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Should the Word "Survey" Be Avoided in Email Invitation Messaging?

Raeal Moore, PhD

Introduction

The wording of email invitations requesting respondents' participation in a survey has the potential to impact the data collected.[1] Research shows that a short invitation message,[2] with the survey URL towards the top of the invitation[3] and an explicit indication of a short time estimate for survey completion[4] all positively affect response rates relative to when these invitation design elements are excluded.

Evidence also suggests that email subject line messaging affects response rates. An authoritative subject line ("MSU Vice President asks you to take a survey")—as compared to one with a higher subject matter salience ("Take an MSU survey on campus environmental stewardship")—improves response rates.[5] Likewise, a plea request ("Please help us to make improvements") improves response rates relative to a subject line that poses a question ("Would you like to provide your feedback?").[6] Similarly, Trouteaud (2004)[7] indicated that a simple "Please help" resulted in a higher response rate than when the subject line presented an offer ("Share your advice" or "Take some of your time to share").

To the author's knowledge, little research has been conducted to determine whether including the word "survey" in either the invitation message or the subject line has a differential impact on response rates. This investigation is particularly salient because when ACT Survey Research (ACT SR) sends a survey invitation, the word "survey" is typically excluded from the messaging in an attempt to avoid flagging the email as spam. In the past, ACT SR had encountered situations in which spam filters had been shown to flag such messages and prevent them from arriving in email inboxes. ACT SR therefore implemented two experimental studies to determine whether the inclusion or exclusion of the word "survey" in the email invitation messaging had a differential impact on response rates.

Experiment 1

Students who took the ACT® test were invited to participate in an online survey about their test taking experience (N = 50,000). To study the relationship between invitation messaging and survey participation, an equal number of students was randomly assigned to one of two groups based on whether the word "survey" was included

Raeal Moore is a senior research scientist specializing in survey methodological research and research on education best practices in P–12 schools.

or excluded in the email invitation. Figure 1 presents a sample invitation message illustrating the inclusion of the word "survey." The invitation message that excluded the word "survey" replaced it with the word "questions." A total of 2,242 students participated in the survey.[8] Three research questions were investigated.

Research Question 1: Does including the word "survey" in the invitation message decrease the number of students who open the email?

Of central importance was determining whether including the word "survey" in the invitation message increased the number of emails flagged as spam. Given that the collection of these data was not possible, the number of emails opened was used as a proxy indicator. Figure 2 illustrates the number of respondents, by survey behavior and whether the word "survey" was included or excluded in the invitation message.

Almost twice as many students opened the email when the word "survey" was included in the invitation message (n = 6,073; 24%) than when it was excluded (n = 3,619; 14%). This difference in response pattern was statistically significant (X^2 (1) = 813.46, $p.$ < .05) and had a small effect size associated with it (φ = .13).[9] Not only did emails that included the word "survey" successfully reach their destinations, but they were also associated with higher open rates. Including the word "survey" therefore did not decrease the number of students who opened the email but rather increased it.

Research Question 2: Does including the word "survey" in the invitation message increase the number of students who complete the survey?

Since including the word "survey" in the invitation message increased the number of students who opened the email, our second research question sought to identify whether this invitation message also increased the

Dear Student,

ACT is very interested in your opinions of the ACT test. By answering a few brief survey questions, you can provide important information that will guide us in our efforts to [purpose of survey described here].

The survey, which should take approximately 7-10 minutes to complete, can be found at the following site:

${l://SurveyURL}

ACT will not ask you to buy anything based on your survey responses, and no one will contact you as a result of your participation. Your responses will be kept strictly confidential and reported in group form only.

We thank you for your time and look forward to your candid input.

