# Impact of Email Tone on Web-Survey Participation among Young Adult Lesbian, Gay, Bisexual, and Transgender (LGBT) Respondents 

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#### Abstract

Survey researchers have traditionally used a formal writing style when contacting potential respondents. However, there have been few empirical tests of whether an informal, humorous approach may be more effective, at least with younger populations. In this manuscript, we investigate whether a formal or informal writing style is more effective in gaining web survey participation among a panel of LGBT 18- to 24-yearolds. Data come from the Food and Drug Administration's Research and Evaluation Survey for the Public Education Campaign on Tobacco (RESPECT). Panel members, who were initially intercepted and screened for eligibility in social venues such as gay and lesbian bars and nightclubs, received an email survey invitation and up to three reminder emails. Given both the young population and the informal settings in which they were initially recruited, we hypothesized that the population might be more likely to participate in the survey when the email invitations and reminders were informal in tone. However, we also hypothesized that an informal tone could negatively impact data quality by suggesting the survey was not important enough to take seriously. We constructed two sets of invitations, one using typical formal language and tone, and the other using informal language and tone. Respondents were randomly assigned to receive either all formal messages, including invitation and reminders, or all informal messages. We found that the tone of the email had no statistically significant effect on survey participation or data quality.


Key Words: Web-survey, response rates, generation z

## 1. Introduction

Due in part to increasingly high rates of Internet access, web surveys that rely only on email invitations to obtain responses are the fastest-growing form of surveys in the United States (Dillman et al., 2014). While web surveys are becoming increasingly popular for surveys of a general adult population, several factors point to web surveys as a particularly suitable choice for researchers who are interested in surveying young adults. Nearly $100 \%$ of U.S. adults aged 18 to 24 report having Internet access (Pew Research Center, 2017). Moreover, individuals born after the mid-1990s have long been termed "digital natives," meaning that their native language and manner of interacting with the world is heavily influenced by computers, video games, and the Internet (Prensky, 2001). Technology is
incorporated into every aspect of their lives, and this shows in several key ways that impact communication (Bolton et al., 2013). Today's young adults are heavy smartphone users and prefer computer-mediated forms of communication, like texts or email, to face-to-face communication (Duggan et al., 2015; Lipsman, 2014; Rood, 2014). While collectively these factors suggest that web surveys may be particularly well suited to research with young adults, a key concern for survey researchers is how to compete for young adults' attention against all other available digital content. Marketing literature suggests that one way to engage today's young adults is to make them feel involved, particularly by using social media effectively (Fromm et al., 2014). This suggests that using in-group language, images, and tone similar to what young adults engage with on social media would bolster web survey participation.

In this paper, we present results from an experiment designed to increase participation rates in a longitudinal web survey of 18 - to 24 -year-olds in the LGBT community. As part of the Research and Evaluation Survey for the Public Education Campaign on Tobacco (RESPECT), we intercept potential panel members in LGBT bars and nightclubs, and send email invitations for the web survey to those who meet the study's eligibility criteria. With this approach, we obtained reasonable cooperation rates from our baseline cohort of eligible intercept respondents, but we continued to look for ways to more efficiently and effectively engage new panel members, who were added to the sample in a subsequent wave of the intercept survey. Considering the above literature on communication styles for today's young adults and the location of the initial intercept survey, we anticipated that survey participation may be higher when using informal language in the survey invitation, which would seem more consistent with respondents' previous interactions with the study team. We hypothesized that respondents in the 18 to 24 age group would be more receptive to an informal tone of communication that better matched what is used on social media and what they experienced during the intercept survey than more commonly used formal contact attempts. By offering informal contact emails, we anticipated engendering goodwill and increasing respondent comfort, which we hoped would increase response rates. However, we also hypothesized that an informal tone could negatively impact data quality by giving respondents the impression that the survey was not a serious data collection effort or that their responses were not important.

