Are We Missing Too Many Alumni with Web Surveys? (Part 2)
by Peter B. Wylie, with John Sammis

I’m writing the intro for this “sequel” the day after our presidential election. The day the pollsters (and the pollster "aggregators" like Nate Silver) got it so wrong. The idea for this project, of course, was born long before those late night results that left us all shaking our heads in bewilderment. But Trump's unanticipated victory and alumni web surveys have a connection. At the very least, both are examples of how efforts to measure opinions can miss far too many types of people.

Some Background
The first piece we wrote on this was several years ago. If you could read it (or re-read it), that’d be great:

https://cooldata.wordpress.com/2012/03/28/are-we-missing-too-many-alumni-with-web-surveys/

But if not, here’s a summary that should help:

We looked at data from four higher education institutions spread out across North America; two were private, and two were public. We assumed that if any of these schools wanted to conduct an alumni web survey, they would need an email address to invite each alum to go to a website to complete the survey. Any alum without an email address could not be invited.

We found that if any of these four schools conducted a web survey by only contacting alums with an email address, none of the schools would reach lots of alums whose opinions they probably wanted to gather.

Some specifics:
• One school would have missed 40% of alums who had graduated in 1974 or earlier. That’s a lot of senior folks who were still alive and kicking and probably had firm views about some of the issues contained in the survey.

• For another school, even **considering** doing a web survey would have been a bad idea. Fewer than 20% of their alums who graduated in 1998 or earlier had an e-mail address listed in the database.

• At all four schools, the lifetime giving rates between alums with and without an email address were **strikingly** different. The former **far** out-gave the latter. Therefore any web survey would have automatically targeted more generous donors. Donors whose attitudes towards their alma mater would likely be … Well, you get the idea.

**An Opportunity to Dig Deeper**

So, how about the sequel? Several months ago, we had the good fortune to receive data from a medium size North American university that had just done an alumni web survey. For each of well over 100,000 living alums, we had access to lots of variables. Variables that allowed us to go far beyond the analyses we had done in Part 1. A few examples:

• Who participated in the survey and who did not
• Whether the alum could have received an email invitation to participate in the survey
• The gender of the alum
• A very accurate measure of each alum’s age
• The marital status of the alum
• Whether or not the alum had ever attended an event after graduation
• Whether or not the alum had RSVP’d to an event invitation
• Whether or not the alum was the spouse of another alum
• Total lifetime giving of the alum

With these data we could look at differences among three distinct sets of alums:

• Some 54,000 alums who had no opportunity to participate in the survey (because there was no email address in the alumni database for any of them)
• More than 3,000 alums who were invited to participate in the survey and did respond
• Almost 75,000 alums who were invited to participate in the survey but did not respond

Foraging through these data was an analyst’s dream. If you get a chance to do some similar foraging, do it. You’ll have a ball.

The problem with this piece is that we can’t show you everything we found. It would take forever to put something like that together. More importantly, we’d lose most of you before you got a quarter of the way through it.

So here’s what we did. We looked at differences among the three groups with respect to age, events attended, and giving. We’ll show you what we found. Then we’ll voice some strong opinions.

Age

Table 1 shows the median age as well as the minimum and maximum ages for ten roughly equal size groups from the total population of alums in the data file. Just to be clear, you’ll see that the youngest group has a median age of 25 where every person falls between ages 22 and 27. The oldest group has a median age of 74 where every person falls between ages 69 and 105.

<table>
<thead>
<tr>
<th>AGE RANGES</th>
<th>Count</th>
<th>MEDIAN AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>22-27</td>
<td>13,946</td>
<td>25</td>
</tr>
<tr>
<td>28-31</td>
<td>11,647</td>
<td>30</td>
</tr>
<tr>
<td>33-35</td>
<td>12,794</td>
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<td>36-40</td>
<td>15,323</td>
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<td>41-44</td>
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<td>50-54</td>
<td>12,737</td>
<td>52</td>
</tr>
<tr>
<td>55-60</td>
<td>12,971</td>
<td>57</td>
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<td>61-68</td>
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</tr>
<tr>
<td>69-105</td>
<td>12,590</td>
<td>74</td>
</tr>
</tbody>
</table>
Here’s where things start to get interesting. Take a look at Figure 1.

What’s going on here? Why was it that only about 150 alums between the ages of 22 and 27 could not have been invited to participate in the survey, while thousands and thousands of older alums could not have been invited?

The answer lies in Figure 2.
This chart reveals something very similar to what we found several years ago: **The older an alum is, the less likely you are to reach that alum by email.** (We’ll come back to this issue later on.)

Now we’ll look at the age distribution for the small group of alums who did participate in the survey. But let’s remind ourselves that this is a **very** small group. It represents less than 3.0% of the entire living alumni database. And it represents less than 5.0% of all the alums who could have been invited (by email) to participate in the survey.

Here’s the age distribution for the small group of responders:
It looks as if the youngest group (22-27) is somewhat overrepresented, but not terribly so.

Now let’s look at the age distribution of the alums who were invited to respond but did not.
Wow! This looks very different from Figure 1 that shows the alums who could not have been invited to participate in the survey. So you don’t have to scroll back, we’ve created Figure 5 that shows the age distribution for both groups side by side.
To put things simply: The alums who could not be reached are underrepresented by younger people and overrepresented by older people. Just the reverse is true of the alums who could be reached: they are overrepresented by younger people and underrepresented by older people. (More about this later.)

**Event Attendance**

Attendance at events after graduation is a variable that has become generally recognized as a measure of alumni engagement in higher education. People who come back to school for reunions, homecomings, and the like are considered to be...
more “engaged” in the goings on of their college or university than people who don’t come back. Nothing startling about that.