Sincerely,

ACT Product Management Team

Figure 1. Including the word "survey" in the email invitation

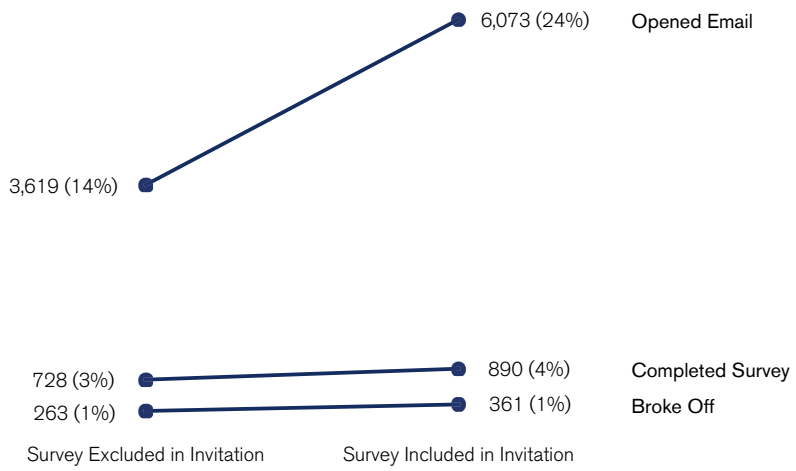


Figure 2. Number of responses, by survey behavior and invitation message type

number of students who completed the survey. Figure 2 displays the number of students who completed the survey and the number of students who broke off before completion. There were slightly more students (n = 890; 4%) who completed the survey when the invitation included the word "survey" than the number who completed the survey when it was excluded (n = 728; 3%). This difference in completion rates was statistically significant (X^2 (1) = 16.76, $p.$ < .05), but had little practical significance (φ = .02). Statistically speaking, completion rates were higher when students received an invitation message with the word "survey" included relative to when the word was excluded. The magnitude of this difference (d = 162) was virtually non-existent, implying that the statistical difference was most likely due to the large sample size. Interestingly, those students who received an invitation with the word "survey" included had a higher break off rate (n = 361; 1%) relative to those students who had the word excluded

(n = 263; 1%); however, this difference was neither statistically (X^2 (1) = 1.48, p. > .05) nor practically significant (φ = .03). Including the word "survey" in the invitation message did not necessarily increase the number of students who completed the survey nor did it influence whether students broke off from participating.

Research Question 3: Do the response patterns before and after the reminder message is received differ for those students who received the word "survey" in the invitation message, versus the response patterns for those students who receive the invitation message with the word "survey" excluded?

A total of 2,242 students responded to at least one survey question (i.e., those students who completed the survey or broke off before completion); these students were included in this analysis. Figure 3 presents the percentage of students who answered at least one survey question, disaggregated by whether participation occurred before or after the reminder message was received and by whether or not the student received the invitation message with the word "survey" included.

The results demonstrate that there were differential response rate patterns for those students who responded to the survey before and after the reminder message was received. When the invitation message included the word "survey," a higher response rate occurred before the reminder message (61%) than after it (39%). The inverse pattern emerged when students received an invitation message excluding the word "survey." A smaller percentage of students responded to the survey before the reminder message (43%) than after it (57%). This difference in response patterns for the two invitation message types was statistically significantly (X^2 (1) = 73.57, p. < .05) and had a small effect size (φ = .18).

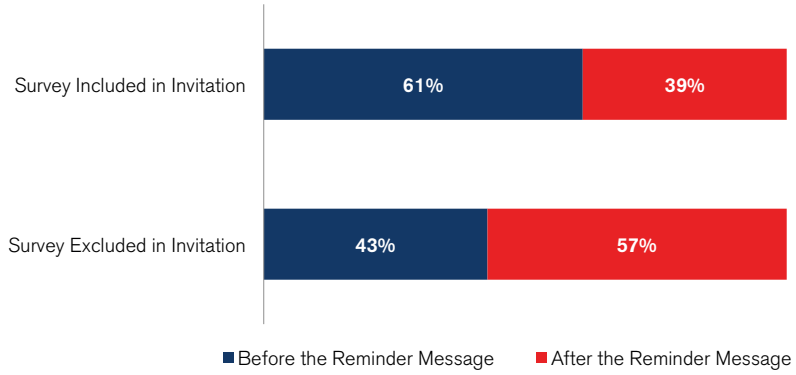


Figure 3. Percentage of responses, by invitation message type and reminder message status

