The Impact of Greeting Personalization on Estimates of Sexual Assault Victimization

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Abstract

Although personalized invitations tend to increase response rates in web surveys, little is known about how personalization impacts data quality. To evaluate the impact of personalization on response rates and survey estimates of sensitive items, we conducted an experiment to compare the effects of personalized and generic greetings in a survey on an extremely sensitive topic: sexual assault victimization. Bivariate analyses were used to determine whether or not greeting personalization led to significant differences in response rates (by sex) and whether victimization estimates differed by greeting personalization. Bivariate analyses indicate that personalization increased response rates for all students and that female respondents to the personalized greeting reported significantly lower victimization rates than female respondents to the generic greeting. Further study is needed to assess whether differences in victimization are due to under-reporting by victims or true differences in the responding populations.

Introduction

As part of the Campus Climate Survey Validation Study (CCSVS) (Krebs et al., 2016) which aimed to develop a valid and reliable methodology for campus climate surveys, we conducted an experiment intended to guide recommendations regarding recruitment messages for future efforts. The experiment compared personalized and generic greetings in emails to students inviting them to participate in the survey. The ultimate goal of the experiment was to determine the impact of the conditions on survey response rates and sexual assault victimization rates.

In general, there are two broad categories of greetings: (1) a generic greeting, and (2) a personalized greeting. A generic greeting uses a salutation that can be applied to all sample members (e.g., "Dear Student"). The generic greeting has the advantage of emphasizing respondents' anonymity. This advantage may help respondents to feel comfortable answering questions about sensitive topics honestly. However, because the greeting is not tailored to the individual sample member, he or she may feel less invested in participating. Therefore, the generic greeting has the disadvantage of producing lower response rates.

A personalized greeting uses the respondent's name or other personal information (e.g., "Dear John"). This approach has been identified as an effective means to increasing response rates (e.g., Cook et al., 2000). This could be due to a number of reasons, such as the greeting's potential to: (1) decrease the perceived distance between researcher and respondent, (2) signal that the respondent is unique and important to the study, and (3) indicate the authenticity of the survey and its sponsor (Dillman et al, 2014).

In addition to impacting response rates, personalized greetings may also impact estimates in surveys of sensitive topics—it is not clear if sample members may hesitate to either respond or to respond honestly. In other words, a personalized greeting may downwardly bias estimates. Existing literature on the impact of a personalized greeting on estimates is mixed. Some studies have found that the personalized greeting reduces self-disclosure on sensitive items (Joinson, Woodley, & Reips, 2004) or increases socially desirable responding (Heerwegh et al., 2005); however other studies have been unable to replicate these findings (e.g., Heerwegh, 2005; Heerwegh & Loosveldt, 2006). Moreover, it is not clear if any differences found in the outcome of interest are actually due to the greeting or due to differences in the response rates caused by the different greetings. Randomization will control for any differences among initial sample members allowing for simple comparisons of the response rates. However, when comparing the outcome measure, the initial randomization will not control for any differences in the response propensities due to the different greeting types. Therefore, to accurately assess the impact of greeting on the outcome of interest, any differences in response need to be taken into account.

Because the literature is unclear on the exact impact that a personalized greeting would have on response rates and reporting victimization compared to a generic greeting, two hypotheses were formed:

1. That the personalized greeting would result in a higher response rate than the generic greeting, and

2. Once controlling for differences in response, the victimization rates would not differ across respondents who received the personalized greeting and the generic greeting.

Methods

The CCSVS included nine U.S. institutions of higher learning. Data were collected via a web survey during the spring of 2015, with five of the nine institutions included in the greeting experiment. Because school context is likely to influence the effects of personalization, it is necessary to vary the conditions within each of the participating schools to rule out the possibility of school characteristics being responsible for any observed variability in the conditions. Therefore, rather than assigning all sampled students in a given school to receive one condition and then comparing this against the other condition at another school, the experimental conditions were varied within each participating school. The experiment was implemented to evaluate the impact of personalization on response rates and survey estimates.