## 2. Methods

This paper uses data collected as part of RESPECT, a Food and Drug Administrationfunded evaluation of the "This Free Life" tobacco public education campaign. "This Free Life" engages with young LGBT adults in 12 U.S. designated market areas (DMAs) through multiple strategies, including social media and LGBT-specific digital sites, streaming radio, LGBT print media, branded promotions at LGBT events and social venues, and out-of-home media such as signage at bus stops in areas where LGBT young adults are likely to socialize. RTI International conducts the evaluation of this campaign and will collect six waves of web survey data in the 12 treatment markets and in 12 comparison markets, which did not receive the campaign, between 2016 and 2019.

The evaluation includes seven waves of data collection and uses a repeated cross-sectional design with an embedded longitudinal cohort. Two strategies are employed to recruit a convenience sample of LGBT young adults at each wave. Nearly $25 \%$ of web survey respondents are recruited via social media ads on Facebook and Instagram that link to a web screening instrument. Over $75 \%$ of web survey respondents are recruited through in-
person intercept screening interviews conducted on tablet devices in bars, nightclubs, and other social venues that were identified as LGBT-specific spaces.

Data presented in this paper include results of an experiment conducted with 2,719 respondents who were intercepted in-person during the second wave of data collection, conducted in September and October 2016. Working in teams at LGBT-specific venues, data collectors approached patrons who appeared to be in the target age range, explained the screening process, and pre-screened the patrons for age eligibility. When patrons indicated that they were between the ages of 18 and 24, interviewers asked the patron to complete a self-administered screener on a tablet for $\$ 10$ in cash. If patrons agreed, a data collector helped the patron launch the screener to determine their eligibility for participating in the main survey, which included questions about the participant's age, home zip code, gender and sexual identity, and tobacco use. Data collectors provided respondents who screened as eligible with a study information card with further details about next steps. We randomized assignment of eligible intercept respondents to receive either a formally worded web-survey invitation and reminder messages (Figure 1) and reminder prompts (Figure 2) or an informally worded invitation (Figure 3) and reminder messages (Figure 4). Within 2 days, eligible respondents received these invitations via SMS text message and/or email (based on the participant's stated preference) to complete the full 30 -minute web survey. Those who clicked on the personalized link within the message were directed to an informed consent screen. Those who consented completed the main web survey, which included questions about their demographic characteristics; tobacco, alcohol, and social media use; LGBT culture participation and identity; and tobacco-related knowledge, attitudes, and beliefs. Everyone who completed the web survey received a $\$ 20$ online gift card. Those who completed the full survey within 2 days of receiving the first invitation received an additional $\$ 5$ bonus.

## 3. Results

Just over half ( $56 \%$ ) of new panel members were assigned to receive formal messages, as shown in Figure 5. The formal and informal respondents had equivalent demographic distributions, as shown in Figure 6. This similarity allows us to be reasonably sure that any difference in participation rate is not due to demographic characteristics.

Figures 7 and 8 relate to the effect of email tone on survey participation. Although Figure 7 shows that respondents were significantly more likely to open email messages with formal subject lines than email messages with informal subject lines ( $p<0.01$ ), in Figure 8 we see that participation rates do not differ by tone of email. Similarly, email tone had no effect on how soon respondents replied after receiving the invitation (Figure 9).

Next, we examined the effect of email tone on data quality. Although we hypothesized that an informal tone could potentially undermine the seriousness with which respondents viewed their responsibility to provide thoughtful responses, we found no significant differences in data quality as measured by speed of the interview, straight-lining, or survey break-off (Figure 10).

