.0
LVVN2P	57	81.4	10	14.3	3	4.2
LVHP2N	40	76.9	9	17.3	3	5.8
LVHN2P	57	73.1	17	21.5	4	5.1
PDP2N	64	80.0	14	17.5	2	2.5
PDN2P	71	65.1	26	23.9	12	11.0
CAAF	60	76.9	13	16.7	5	6.4
CAAR	55	75.3	16	21.9	2	2.7
LMAT	56	78.9	14	19.7	1	1.4
OPEN	73	83.0	12	13.6	3	3.4
Total	578	75.5	149	19.5	39	5.1

Table G17: What is your level of achievement in file management?

Survey	I move files between folders and drives, and I maintain my network storage size within acceptable limits		I select, open and save documents on different drives		I do not save any documents I create using the computer	
	N	%	N	%	N	%
LVVP2N	35	51.5	30	44.1	3	4.4
LVVN2P	44	62.9	24	34.3	2	2.9
LVHP2N	26	51.0	23	45.1	2	3.9
LVHN2P	35	45.5	36	46.8	6	7.8
PDP2N	51	63.8	28	35.0	1	1.3
PDN2P	49	44.5	57	51.8	4	3.6
CAAF	44	57.1	33	42.9	--	--
CAAR	34	45.9	38	51.4	2	2.7
LMAT	40	56.3	29	40.8	2	2.8
OPEN	57	64.8	31	35.2	--	--
Total	415	54.2	329	43.0	22	2.9

Table G18: What is your level of achievement in word processing?

Survey	I edit, spell-check, and change the format of a document		I occasionally use a word processing program for simple documents		I do not use a word processing program	
	N	%	N	%	N	%
LVVP2N	56	82.4	8	11.8	4	5.9
LVVN2P	65	92.9	4	5.7	1	1.4
LVHP2N	44	88.0	4	8.0	2	4.0
LVHN2P	65	84.4	12	15.6	--	--
PDP2N	70	88.6	8	10.1	1	1.3
PDN2P	90	84.1	14	13.1	3	2.8
CAAF	67	85.9	8	10.3	3	3.8
CAAR	64	85.3	9	11.8	2	2.7
LMAT	63	90.0	5	7.1	2	2.8
OPEN	79	90.8	8	9.2	--	--
Total	663	87.1	80	10.5	18	2.4

Table G19: What is your level of achievement in spreadsheet use?

Survey	I use labels, formulas, cell references, and formatting tools in my spreadsheets		I create simple spreadsheets		I do not use a spreadsheet	
	N	%	N	%	N	%
LVVP2N	27	39.7	17	25.0	24	35.3
LVVN2P	33	47.8	25	36.2	11	15.3
LVHP2N	15	30.0	23	46.0	12	24.0
LVHN2P	30	39.0	27	35.1	20	25.3
PDP2N	47	58.8	18	22.5	15	18.8
PDN2P	39	35.8	41	37.6	29	26.6
CAAF	32	41.0	30	38.5	16	20.5
CAAR	33	44.6	27	26.5	14	18.9
LMAT	33	46.5	27	38.0	11	15.5
OPEN	45	51.1	26	29.5	17	19.3
Total	334	43.7	261	34.2	169	22.1

Table G20: What is your level of achievement in telecommunications use?

Survey	I follow links from sites to various Internet resources		I access school and district web sites to find information		I do not use the Internet	
	N	%	N	%	N	%
LVVP2N	63	94.0	4	6.0	0	0
LVVN2P	63	91.3	5	7.2	1	1.4
LVHP2N	44	88.0	6	12.0	0	0.0
LVHN2P	71	93.4	5	6.6	--	--
PDP2N	77	96.	3	3.8	--	--
PDN2P	102	93.6	7	6.4	--	--
CAAF	72	92.3	6	7.7	--	--
CAAR	69	92.0	6	8.0	--	--
LMAT	68	97.1	2	2.8	--	--
OPEN	79	89.8	9	10.2	--	--
Total	708	92.9	53	17.7	1	0.1

Table G21: What is your level of achievement in Internet use?

