

Lower Response Rates on Alumni Surveys Might Not Mean Lower Response Representativeness

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Abstract

The purpose of this research is to explore some possible issues with response representativeness in alumni surveys. While alumni surveys can provide important information, they often have lower response rates due to bad contact information and other reasons. In this study we investigate potential differences between responses on the National Survey of Student Engagement (NSSE) from the cohorts of graduating seniors from 2000, 2005, 2006, 2007, 2008, and 2009 and those same cohorts of alumni responding to the Strategic National Arts Alumni Project (SNAAP) in 2010 at six diverse institutions. A series of chi-squared analyses were done for each of the six cohort years. Findings indicate that the demographic characteristics and institutional satisfaction of alumni respondents closely mirror those of the graduating seniors. The results from this study suggest that even though response rates on alumni surveys might be lower, the results may be just as representative as studies with much higher response rates.

Key words: representativeness; response rates; alumni; surveys

Lower Response Rates on Alumni Surveys Might Not Mean Lower Response Representativeness

As budgets keep getting tighter in the current economy and funding to higher education institutions continues to be cut, colleges and universities are often required to show measures of their effectiveness (Kuh & Ewell, 2010). Since surveys are used to inform a multitude of areas within higher education (Kuh & Ewell, 2010; Kuh & Ikenberry, 2009; Porter, 2004), alumni satisfaction surveys have become an important tool utilized for program and institutional assessment (Furedi,

2011; Marsh & Dunkin, 1992). Alumni surveys can provide information not only on student satisfaction, but also acquired skills, strengths and weaknesses of the institutional experience, and current career attainment. While alumni surveys provide performance indicators for institutions, there are concerns that come along with alumni surveys as well.

As with all surveys and in particular alumni surveys, one of the biggest concerns is low response rates. In fact, over the last decade response rates on all kinds of surveys have been falling (Atrostic, Bates, Burt, & Silberstein, 2001; Baruch, 1999; Porter, 2004). Alumni surveys often have lower response rates than other types of surveys because of bad contact information and other reasons, such as suspicion of money solicitation or decreased loyalty after graduation (Smith & Bers, 1987). While so much of the literature has focused on how to increase response rates (Dillman, 2000; Edwards, Roberts, Clarke, DiGuseppi, Pratap, Wentz, & Kwan, 2002; Porter & Whitcomb, 2005), response rates may not be the ultimate issue. The question is really whether these lower response rates are leading to data that are not representative of the opinions of all of the graduates of an institution. Thus, response representativeness is an even more important concern than response rates (Cook, Heath, & Thompson, 2000; Krosnick, 1999).

The problem with using representativeness as a measure of data quality is that one can only compare the respondents to the population based on demographics and information that is readily available about the population. Many of the topics for which researchers would like to test response representativeness are not easy to find at the population level. Therefore, this research takes a slightly different approach to explore the possible issues with response representativeness in alumni surveys. Because low response rates have long been an issue in alumni surveys

(Smiths & Bers, 1987), but response rates to student surveys can be much higher (NSSE 2010 Overview, 2010), this research study compares key characteristics and two substantive questions concerning opinions on institutional satisfaction from six cohorts of graduating seniors and then the same cohorts one to five years after graduation as well as 10 years after graduation.

Method

While many studies compare demographics between respondents and the populations (Dillman, 2000; Suskie, 1996) or compare the responses of early responders to late responders for the same survey (Menachemi, Hikmet, Stutzman, & Brooks, 2006), this study has the unique opportunity to compare respondents to an alumni survey, which have notoriously bad response rates because of the poor contact information and other issues, to respondents from the same population to a college student survey, which may not be all respondents in the population but is much closer because of much higher response rates. In addition because of the parallel nature of some of the questions on these particular student and alumni surveys, the study can explore not only demographics, which are available for the population, but substantive questions as well that are not available for the population.

Participants

In this study, we use the responses on the National Survey of Student Engagement (NSSE) from the cohorts of graduating seniors from 2000, 2005, 2006, 2007, 2008, and 2009 and those same cohorts of alumni responding to the Strategic National Arts Alumni Project (SNAAP) in 2010. This study includes six diverse institutions that participated in SNAAP in 2010 and NSSE in all the corresponding senior years. SNAAP also surveys those 15 and 20 years after graduation,

but NSSE was launched in 2000 so no corresponding data was available for those alumni cohorts.