Okay, so far, with this school, we’ve seen that the people who can respond to an alumni web survey (whether they do or not) are much younger (on the whole) than people who can’t respond. Well, how about event attendance? How do the three groups we’re focusing on compare on that measure?

Take a look at Figures 5-7. Then we’ll tell you what we see.

Fig. 6: PERCENTAGE OF ALUMS BY AGE (WHO COULD NOT BE INVITED TO PARTICIPATE IN ONLINE SURVEY) WHO HAD EVER ATTENDED AN EVENT AFTER GRADUATION
Fig. 7: PERCENTAGE OF ALUMS BY AGE (WHO WERE INVITED TO PARTICIPATE IN ONLINE SURVEY BUT DID NOT RESPOND) WHO HAD EVER ATTENDED AN EVENT AFTER GRADUATION

Fig. 8: PERCENTAGE OF ALUMS BY AGE (WHO WERE INVITED TO PARTICIPATE IN ONLINE SURVEY AND DID RESPOND) WHO HAD EVER ATTENDED AN EVENT AFTER GRADUATION
Frankly, before we did the analysis that lead to these charts, we expected to see differences among these three groups. But this much difference? No. Not this much. Without going into detail, the alums who could not be invited to participate in the survey were far, far less likely to have attended an event (regardless of their age) than alums who could participate in the survey. (Regardless of whether they did or did not respond.)

**Giving**

Is giving to one’s alma mater a measure of engagement? Believe it or not, some folks would actually say, “No, giving is separate. Things like event attendance and volunteering are measures of engagement. Not giving.” With all due respect, we disagree. Actually, we’re not at all respectful of that opinion. We think it’s bullshit. If you’re an alum and you give your school money, you’re engaged with the institution.

For this piece we arbitrarily picked a dichotomous measure of giving. Whether or not an alum had given $1,000 or more lifetime to the school. Take a look at Figures 9-11.
Fig. 9: PERCENTAGE OF ALUMS BY AGE (WHO COULD NOT BE INVITED TO PARTICIPATE IN ONLINE SURVEY) WHO HAD \textit{GIVEN} \ $1,000 \ OR \ MORE \ LIFETIME

![Bar chart showing percentage of alums by age.]

Fig. 10: PERCENTAGE OF ALUMS (WHO \textit{WERE} INVITED TO PARTICIPATE IN ONLINE SURVEY BUT DID NOT RESPOND) WHO HAD \textit{GIVEN} \ $1,000 \ OR \ MORE \ LIFETIME

![Bar chart showing percentage of alums by age.]

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What we see here is not unlike what we saw with event attendance. The alums who could not be invited to participate in the survey were far, far less likely to have given $1,000 or more lifetime (regardless of their age) than alums who could participate in the survey. (Regardless of whether they did or did not respond.)

So Where Are We Here?

As we close out this chapter in our look at alumni web surveys, we’d like to cover two topics:

- What our mounting evidence about alumni web surveys is indicating
- Some suggestions based on that evidence for schools that have done (and that plan to do) alumni web surveys
What the Evidence Is Indicating

If you read the piece we wrote several years ago as well as this piece, you’ve seen lots of detailed evidence. That’s a good thing. Sound applied science needs specific details. Those details not only make the results more believable, but they also allow others to reproduce those results and possibly even refute them.

But what’s the big picture, the bottom line, of all the results we’ve been conveying? We think it’s simple: Alumni web surveys simply miss far too many people who are different in many ways from the people who are not missed. Anyone who ignores that fact is simply putting his or her head in the sand.

Suggestions for Schools That Have Done and/or Plan to Do Alumni Web Surveys

We're not experts on surveying. Surveying's a vast field with a vast methodological literature going back at least 75 years. If you're into analytics and have decided to make a career of it, we'd encourage you to explore that literature – even if you have to wade through articles and books that won't exactly keep you awake and flipping pages.

No, we're not survey experts, but we do feel comfortable making suggestions in two areas:

- Questions you should be asking potential web survey vendors
- Analyses you can do with data that you can get from a vendor after you do a web survey

Questions to Ask Survey Vendors

Firms that do web surveys are unlikely to dwell on the shortcomings we've been focusing on in this piece. So ask questions like:

- "What about the alums who are automatically excluded from web surveys because they can't be reached by email? What do you do about them?"
• "Generally speaking, what percentage of the entire alumni database can't you reach because these alums don't have an email address?"

• "What are the typical response rates you get from the alums you can reach?"

• "Generally speaking, what are the differences you find between responding and non-responding alums? For example, how do they differ on age, giving amounts, and event attendance?"

Our bet is that all the firms you talk to will struggle with these questions. That's okay. We get that. What we'd pay attention to is the honesty and straightforwardness of their answers. For example, a simple: "We don't know; we need to look into that" is way better than simply not answering the question and circling back to "pitch points."

**Analyses You Can Do With Survey Vendor Data**

The firm you will hire or have hired to do a survey should have a unique ID number for each alum who was emailed to participate in a given survey. That ID should be the same ID you use in your general alumni database. If it is not the same ID, it should be "matchable" with your general ID number.

If that is the case, you can go crazy with all kinds of interesting analyses that go far beyond what we've shown you here. For example, let's just focus on the folks who responded to the survey. You can look at the relationship between all the items (questions) in the survey and age, giving lifetime, giving over the last five years, volunteer participation, marital status, and on and on the list can go.

We know full well that the daily demands on your time will tend to push this kind of analysis aside. That's just life in the real world of educational advancement. So, sneak it in where you can. It'll be well worth the effort.