Survey	I check my e-mail account on a regular basis and maintain my mail folders in an organized manner		I send messages using e-mail—mostly to district colleagues, friends, and family		I have an e-mail account but I rarely use it	
	N	%	N	%	N	%
LVVP2N	57	83.8	9	13.2	2	2.9
LVVN2P	57	81.4	10	14.3	3	4.3
LVHP2N	40	80.0	8	16.0	2	4.0
LVHN2P	64	81.0	11	13.9	2	2.5
PDP2N	64	80.0	16	20.0	--	--
PDN2P	83	76.9	25	23.1	--	--
CAAF	61	78.2	15	19.2	2	2.6
CAAR	62	82.7	13	17.3	--	--
LMAT	54	77.1	15	21.4	1	1.4
OPEN	71	81.6	13	14.9	3	3.4
Total	613	80.3	135	17.7	15	2.0

Table G22: Overall Primacy Effect in Survey Questions		
Question	Pearson r	Significance
I am aware of district alumni chapter activities in my area.	.154	.072
I try to attend alumni chapter meetings.	.353	.000
Regarding the alumni chapter activities in my area, I am satisfied with:		
a. quality	.035	.689
b. variety	.039	.654
c. frequency	-.065	.456
I would like to see my chapter offer the following program choices:		
a. Featured campus-speakers	-.645	.000
b. Social events for club members	-.673	.000
c. Local cultural events	-.768	.000
d. Local sporting events	-.683	.000
e. Grambling State University sporting events	-.798	.000
f. Admissions receptions	-.713	.000
g. Send-off events for new students	-.694	.000

Table G22: Overall Primacy Effect in Survey Questions (Continued)		
Question	Pearson r	Significance
How satisfied are you with the following aspects of reunion?		
a. Class programs	.084	.355
b. General education programs	-.192	.034
c. Meals	-.137	.144
d. Housing	.043	.645
e. Length of reunion	-.039	.680
f. Pre-reunion information	.281	.002
g. Staff assistance and support	.003	.975
What homecoming opportunities would you like to see offered?		
a. Educational programs featuring professors	-.437	.000
b. Campus tours	-.702	.000
c. Panel discussions involving students, faculty, and administrators	-.594	.000
d. Social gatherings, including tailgates	-.764	.000
e. All-campus dinner	-.655	.000
f. Concerts, plays, musical affairs	-.786	.000
I am satisfied with Grambling State University's handling of legacy admissions	-.246	.004

Table G22: Overall Primacy Effect in Survey Questions (Continued)		
Question	Pearson r	Significance
How satisfied are you with the following characteristics of Grambling State University's merchandising program?		
a. Costs	-.255	.003
b. Variety of merchandise	-.151	.080
c. Availability	-.079	.365
Please rate the importance of each of the following. Rank the most important item "1."		
a. Alumni chapter activities	-.491	.000
b. Reunions	-.539	.000
c. Homecomings	-.644	.000
d. Alumni admissions activity	-.426	.000
e. Continuing education program	-.621	.000
f. Undergraduate training and relations	-.508	.000
g. Class efforts	-.435	.000
h. Travel programs	-.171	.053
i. Merchandising	-.295	.001
j. Alumni directory	-.333	.000
k. Athletic promotions	-.277	.001

Table G22: Overall Primacy Effect in Survey Questions (Continued)		
Question	Pearson r	Significance
How many different alumni events would you be willing to attend in one year?	-.812	.000
What is the best time for you to attend Grambling State University alumni events?	.525	.000
How do you prefer being invited to events?	-.030	.732
The most important reason to attend alumnae events is:	-.193	.027
How important is it for you to stay connected with former classmates?	-.697	.000
Which of the following factors hinder you from attending Grambling State University events?		
a. Costs	.202	.019
b. Distance	-.141	.103
c. Experiences at Grambling State University	.570	.000
d. Time	-.345	.000
e. Events are not appealing	.153	.079
f. Do not hear about them	-.598	.000
Overall, how satisfied are you with the information presented in <i>Visions Magazine</i> ?	-.217	.019
How likely would you be to subscribe to the magazine or recommend the publication to an alumnus or associate?	-.481	.000