Since NSSE was first administered in 2000, more than one million first-year and senior students at more than 1,500 colleges and universities have responded to the annual survey (NSSE 2012 Overview, 2012). Students are asked questions about their engagement inside and outside of the classroom. Since SNAAP only surveys arts alumni, only NSSE data from graduating seniors majoring in the corresponding arts programs were used in this study. There were almost 600 respondents spread evenly across the six cohort years and the six institutions. The average NSSE institutional response rate for these six institutions was about 40% (ranging from 35% to 69%), which is consistent with most NSSE institutions.

SNAAP is a multi-institution online alumni survey designed to obtain knowledge of arts education. The 2010 SNAAP participants were 13,581 alumni from 154 different arts high schools and undergraduate and graduate colleges or arts programs within larger universities. For this study, the 1,290 undergraduate respondents from the six corresponding NSSE schools were included. More SNAAP respondents were available because SNAAP invites all alumni to participate while NSSE used a random sampling method until 2010. The average SNAAP institutional response rate for these six institutions was just over 20% (ranging from 17% to 34%), which is consistent with most SNAAP institutions. Both NSSE and SNAAP institutional response rates can be seen below in Table 1.

Table 1 *NSSE & SNAAP Response Rates by Institution*

	NSSE 2000	NSSE 2005	NSSE 2006	NSSE 2007	NSSE 2008	NSSE 2009	SNAAP 2010
Institution 1	34%	32%	35%	31%	31%	34%	18%
Institution 2	41%	47%	54%	53%	39%	43%	22%
Institution 3	68%	56%	64%	49%	53%	51%	34%
Institution 4	69%	56%	54%	56%	51%	53%	43%
Institution 5	52%	47%	64%	53%	59%	54%	35%
Institution 6	32%	27%	29%	28%	30%	30%	17%

The graduating seniors at any one of the six institutions responded at a rate that was double and in some cases more than twice the response rates of the SNAAP alumni survey. While the NSSE response rates were not 100% and in some cases were as low as 35%, NSSE respondents were representative of the population on key characteristics with the exception of gender. Female graduating seniors responded at a higher rate than their male counterparts. This is not uncommon in survey research (Sax, Gilmartin, & Bryant, 2003; Underwood, Kim, & Matier, 2000). For each institution, NSSE response rates are fairly constant across years of participation with the exception of Institutions 3 and 4, which experienced a decrease consistent with findings in the literature (Atrostic et al., 2001; Baruch, 1999; Porter, 2004).

Materials

The measures were limited to the questions that appear on both the NSSE instrument and the SNAAP questionnaire. The set of questions were included in the two larger surveys administered to participants online. For both surveys, email invitations were sent to participants with a link to the survey.

Variables

When looking at representativeness, most studies look at demographics, because this information is readily available about the population that is being surveyed. The first set of factors to be compared were five student characteristics that included: gender, race/ethnicity, U.S. citizenship status, parent's education, and age. Gender was a dichotomous variable for male/female, as was whether or not a respondent was a U. S. citizen, and whether or not a student or alumni had at least one parent with a baccalaureate degree. Race/ethnicity was a categorical variable with seven racial/ethnic options. These categories were American Indian, Asian or Pacific Islander, Black or African American,

White, Hispanic, multiracial, or other. Finally, age was a continuous variable.

In addition to these student characteristics, two non-demographic questions were on both NSSE and SNAAP. These questions both asked about institutional satisfaction. Participants were asked to rate their institutional experience using a four-point scale from “Poor” to “Excellent.” The second item inquired whether or not they would attend the same institution if they had it to do all over again on a four-point scale from “Definitely no” to “Definitely yes.”

Analyses

A series of six chi-squared analyses and one t-test was done for each of the six cohorts. The chi-squared analyses were used for the dichotomous and categorical variables and the t-test was done for the continuous variable of age. An adjustment was also made when testing age to account for the fact that the alumni respondents in the same cohort year should have aged by the number of years that had passed since they were graduating seniors. These analyses compared the responses of the NSSE graduating seniors to the SNAAP alumni in the same cohort.

Results

All six chi-squared tests showed no statically significant differences between the gender, race/ethnicity, citizenship, parental education, or level of satisfaction of the graduating seniors and the alumni from the corresponding cohort year. This pattern was consistent across all six cohort years.