## 4. Conclusions

Although a formal tone has long been standard practice for survey invitation letters and emails, there have been few empirical tests of whether an informal, more humorous
approach may be more effective, at least with younger populations. Rath et al. (2015) found that a humorous reminder prompt increased the odds of survey participation relative to a formal invitation among 18- to 34 -year-old respondents. Our findings demonstrated minimal impact of email tone on survey outcomes. We found that email invitations with formally worded subject lines were more likely to be opened, but we also found similar rates of web survey participation and similar data quality for those who received formally worded survey invitation email messages and those who received informally worded survey invitation email messages. We note that our email-tone experiment was conducted with a very specific group of individuals: a convenience sample of LGBT 18- to 24-yearolds who were initially recruited through in-person contacts in bars and nightclubs. Therefore, applications to other populations are unknown.

This research has several other limitations. We conducted no formative research or pretesting of content for the formal and informal messages. Thus, it is unclear how the messages were perceived by panel members. Likewise, the web survey included no debriefing questions. We have no information regarding the respondents' perceptions of the email invitations or what factors motivated them to participate. It is also notable that the panel members included in this experiment were all initially identified and screened as part of an in-person contact. Interviewers verbally encouraged participants to watch for the invitation email and to participate in the web survey. As a final step during the in-person contact, interviewers also handed all eligible panel members a formally written study information card that likewise encouraged the respondents' participation. It may be that the impression that the panel member formed about the study as part of the in-person contact is more influential in the panel member's decision to participate in the web survey than the content or tone of the subsequent invitation email. Content and tone of email messages are likely to influence participation more heavily when written communication is the only form of interaction between the research staff and panel members. Further experimentation is needed on email tone in the context of list-based web surveys in which the only contact between the research team and the potential respondent is a written message.

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## References

Bolton, R. N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., et al. (2013). Understanding Generation Y and their use of social media: A review and research agenda. Journal of Service Management, 24(3), 245-267. Retrieved from
https://repository.asu.edu/attachments/112065/content/Bolton Understanding_GenY Social Media Final 33p.pdf
Dillman, D. A., Smyth, J. D., \& Christian, L. M.. (2014). Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method. Hoboken, NJ: John Wiley \& Sons, Inc.

Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., \& Madden, M. (2015, January 9). Social media update 2014. While Facebook remains the most popular site, other platforms see higher rates of growth. Pew Research Center. Retrieved from http://www.pewinternet.org/2015/01/09/social-media-update-2014/
Fromm, J. (2014). The millennial workout. Millenial Marketing. Retrieved from http://www.millennialmarketing.com/2014/02/the-millennial-work-out/
Lipsman, A. (2014, August 8). Does Snapchat's strength among millennials predict eventual mainstream success? comScore. Retrieved from
http://www.comscore.com/Insights/Blog/Does-Snapchats-Strength-Among-Millennials-Predict-Eventual-Mainstream-Success
Pew Research Center. (2017, July 19). Internet/Broadband Fact Sheet. Retrieved from http://www.pewinternet.org/fact-sheet/internet-broadband/.
Prensky, M. (2001, October). Digital natives, digital immigrants. On the Horizon, 9(5), 1-6. Bingley, UK: MCB University Press. Retrieved from http://marcprensky.com/writing/Prensky\ -\ Digital\ Natives,\ Digital\ Immigrants\ -\ Part1.pdf
Rath, J. M., Williams, V. F., Villanti, A. C., Green, M. P., Mowery, P., \& Vallone, D. M. (2015, May 15). Boosting response rates in online longitudinal studies: A dose of funny. Legacy for Health. Retrieved from
http://www.aapor.org/AAPOR_Main/media/AnnualMeetingProceedings/2015/H7-5Rath.pdf
Rood, R. (2014, October 23). Please do not leave a message: Why millennials hate voice mail. NPR. Retrieved from
http://www.npr.org/sections/alltechconsidered/2014/10/23/358301467/please-do-not-leave-a-message-why-millennials-hate-voice-mail

## FROM: RESPECT Staff

Subject: Your invitation to the RESPECT Study
Thanks for taking the time to talk our staff at [VENUE NAME]; based on the information you provided, you are eligible to participate in the RESPECT Study Web Survey. If you complete this short web survey within 48 hours, you'll receive a $\$ 25$ gift card for a store of your choice from many online and in-store options, like Amazon.com, Starbucks, or Panera Bread. If you participate after the early bird deadline, you will still receive a $\$ 20$ gift card.