Table G22: Overall Primacy Effect in Survey Questions (Continued)		
Question	Pearson r	Significance
When you receive <i>Visions Magazine</i> , how much of it do you usually read?	-.121	.242
When you receive <i>Visions Magazine</i> , do you usually	.205	.048
Typically, how long do you keep an issue of <i>Visions Magazine</i> ?	-.104	.366
In viewing/reading materials produced by the Office of Alumni Affairs, were they:		
a. Helpful	-.472	.000
b. Informative	-.504	.000
c. Appealing	-.381	.000
d. Relevant	-.416	.000
The Office of Alumni Affairs provides quality programs and services.	-.023	.801
The Office of Alumni Affairs provides invaluable information that keeps you informed about the university and its alumni.	-.066	.465
The Office of Alumni Affairs understands the needs of the alumni.	.006	.949
The Office of Alumni Affairs is an organization you can trust.	-.005	.956

Table G22: Overall Primacy Effect in Survey Questions (Continued)		
Question	Pearson r	Significance
The Office of Alumni Affairs staff goes out of its way to meet alumni needs.	.132	.145
Alumni staff treats you as if they care about you as an alumnus.	-.009	.917
How many times have you visited the Grambling State University web site in the past year?	.017	.849
At what level of support did you contribute to Grambling State University in 2004?	-.038	.664
I appreciate the education I received at Grambling State University.	-.696	.000
The financial needs of Grambling State University are compelling.	-.571	.000
I want to ensure a quality education for future students.	-.766	.000
I responded to a solicitation letter and/or phonathon call.	.020	.827
I responded to a volunteer solicitation request.	.137	.147

Table G22: Overall Primacy Effect in Survey Questions (Continued)		
Question	Pearson r	Significance
Listed below are some specific needs at Grambling State University to which donations could be directed. Please indicate those which you are most likely to support.		
Unrestricted annual fund	.162	.064
General endowment	-.204	.020
Academic programs	-.695	.000
Athletic support groups	-.368	.000
Financial aid	-.510	.000
Student residence construction/improvement	-.495	.000
Off-campus study group support	-.340	.699
Library book/periodical support	-.528	.000
Athletic facility construction/renovation	-.136	.199
Technology	-.662	.000
Facility support	-.477	.000
How important are the "perks" (i.e., dinners, special listings, invitations, etc.) to you in determining the amount of your support?	-.264	.002

Table G23: Primacy Effect in Check-All-That-Apply Survey Questions

Question	Pearson r	Significance
Satisfaction with alumni chapter activities in area	-.038	.639
Program choices alumni would like to see the chapter offer	.039	.631
Satisfaction with aspects of the reunion	.130	.109
Homecoming opportunities would like to see offered	.108	.184
Satisfaction with characteristics of Grambling State University's merchandising program	.025	.755
Importance of alumni chapter activities, reunions, homecomings, alumni admissions activity, continuing education programs, undergraduate training and relations, class efforts, travel programs, merchandising, alumni directory, athletic promotions.	-.139	.085
Best time to attend Grambling State University alumni events	.166	.039
How do you prefer being invited to events?	.007	.935
Important reason to attend alumnae events:	-.181	.025
Factors hindering attendance at Grambling State University events	.244	.002

Table G23: Primacy Effect in Check-All-That-Apply Survey Questions (continued)

Question	Pearson r	Significance
Materials produced by the Office of Alumni Affairs are helpful, informative, appealing, and relevant.	.062	.448
Strong attributes of the Office of Alumni Affairs:	-.076	.348
Reasons for giving:	-.045	.577
Likelihood of supporting specific needs at Grambling State University:	-.182	.024

Table G24: Satisficing in Survey Questions in Matrix Format

Question	t	Significance
Alumni chapter activities and meetings	-1.355	.178
I would like to see my chapter offer the following program choices	.505	.614
I am satisfied with the following aspects of the reunion	2.675	.009
What homecoming opportunities would you like to see offered?	-.316	.752
I am satisfied with the following aspects of Grambling State University's merchandising program	-.422	.674
Rate the importance of each	-.179	.858
Factors hindering attendance of Grambling State University events	.486	.628
Materials produced by the Office of Alumni Affairs	-.926	.357
Office of Alumni characteristics	-.611	.642
Reasons for giving	-1.709	.090
Support purposes	-.653	.514