In contrast, the results of the t-test analyses showed a few statistically significant differences between the graduating seniors and the alumni in the same cohort years later for three of the six cohorts. For the 2000 cohort, even after accounting for the ten year time passage between the time they took the NSSE 2000 survey as graduating seniors and SNAAP as alumni in 2010, the SNAAP respondents were slightly older

than their NSSE counterparts ($t = 2.24, p < .05$). Even though this has statistical significance, the practical effect for this difference was small in magnitude ($d = .35$) (Cohen, 1988). The same pattern is seen in the 2005 cohort, and even after accounting for the five year time difference, the SNAAP respondents were slightly older than their NSSE counterparts ($t = 2.12, p < .05$) and the effect size for this difference was small as well ($d = .34$). The third cohort year with significantly older respondents on SNAAP was the 2007 cohort year ($t = 4.18, p < .05$). The practical difference of the two means was again smaller in magnitude according to Cohen's definition ($d = .43$). The average age differences for the remaining three cohort years were not statistically significant.

Discussion

In contrast with alumni surveys, surveying students while they are still in college may be easier because the mailing and email addresses for the students are up to date. The results discussed previously would suggest that lower response rates do not necessarily mean those responding to an alumni survey differ all that greatly from those who respond to a current student survey, at least for the arts alumni at these six institutions. The NSSE response rates for the graduating seniors at any one of the particular six institutions were double and in some cases more than twice the response rates on the SNAAP alumni survey, and yet the students' characteristics and institutional satisfaction were not significantly different between the graduating senior respondents and the alumni respondents. Even the differences in age, some of which were statistically significant, were not practically significant.

Although the age differences were not consistently significant, one might still speculate on potential reasons for

these differences. The significant results indicated that older students were less likely to respond to NSSE. Non-traditional students, who do not attend college on the same timeframe as most students, immediately following completion of high school, may end up enrolling as part-time students due to work or family obligations. Previous research suggests that a majority of part-time senior students work over 20 hours a week, and spend more time caring for dependents (NSSE 2006 Annual Report, 2006). Due to this range of outside responsibilities, non-traditional students may be less likely to invest the extra time required to respond to a student survey. However, once students become alumni, nearly all have acquired the additional responsibilities of work and family, making age less of a factor in their willingness to respond to SNAAP.

In alumni survey research, there is a concern that bad addresses might bias the institutional satisfaction toward the positive end of the spectrum, because only alumni who were satisfied with their experience would keep their information up to date with their institutions. However, the findings of this study indicate that this is not a prominent concern. NSSE email addresses are available for all participants, whereas with SNAAP nearly a third of all alumni do not have email addresses (Interpreting Your 2012 SNAAP Results, 2013). Yet in spite of this, those responding to the SNAAP alumni survey do not seem to be reporting different levels of satisfaction from those responding to NSSE.

These findings suggest that using alumni surveys could provide quality data that is more representative than the low response rates would suggest. Assessment and accountability decisions should probably not be made solely on data from alumni surveys, but the responses given by alumni could be an important additional piece of evidence. Perhaps alumni surveys should be a tool in every assessment toolbox, but not the only tool.

Limitations

While this study has many strengths, some limitations should also be noted. Data came from only six institutions that chose to participate in SNAAP and NSSE for the six corresponding years and for SNAAP only from alumni with contact information. In addition, only arts graduating seniors and alumni were used here so caution must be used when making generalizations to other major fields. Also, the variables used in the study could only be items that appeared on both the NSSE and SNAAP surveys, although these questions did include some about institutional satisfaction that are not usually available for both populations. Furthermore, as most survey research does, this study relied on self-reported perceptions of satisfaction, which may not be completely objective. However, most studies looking at student self-reports in higher education suggest that self-reports and actual abilities are positively related (Anaya, 1999; Hayek, Carini, O'Day, & Kuh, 2002; Laing, Sawyer, & Noble, 1988; Pace, 1985; Pike, 1995). Another possibility could be that while similar to one another, neither the student nor the alumni samples are representative of the entire population. However, this study focuses on whether or not the bad addresses and lower response rates of alumni surveys make them more biased than those studies where good contact information is available and higher response rates result. This possibility once again affirms the need for multiple sources of data before assessment and accountability decisions can be made.

Conclusions

When considering the quality of data from alumni surveys, so often administrators and researchers focus on response rates and lose sight of the more relevant question of representativeness. The results from this study suggest that

even though response rates on alumni surveys might be lower, the results may be just as representative as studies with much higher response rates. However, it should be noted that further research still needs to be done. Creative ways to get more information about non-respondents on substantive information, such as the two satisfaction questions explored here, is needed. The fact that this sample was limited to only arts alumni warrants an expansion of the participants in order to make any generalizations to institution-wide alumni projects. Alumni surveys can provide important pieces of information for assessment and accountability. Therefore, more longitudinal data is needed to allow researchers to explore representativeness of student factors and opinions that are more complex than basic demographics and characteristics.

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