A total of 20,302 sample members across five schools were randomly assigned to receive either a personalized greeting ("Dear [Fill: First Name]") or a generic greeting ("Dear [Fill: School Name] Student") in their survey invitation and reminders. Within each participating school, the sample was stratified by sex of the student, based on student rosters provided by each school. In order to ensure an equal number of males and females be assigned to each treatment group, the randomization was conducted within stratum. As shown in Table 1, the experiment was powered to detect small differences in both response (3.03% or less) and victimization (2.18% or less) rates.

Table 1. Minimum detectable differences in response and sexual assault rates for the greeting experiment, by sex

	Females		Males	
	N	Minimum Detectable Difference	N	Minimum Detectable Difference
Response Rates	11,823	2.54 %	8,479	3.03 %
Sexual Assault Rates	6,971	2.18	3,828	1.50

Note: Detectable difference calculations assume a two-sided Pearson's chi-squared test with alpha = 0.05 and 80% power. Observed sample sizes, response rates, and victimization rates were used in the calculations, and detectable differences shown are in the direction of the observed difference.

Following data collection, bivariate tests were conducted by sex to determine whether or not observed differences in response rates and sexual assault victimization rates were statistically significant. All estimates took into account the stratified random sampling design and were calculated using unweighted data. Tests were conducted using unweighted data because these experiments were testing differences among respondents rather than trying to make inferences about the entire student population. Because the experiment was randomized and every sampled student had an equal chance of being assigned to either the personalized or generic greeting conditions, observed significant differences in response rates can be attributed directly to the assigned greeting. However, if response rates differ across greeting conditions, respondent populations could differ (i.e., different greetings could encourage more or less participation by particular subgroups of the population). For this reason, observed differences in victimization outcomes could be due to either (1) different respondent characteristics (e.g., if the personalized greeting brought more freshmen into the sample and freshmen are more likely to be victimized, then victimization rates in the personalized greeting condition would be higher than the generic greeting condition), or (2) differences in reporting patterns due to concerns about confidentiality (e.g., if the responding populations are similar and actually have the same victimization status, but the personalized greeting suppresses reporting among victims). Because of the confounding between response and victimization patterns, bivariate analyses do not give a complete understanding of the effects of a personalized greeting on victimization, and further assessments are needed.

Results

Of the sampled students, 6,971 females and 3,828 males participated in the survey, for unweighted response rates of 59% for females and 45% for males (AAPOR RR3; AAPOR, 2015). The personalized greeting led to significantly higher survey response rates for both males and females (Table 2). For both sexes, survey response rates were about 3.5 percentage points higher for students who were randomized to receive the personalized greeting than the generic greeting. Based on the bivariate test, victimization rates were significantly lower, though only slightly, for females who received the personalized greeting. There was no significant difference for males.

Table 2. Comparison of response rates and sexual assault rates, by greeting assignment and sex, 2014–2015 academic year

	Generic[a]			Personalized		
	Number	**Percent**	**SE**	**Number**	**Percent**	**SE**
Response						
Males	1,819	43.3 %	0.3 %	2,009	46.9 %*	0.3 %
Females	3,382	57.2	0.1	3,589	60.7 *	0.1
Victimization						
Males	65	3.6	0.1	68	3.4	0.1
Females	443	13.1	0.1	441	12.3 *	0.1

Note: SE = standard error.
[a] Reference group.
* Personalized rate is significantly different than generic rate at the alpha = 0.05 level.

Discussion

The personalized greeting increased response rates as anticipated, but estimated victimization rates were lower for the personalized than the generic greeting conditions. As previously discussed, this could be due to either differences in the responding populations or that personalization may have reduced the likelihood that females who had experienced sexual assault victimization would participate in the survey or would report their victimization experiences openly if they did participate.

We present here bivariate analyses only, and because of the significant difference in the response rates, it is likely that properties of the randomization (i.e., equal numbers of students across person characteristics) do not hold for the victimization comparison. Therefore, to control for potential differences between respondents in the two experiment groups, a multivariate model should be conducted. Preliminary findings from a model-based assessment that controlled for the characteristics of responding students found that there was no significant difference in victimization rates when taking into account characteristics of the responding students (Krebs et al., 2016). While more detailed study is needed, this would suggest that the bivariate differences in victimization rates are due to the characteristics of responding students rather than suppressed reporting of victimization due to the personalized greeting.

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