Questions		
Statement or Question	t	Significance
I am aware of district alumni chapter activities I my area.	.149	.882
I would like to see my chapter offer the following program choices:	-.368	.715
I would like to see the following homecoming opportunities offered:	.283	.778
My level of satisfaction with Grambling State University's merchandising costs is:	.033	.974
My level of satisfaction with Grambling State University's merchandising variety is:	.033	.974
My level of satisfaction with Grambling State University's merchandising availability is:	.266	.791
How important are alumni chapter activities?	1.089	.279
How important are reunions?	-.040	.968
How important are homecomings?	1.542	.127
How important are alumni admissions activity?	-.060	.952
How important are continuing education programs?	-.320	.750
How important are undergraduate training and relations?	-.370	.712
How important are class efforts?	-1.079	.283

Table G25: Satisficing Versus Computer Experience in Open-Ended Survey		
Questions (continued)		
Question	beta	Significance
How important are travel programs?	-.810	.421
How important is merchandising?	1.035	.304
How important is the alumni directory?	.276	.783
How important is the athletic promotions?	-.200	.842
What factors hinder you from attending Grambling State University events?	-.378	.707
Please explain how <i>Visions</i> magazine can achieve its goal.	1.719	.089
Additional comments	.374	.709
Reasons for giving to Grambling State University:	.067	.794
Final comments	-.740	.464

REFERENCES

- Babbie, E. (1990). *Survey research methods* (2nd ed.). New York: Wadsworth.
- Bachmann, D., Elfrink, J., & Vazzana, G. (1999/2000). E-mail and snail mail face off in a rematch. *Marketing Research*, 11, 10-15.
- Bertot, J. & McClure, C. (1996). Electronic surveys: Methodological implications for using the World Wide Web to collect survey data. *Proceedings of the ASIS Annual Meeting, USA, 96*, 173-185.
- Best, S., Krueger, B., Hubbard, C., & Smith, A. (2001). An assessment of the generalizability of Internet surveys. *Social Science Computer Review*, 19, 131-145.
- Bosnjak, M. M. & Tuten, T. L. (2001). Classifying response behaviors in web-based surveys. *Journal of Computer-Mediated Communication*, 6(3). <http://ascusc.org/jcmc/vol6/issue3/boznjak.html>.
- Bowker, D. & Dillman, D. (2000, May). *An Experimental Evaluation of Left and Right Oriented Screens for Web Questionnaires*. Paper presented at the Annual Meeting of the American Association for Public Opinion Research, Portland, OR. Retrieved October 27, 2003 from <http://survey.sesrc.wsu.edu/dillman/papers/AAPORpaper00.pdf>
- Brennan, M., Rae, N., & Parackal, M. (1999). Survey-based experimental research via the web: Some observations. *Marketing Bulletin*, 10, 83-92.
- Chang, L. (2001). *A comparison of samples and response quality obtained from RDD telephone survey methodology and internet methodology*. Unpublished doctoral dissertation, The Ohio State University.
- Church, A. (1993). Estimating the effect of incentives on mail survey response rates: A meta-analysis. *Public Opinion Quarterly*, 57, 62-79.
- Cook, C., Heath, F., & Thompson, R. (2000). A meta-analysis of response rates in web or internet-based surveys. *Educational and Psychological Measurement*, 60, 821-836.
- Couper, M., Blair, J., & Triplett, T. (1999). A comparison of mail and e-mail for a survey of employees in federal statistical agencies. *Journal of Official Statistics*, 15, 39-56.