This is an ongoing study. That means if you participate in this survey, we will contact you again to complete similar surveys every few months. Each survey will offer the same $\$ 20$ gift card, with an extra $\$ 5$ if you respond quickly.

You can click the link below to take the survey or to learn more about it.
Your answers are completely confidential and will be released only as summaries in which no individual's answers can be identified.
If you have any questions or comments about the RESPECT survey, please call the project helpline toll free at 800-848-4072 between 9 am and 5 pm, Eastern Time, Monday through Friday.

Thank you very much for helping with this important study.
Figure 1: Formally worded invitation message

## FROM: RESPECT Staff

SUBJECT: Complete the RESPECT Web Survey for a $\$ 20$ gift card
This is a reminder that you were selected to participate in the RESPECT study. Please click on the following link to participate in the web survey or to learn more about it. For completing this brief survey, you will receive a $\$ 20$ gift card for a store of your choice from among many online and in-store options including Amazon.com, Starbucks, or Panera Bread.

You were selected for this study based on your answers to the survey you completed previously. We really need you to take the survey so that your views and experiences are counted.
Your participation is voluntary and your answers are completely confidential.
Thanks for your participation!
RESPECT Study Team
PS: If you have any questions, please feel free to call the project helpline toll free at 800-848-4072 between 9 am and 5 pm, Eastern Time, Monday through Friday.

Figure 2: Sample formally worded reminder

FROM: RESPECT Staff
Subject: Remember that time we gave you $\$ 10$ for answering some questions at a bar?

No? That's OK too. There's more where that came from. Click below to answer the rest of the questions for the RESPECT survey within the next 48 hours and we'll send you a $\$ 25$ gift card for a store of your choice from many online and in-store options, like Amazon.com, Starbucks, or Panera Bread. Done.

In case you are curious completing this study will take 30 minutes. If you complete the survey within 48 hours, you will receive a $\$ 25$ electronic gift card within 2 business days of completing survey. If you participate after the early bird deadline, you will still receive a $\$ 20$ gift card. Your answers are confidential and will not be shared with anyone else. If you have any questions or comments about the RESPECT survey, please call the project helpline toll free at 800-848-4072 between 9 am and 5 pm , Eastern Time, Monday through Friday.

Figure 3: Informally worded invitation message

FROM: RESPECT Staff
Subject Line: Top 6 Reasons to respond to the RESPECT survey

1. Everybody loves talking about themselves
2. This kitten with a hat on
3. All the feels

4. Participating in social research studies improves outreach and services among the LGBT community
5. Remember that time we gave you a $\$ 10$ thank you? This time we'll say thank you with $\$ 20$
6. You're staring at your phone all day anyways

In case you are curious, completing this study will take 30 minutes. You will receive a $\$ 20$ electronic gift card within 2 business days of completing survey. Your answers are confidential and will not be shared with anyone else. If you have any questions or comments about the RESPECT survey, please call the project helpline toll free at 800-848-4072 between 9 am and 5 pm, Eastern Time, Monday through Friday.

Figure 4: Sample informally worded reminder


Figure 5: Proportion of panel members assigned to each group


Figure 6: Demographic distribution of respondents assigned to the formal messages compared to those assigned to the informal messages


Figure 7: Percentage of emails opened, by email tone, ${ }^{* *} p<.01$


Figure 8: Participation rates, by email tone, $p=0.07$


Figure 9: Percentage of responses received within 2 days of invitation ( $\mathrm{n}=800$ ), by email tone, $p$ $=0.88$

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Figure 10: Data quality ( $n=1,232$ ), by email tone

