“We thought it might encourage participation.” Using lottery incentives to improve LibQUAL+™ response rates among students

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Libraries deploying the LibQUAL+™ survey can offer a lottery incentive and many do so in the hope of increasing response rates. Other libraries may be prohibited from offering one because of Institutional Review Board restrictions, as is the case at Oregon State University. We wanted to discover why libraries offer lottery incentives, what kinds of incentives, and if they believe these incentives have a positive impact on their response rates. The responding libraries hold a general belief that lottery incentives are effective, but base this on feeling rather than research. We examine what the literature says about lottery incentives and student populations.

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Introduction

> “*Our incentive prize was an iPad and it generated a great deal of excitement around campus. The iPad was highlighted in the subject line of the targeted emails.*” — Survey Respondent

It is a decision that every administrator who conducts LibQUAL+™ needs to make: Will a prize be offered for completing the survey? We asked this question in the Fall of 2010 as Oregon State University got ready to administer the survey in the Winter of 2011. Although we originally planned to offer a lottery incentive, we had to abandon this idea when we discovered our university's Institutional Review Board (IRB) office had implemented a new rule forbidding the use of lottery incentives in March of 2010.[1] Our assumption, like that of many researchers on our campus, has always been that lottery incentives would increase our response rates, yet the research provided by the IRB office indicated otherwise. Our frustration with this new rule, a low response rate after administering LibQUAL+™, and the research cited by the IRB office led us to question the assumption we had that lottery incentives help increase response rates. This article will provide an overview of the literature on incentives, discuss what is known about the impact of pre-paid and post-paid incentives on response rate, and present the opinions of 2010 LibQUAL+™ administrators about the effectiveness of post-paid lottery incentives.

Background

As part of ongoing assessment efforts Oregon State University Libraries decided to implement LibQUAL+™ in 2011. LibQUAL+™ is “a suite of services that libraries use to solicit, track, understand, and act upon user's opinions of service quality”.[2] The LibQUAL+™ survey was developed by Fred Heath, Colleen Cook, and Bruce Thompson at Texas A&M University along with the Association of Research Libraries (ARL). Approximately 200 libraries around the world implement LibQUAL+™ each year. The LibQUAL+™ survey instrument can be administered in long form, 22 core survey items, or short (LibQUAL+™ Lite) form which requires individual users to respond to a randomly selected subset of the 22 core survey items while still gathering data about all 22 LibQUAL+™ items. The survey also records demographic information about the participant. One of the decisions a survey administrator has to make when setting up the LibQUAL+™ survey is whether to offer a lottery incentive, an option which can be turned on or off within the survey

software. When this option is implemented respondents may enter their email address at the end of the LibQUAL+™ survey for a chance to win a prize.

Literature Review

A substantial portion of the literature on survey methodology is focused on improving survey response rates, which have been on the decline.[3] One popular method for improving response rates is the use of incentives. Although the literature covers both mail and web-based survey administration and incentives, LibQUAL+™ is an online survey, and we will focus our literature review on the topic of incentives used with web-based surveys and their effectiveness.

Pre-paid Incentives

There are two primary forms of incentives that have found favor with survey researchers. The first is pre-paid incentives that are usually paid to all potential participants, regardless if the participant completes the survey. The amounts are generally small and include cash ranging from $1 to $5 or small gift items such pens or notepads.[4] Pre-paid incentives are frequently used in mail-based surveys but administering pre-paid incentives for online surveys can present a challenge as cash cannot be emailed to the potential respondents.[5] One possible method includes using web-based services such as PayPal.com to transfer money to people online.[6]

Post-paid Incentives

Post-paid incentives may be monetary or nonmonetary and are either paid to every participant upon completion of the survey or the participants are entered into a lottery drawing for a larger prize or significant cash award. Post-paid incentives offered to all participants are by necessity small amounts or gifts similar to pre-paid incentives.[7] Post-paid lottery incentives are frequently used in online surveys because of the difficulties web-based surveys present in providing pre-incentives.[8] Lottery incentives in web-based surveys generally fall in the range of $15 to $350 and often take the form of gift certificates, rather than cash.[9] Some studies have offered non-cash prizes, such as iPods, iPads, or DVD players.[10]