	Subject Line	
Invitation Message	The word "survey" included	The word "survey" excluded
The word "survey" included	11,350	11,350
The word "survey" excluded	11,350	11,350

Figure 4. Random assignment of students to four experimental groups

Summary

Three research questions were investigated to determine whether including or excluding the word "survey" in the invitation message produced differences in response rates. Differences emerged. Including the word "survey" in the invitation message increased the number of students who opened the email and the number of students who completed the survey. A total of 162 more students completed the survey when the invitation message explicitly articulated what was being asked of them. This gain in the number of students who completed the survey was statistically but perhaps not practically significant. Furthermore, differences in response patterns by invitation message type before and after the reminder message was received also appeared. These results suggest that if there is no time to administer a reminder message, including the word "survey" in the original email invitation is important to obtain a higher response rate.

Experiment 2

Since the first experiment showed that including the word "survey" in the invitation message increased the likelihood of opening the email invitation, the second experiment strove to first replicate the effects on response rates when including or excluding the word "survey" in the invitation message and, second, to expand this question and determine whether including and excluding the word "survey" in the subject line also impacts response rate patterns.

Students who took the ACT® test in February 2016 were invited to participate in an online survey about how they prepared for the ACT (N = 45,400). To study the relationship between invitation messaging and survey participation, students were randomly assigned to one of four groups, based on whether the word "survey" was included in the email invitation and in the subject line. Figure 4 shows these four groups and the number of students randomly assigned to each group.

Figures 5a and 5b present a sample invitation message and subject line illustrating the inclusion and exclusion of the word "survey." A total of 7,204 students responded.[10] Three research questions were investigated.

Research Question 1: Does including the word "survey" in the email invitation and/or subject line influence the percentage of students who answer at least one question in the survey?

Figure 6 presents the percentage of respondents classified into one of the four invitation message groups. The results showed that when the word "survey" was included in either the invitation message or the subject line, the percentage of students who answered at least one survey question was higher than when it was excluded from both. The largest response rate (17.1%) was when the subject line included the word "survey" but the invitation message did not. This survey pattern was followed by including the word "survey" in the invitation message only (15.6%) and including the word "survey" in both the invitation message and subject line (15.4%). The smallest response rate was when students received an invitation and subject line message that excluded the word "survey" entirely (15.3%). These differences in response patterns are statistically significant (X^2 (3) = 17.86, p. < .05), but the effect size associated with them is negligible (φ = .02). Including the word "survey" in the invitation messaging did not have a meaningful impact on response rates, although including the word in the subject line increased response rates by approximately two percentage points relative to when the word "survey" was excluded from both the subject line and the invitation message.

Subject: Please help us by completing this survey!

Dear {First Name},

Thank you for recently taking the ACT assessment. We would like to ask you to complete a survey [purpose of the study described here]. Ultimately, we hope that the answers you provide will help us to [purpose of the study described

The survey, which should take approximately 5 minutes to complete, can be found here:

${l://SurveyURL}

ACT will not ask you to buy anything based on your survey responses, and no one will contact you as a result of your participation. Your responses will be kept strictly confidential and reported in group form only.

We thank you for your time and look forward to your candid input.

Sincerely,

ACT

Figure 5a. Including the word "survey" in the email invitation and subject line

Subject: Please help us!

Dear {First Name},

Thank you for recently taking the ACT assessment. We would like to ask you just a few questions about [purpose of the study described here]. Ultimately, we hope that the answers you provide will help us to [purpose of the study described here].

The questions, which should take approximately 5 minutes to complete, can be found here:

${l://SurveyURL}

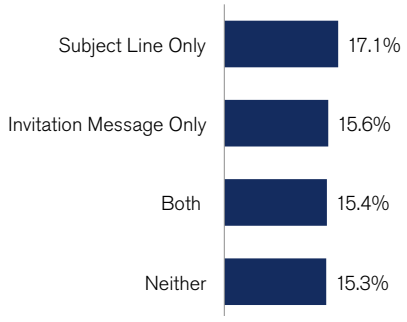
ACT will not ask you to buy anything based on your responses, and no one will contact you as a result of your participation. Your responses will be kept strictly confidential and reported in group form only.