- Couper, M., Traugott, M. W., & Lamias, M. (2001). Web survey design and administration. *Public Opinion Quarterly*, 65, 230-253.
- Crawford, S., Couper, M., & Lamias, M. (2001). Web surveys: Perception of burden. *Social Science Computer Review*, 19, 146-162.
- Dillman, D. (1999). Mail and other self-administered surveys in the 21st century: The beginning of new era. *The Gallop Research Journal*, 2, 121-140.
- Dillman, D. (2000). *Mail and internet surveys: The total design method* (2nd ed.). New York: Wiley.
- Dillman, D. (2002, May). *Navigating the rapids of change: Some observations on survey methodology in the early 21st century*. Paper presented at the annual meeting of the American Association for Public Opinion Research, St. Petersburg, FL.
- Dillman, D. & Bowker, D. (2001). The web questionnaire challenge to survey methodologists. In U. Reips & M. Bosnjak (Eds.), *Dimensions of internet science* (pp. 495-525). Lengerich, Germany: Pabst Science Publishers.
- Dillman, D. & Christian, L. (2002). *The Influence of Words, Numbers, and Graphics on Answers to Self-Administered Questionnaires: Results from 18 Experimental Comparisons*, Retrieved October 27, 2003. from http://survey.sesrc.wsu.edu/dillman/papers/single_space_fig_table.pdf
- Dillman, D., Phelps, G., Tortora, R., Swift, K., Kohrell, J., & Berck, J. (2001). *Response rate and measurement differences in mixed mode surveys using mail, telephone, interactive voice response and the Internet*. Unpublished manuscript, Washington State University.
- Dillman, D., Tortora, R., and Bowker, D. (1998). *Principles for Constructing Web Surveys*. (SESRC Rep. No. 98-50). Pullman, Washington: Washington State University, Social and Economic Sciences Research Center.
- Dillman, D., Tortora, R., Conradt, J., & Bowker, D. (1998, August). *Influence of plain vs. fancy design on response rates of web surveys*. Paper presented at American Statistical Association Joint Statistical Meetings, Dallas, TX.
- Fox, R., Crask, M., & Kim, J. (1988). A meta-analysis of selected techniques for inducing response. *Public Opinion Quarterly*, 52, 467-491.
- Gasman, M., & Anderson-Thompkins, S. (2003). *Fund Raising From Black College Alumni: Successful Strategies for Supporting Alma Mater*. Washington, DC: Council for Advancement and Support of Education.

- Hallowell, C., Patel, R., Bales, G., & Gerber, G. (2000). Internet and postal survey of endourological practice patterns among American urologists. *The Journal of Urology*, *163*, 1779-1782.
- Heberlein, T., & Baumgartner, R. (1978). Factors affecting response rates to mailed questionnaires: A quantitative analysis of the published literature. *American Sociological Review*, *43*, 447-462.
- Hertz, K., Zook, E., Chitwood, K., O'Carroll, P., & Friede, A. (1996, April). *E-mail versus phone: Is there a winner? Experiences from the field*. Paper presented at Survey 1996 conference. Retrieved April 9, 2003, from <http://www.ai.mit.edu/projects/iip/conferences/survey96/hertz/wonder.html>
- Jenkins, C., & Dillman, D. (1995). The language of self-administered questionnaires as seen through the eyes of respondents. In *Statistical Policy Working Paper 23: New Directions in Statistical Methodology*, (pp. 470 – 516). Washington, DC: U.S. Office of Management and Budget.
- Kehoe, C., Pitkow, J., Sutton, K., Aggarwal, G., & Rogers, J. (1999). *GVU's WWW users surveys: Results of GVU's tenth world wide web user survey*. Retrieved March 13, 2003, from http://www.gvu.gatech/user_surveys/survey-1998-10/tenthreport.html.
- Kennedy, J., Kuh, G., & Carini, R. (2000, May). *Web and mail surveys: Preliminary results of comparisons based on a large-scale project*. Paper presented at the meeting of the American Association for Public Opinion Research, Portland, OR.
- Kiesler, S., & Sproull, L. (1986). Response rates in electronic survey. *Public Opinion Quarterly*, *50*, 402-413.
- Kittleson, M. (1997). Determining effective follow-up of e-mail surveys. *American Journal of Health Behavior*, *21*, 193-196.
- Krosnick, J. (1991). Response Strategies for coping with the cognitive demands of attitude measures in surveys. *Applied Cognitive Psychology*, *5*, 213-236.
- Krosnick, J. & Alwin, D. (1987). An evaluation of cognitive theory of response order effects in survey measurement. *Public Opinion Quarterly*, *51*, 201.
- Krosnick, J., Holbrook, A., Berent, M., Carson, R., et al. (2002). The impact of "no opinion" response options on data quality: Non-attitude reduction or an invitation to satisfice? *Public Opinion Quarterly*, *66*, 371-403.