Effectiveness of Lottery Incentives

Pre-incentives are generally considered the most effective form of incentive for mail-based surveys but are not as common in web-based surveys where lottery incentives are more popular.[11] The results of studies on the impact of lottery incentives on response rates for web-based surveys have produced conflicting results.[12] Early studies on web-based surveys have used data from research on mail surveys and attempted to apply the results to web-based surveys, yet there is evidence that what works in a mail survey is not generalizable to online surveys.[13] Heerwegh concluded that unlike mail surveys, web survey response rates apparently benefit from lotteries in a relatively consistent way.[14] Similarly, Deutskens, de Ruyter, Wetzels, and Oosterveld state that "lotteries are probably the most effective reward in an online environment as they lead to the highest response rate in the short version and still a respectable response rate in the long version".[15] A 2003 study found pre-paid incentives on a web-based survey did not increase response rates, while a post-paid lottery incentive did increase completion rates.[16] However, other researchers have not found lottery incentives to be particularly effective in increasing response rates in web-based surveys.[17] Cook, Heath, and Thompson reported in a meta-analysis of surveys that incentives could even potentially suppress response rates.[18]

Incentives and College Students

The literature on the impact of lottery incentives on higher education students' willingness to respond to a survey is quite limited. The only research to date on the impact of lottery incentives on web-based surveys taken by college students in the United States was conducted by Laguilles, Williams, and Saunders. In this study, a random sample of college students was divided into five groups with four different surveys and a control group. The authors experimented with different amounts for lottery incentives, including ten $50 gift certificates to the dining hall, two iPod Nanos, and an iPod Touch. They found lottery incentives had a positive impact on all four surveys.[19]

Other studies on the effect of incentives on students were conducted by Heerwegh, who surveyed over 2000 Belgian students enrolled in a "full-time first year curriculum" and Sánchez-Fernández et al., who surveyed over 1600 undergraduate students at a Spanish university.[20] Heerwegh offered 10 gift certificates of 25€ each and found evidence that a lottery incentive has an "overall positive effect on the response rate of the web survey".[21] However, Sánchez-Fernández et al. offered fuel or transportation coupons as pre-incentives and lottery incentives ranging in value from 120€ to 350€, but did not find that lottery incentives improved response rates.[22]

Despite the inconclusive nature of the evidence about lottery incentives and their effect on web surveys, lottery incentives remain popular among researchers using web-based surveys particularly in higher education where all students have email addresses and check them regularly.[23]

Methodology

We developed the LibQUAL+™ Incentives Survey to find out why LibQUAL+™ administrators do or do not offer incentives, what types of incentives are offered, and their perceptions of the effectiveness of lottery incentives on response rates for the LibQUAL+™ survey.

We developed a 25-item questionnaire and deployed it using Qualtrics survey software. The survey was administered to all 124 US and Canadian (English language only) academic libraries (excluding community colleges) that participated in LibQUAL+™ in 2010. An email invitation along with a link to the survey was sent directly to LibQUAL+™ survey administrators on May 16, 2011 with one reminder email sent one week later and a second sent after four weeks; the survey was open for six weeks. The contact information for survey administrators was obtained from the Association of Research Libraries (ARL).

Data from the 124 institutions was obtained through the LibQUAL+™ data repository and included: institution name, response rate broken down by population potential respondent pool size, and survey (LibQUAL+™ Lite or LibQUAL+™) used. This data was then merged with the Incentives Survey responses using Qualtrics.

Results

Twenty-nine of the 124 LibQUAL+™ 2010 survey administrators completed the Incentives Survey, a return rate of 31%. Because of the small population and response rate, the closed-ended questions' results should be viewed with some caution as the sample cannot be generalized to all LibQUAL+™ participants. However, the answers to open-ended questions provide insight and those results are discussed throughout this section.

All of the responding libraries were 4-year institutions; 22 U.S. libraries and 7 Canadian libraries completed the survey. Of the institutions in the United States, 9 were private and 13 were public. All of the responding Canadian libraries were public institutions. The responding institutions ranged from small to large based on the Carnegie classification, as seen in Table 1.

The type of survey used, type of incentive offered, and amount spent by each of the institutions are reported in Appendix A. Libraries can offer the long version, lite version, or a combination of both. Most of the responding institutions administered the Lite version of LibQUAL+™ as illustrated in Table 2.

When an institution prepares to deploy the LibQUAL+™ survey, survey administrators have the option to offer a post-paid lottery