We thank you for your time and look forward to your candid input.

Sincerely,

ACT

Figure 5b. Excluding the word "survey" in the email invitation and subject line

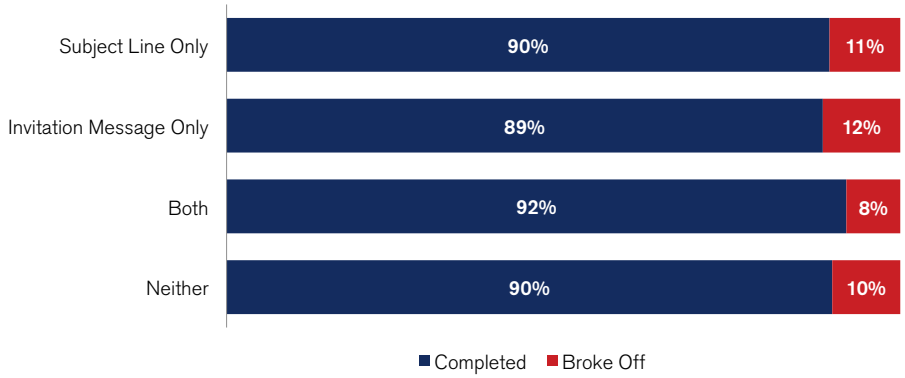


Note: Subject Line Only = only the subject line included the word "survey" (n = 1,941); Invitation Message Only = only the invitation message included the word "survey" (n = 1,772); Both = both the invitation message and the subject line included the word "survey" (n = 1,751); Neither = neither the invitation message nor the subject line included the word "survey" (n = 1,739).

Figure 6. Response rates, by invitation messaging

Research Question 2: Does including the word "survey" in the email invitation and/or subject line increase the percentage of students who complete the survey?

Figure 7 summarizes the percentage of students who completed the survey or who broke off the survey by invitation messaging type. There was a larger percentage of students who completed the survey when the invitation message and subject line included the word "survey" relative to the other three invitation messaging groups. This difference was statistically significant (X^2 (3) = 14.21, $p.$ < .05), but the effect size associated with it was negligible (φ = .02). Including the word "survey" in the invitation message and the subject line did not appear to improve the completion rates. The inclusion of the word "survey" in these messaging locations did not decrease the completion rates, either.

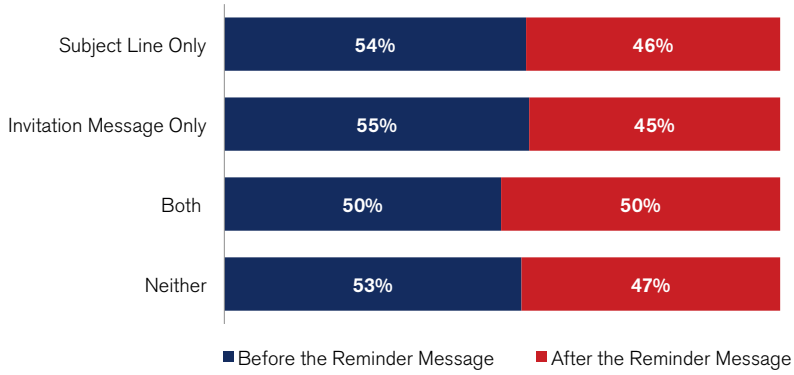


Note: Subject Line Only = only the subject line included the word "survey" (finished = 1,738); Invitation Message Only = only the invitation message included the word "survey" (finished = 1,569); Both = both the invitation message and the subject line included the word "survey" (finished = 1,611); Neither = neither the invitation message nor the subject line included the word "survey" (finished = 1,564).

Figure 7. Percentage of students, by survey behavior and invitation messaging type

Research Question 3: Does including the word "survey" in in the email invitation and/or subject line influence response rates before and after the reminder message is received?

Results presented in Figure 8 illustrate that there was approximately a 50% split between the percentage of students who participated in the survey before the reminder message was received and after it was received. This pattern of responses was relatively consistent across the four different invitation messaging groups. These differences in response patterns before and after the invitation message was received were statistically significant (X^2 (3) = 11.04, $p.$ < .05), but not meaningfully significant (φ = .04). Including the word "survey" in the invitation messaging did not appear to influence response rates before or after the reminder message.