- Krosnick, J., Narayan, S., & Smith, W. (1996). Satisficing in surveys: Initial Evidence. In Braverman, M. & Slater J.(Eds.) *Advances in Survey Research* (pp. 29-44). San Francisco: Jossey-Bass Publishers.
- Marvis, B., & Brocato, J. (1998). Postal surveys versus electronic mail surveys: The tortoise and the hare revisited. *Evaluation & The Health Professions, 21*, 395-408.
- Matz, C. (1999). *Administration of Web versus paper surveys: mode effects and response rates* (Report No. IR019968). East Lansing, MI: National Center for Research on Teacher Learning. (ERIC Document Reproduction Service No. ED439694).
- Narayan, S., & Krosnick, J. (1996). Education moderates some response effects in attitude measurement. *Public Opinion Quarterly, 60*, 58-88.
- National Telecommunications & Information Administration study (as cited in Best, Krueger, Hubbard & Smith, 2001).
- Oppermann, M. (1995). E-mail surveys: Potentials and pitfalls. *Marketing Research, 7*, 29-33.
- Paolo, A., Bonaminio, G., Gibson, C., Partridge, T., & Kallail, K. (2000). Response rate comparisons of e-mail and mail-distributed student evaluations. *Teaching and Learning in Medicine, 12*, 81-84.
- Redline, C. & Dillman, D. (1999, April). *The influence of auxiliary, symbolic, numeric, and verbal language on navigational compliance in self-administered surveys*. Retrieved April 9, 2003, from <http://survey.sesrc.wsu.edu/dillman/papers/Auxilliary.Symbolic.numeric%20paper--with%20Cleo.pdf>
- Schaefer, D. & Dillman, D. (1998). Development of a standard e-mail methodology: Results of an experiment. *Public Opinion Quarterly, 62*, 378-397.
- Schuldt, B., & Totten, J. (1994). Electronic mail vs. mail survey response rates. *Marketing Research, 6*, 36-39.
- Sheehan, K., & McMillan, S. (1999). Response variation in e-mail surveys: An exploration. *Journal of Advertising Research, 39*, 45-54.
- Shermis, M., & Lombard, D. (1999). A comparison of survey data collected by regular mail and electronic mail questionnaires. *Journal of Business and Psychology, 14*, 341-354.

- Shonlau, M., Fricker, Jr., R., & Elliott, M. (2002). *Conducting research surveys via e-mail and the web*. Santa Monica, CA: Rand.
- Solomon, David J. (2001). *Conducting Web-Based Surveys*. College Park, MD: ERIC Clearing House on Assessment and Evaluation. (ERIC Document Reproduction Service No. ED458291).
- Sproull, L. (1986). Using electronic mail for data collection in organizational research. *Academy of Management Journal*, 29, 159-169.
- Tourangeau, R. (1984). Cognitive sciences and survey methods. In T. Jabine, M. Straf, J. Tanur, and R. Tourangeau (Eds.), *Cognitive Aspects of Survey Methodology: Building a Bridge Between Disciplines*, (pp. 73-100). Washington, DC: National Academy Press.
- Tse, A. (1998). Comparing response rate, response speed and response quality of two methods of sending questionnaires: E-mail vs. mail. *Journal of the Market Research Society*, 40, 353-362.
- Tse, A., Tse, K., Yin, C., Ting, C., Yi, K., Yee, K., & Hong, W. (1995). Comparing two methods of sending out questionnaires: E-mail vs. mail. *Journal of the Market Research Society*, 37, 441-446.
- White, G. (1996). An on-line survey of food and beverage consumers on the internet: An evaluation of the survey methodology. *Marketing Research On-Line*, 1, 39-59.
- Witte, K. (1998). Best practices in interviewing via the Internet. *Proceedings of Sawtooth Software Conference*, Sequim, Washington, 15-37.
- Zhang, Y. (2000). Using the Internet for survey research: A case study. *Journal of the American Society for Information Science*, 51, 57-68.