Note: Subject Line Only = only the subject line included the word "survey"; Invitation Message Only = only the invitation message included the word "survey"; Both = both the invitation message and the subject line included the word "survey"; Neither = neither the invitation message nor the subject line included the word "survey." This figure includes only those students who answered at least one survey question (n = 7,204).

Figure 8. Percentage of responses, by invitation messaging type and reminder message status

Summary

No differences in response rate patterns emerged between the four invitation messaging types. Whether students received an invitation message or a subject line message that included or excluded the word "survey" had little bearing on survey participation or completion rates. Furthermore, the invitation messaging did not create a differential response pattern before and after the invitation message was received.

Conclusion

Two experimental studies were implemented to determine whether including or excluding the word "survey" from the invitation messaging would have an impact on response rates. The most surprising result was that students who received an invitation message with the word "survey" included were more inclined to open the email message. This is good news as it provides evidence that refutes the prior belief that including the word "survey" would be a flag for spam. This also means that the ACT Survey Research team does not need to avoid the word "survey" when soliciting students' participation in online surveys.

Both experiments showed that including or excluding the word "survey" in an invitation message, be it in the email invitation or the subject line, did not have a meaningful impact on completion or break off rates. It is worth noting, however, that in both experiments those students who received messaging with the word "survey" included had higher survey participation rates than when the invitation message excluded this word, although such differences had negligible effect sizes.

Inconsistencies between the two experiments emerged with respect to survey behavior for those students who responded before the reminder message and after it. In the first experiment there were more students who participated in the survey after the reminder message when the word "survey" was excluded, whereas more students participated in the study before the reminder message when the word "survey" was included. The second experiment showed no differences in response patterns before and after the reminder message, whether or not the word "survey" was included in the messaging.

It is unclear why these contradictory results emerged. However, the time of year the invitations were administered might relate to these inconsistent trends. Both studies used ACT test takers as the population of interest, but the surveys were administered at different times of the year. In the first experiment, surveys were administered in June, a few weeks after the students had taken the test. The invitations for the second experiment were sent in February, three hours after students had taken the test.

Readers outside of ACT should interpret these results with caution. Students who complete ACT surveys have had prior experience with the organization. This prior interaction is not a luxury all survey researchers have. Regardless, the results are promising in that, for these respondents, including the word "survey" in invitation messaging did not negatively impact the data collected. ■

Notes

1 Dillman, D. A., Smyth, J. D., & Christian, L. M. (2013). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). New York, NY: John Wiley; Kaplowitz, M. D., Lupi, F., Couper M. P., & Thorp, L. (2012) The Effect of Invitation Design on Web Survey Response Rates. *Social Science Computer Review* 30(3): 339–49; Mavletova, A., Deviatko, I., & Maloshonok, N. (2014). Invitation Design Elements in Web Surveys – Can One Ignore Interactions? *Bulletin de Méthodologie Sociologique* 123: 8–79.

2 Dillman et al., 2013.

3 Couper, M. P. (2008). *Designing effective web surveys.* New York, NY: Cambridge University Press.

4 Marcus, B., Bosnjak, M., Lindner, S., Pilischenko, S., & Schutz, A. (2007). Compensating for low topic interest and long surveys—A field experiment on nonresponse in web surveys. *Social Science Computer Review 25:* 372–383.

5 Kaplowitz et al., 2012.

6 Henderson, V. (2011) *Increasing (or Decreasing) Response Rate by Changing the Subject of Email Invitations.* Paper presented at AAPOR Annual Conference, 12–15 May 2011. Phoenix, USA.

7 Trouteaud, A. R. (2004) How You Ask Counts: A Test of Internet-Related Components of Response Rates to a Web-Based Survey. *Social Science Computer Review* 22(3): 385–92.

8 Participation is defined as answering at least one survey question.

9 Phi was used to calculate effect size. A value of .1 is considered a small effect; .3 a medium effect; and .5 a large effect.

10 See end note 8.