

Final Report

Thomas Gao, Robert Hosbach, Devesh Khandelwal, Joe Mirza

W241 | Summer 2021

Abstract

<>

Introduction

A wealth of existing research shows that using monetary incentives can increase survey response rates (see Armstrong, 1975; Kanuk & Berenson, 1975; and Duncan, 1979). James & Bolstein (1992) found that an incentive of only \$1 that was mailed with the survey significantly increased the response rate compared to people who received no incentive. More recently, Debell et al. (2020) found that including \$5 of visible money in a mailed survey increased response rates from roughly 43% to 47%. Such studies have also been conducted on response rates for surveys administered to college students. For instance, Szelényi et al. (2005) found that \$2 incentives lead to increased response rates among college students compared to no incentive.

This body of research suggests that direct financial incentives can lead to higher survey response rates. But, while direct financial incentives have been studied in depth, the effect of indirect, philanthropic donations are comparatively less well understood. Gattellari & Ward (2001) found that offering donations to Australian surgeons' alma maters actually led to lower response rates when compared to offering no incentive at all. Nesrallah et al. (2014) and Warwick et al. (2019) had similar findings in medical-related settings. Outside of the medical field, Pedersen & Nielsen (2016) also found that incentives promising donations to a good cause led to decreased response rates relative to no incentives in online surveys.

We conducted a field experiment to test the effect of two different incentives on the survey response rates from alumni of UC Berkeley's Masters of Information and Data Science (MIDS) program. One incentive (hereafter referred to as the "direct incentive") is a chance to be one of 10 winners of a \$25 Amazon gift card if the alumnus completes the survey. This direct financial incentive is akin to the direct financial incentives discussed above. The other incentive (hereafter referred to as the "philanthropic incentive") is an opportunity to have us, the survey developers, donate funds to the Berkeley Student Food Collective (BSFC) if a sufficiently high survey response rate is achieved. While some studies found donation-based incentives counterproductive, our experiment takes a slightly different approach. Instead of promising a donation to BSFC for an individual's response, we will test the effect of survey response rates when individuals are told that the donation will only occur if a certain threshold of group response rate is met.

In this experiment, we evaluated the effects of the direct and philanthropic incentives to cause higher survey response rates when compared to a control group that received no incentive. All three groups were given the same Qualtrics survey that we distributed via one of our personal email addresses; however, only alumni in the direct and philanthropic incentive groups received text in their emails regarding the incentive they were assigned. We hypothesized that both the direct and philanthropic incentives would cause higher survey response rates among the MIDS alumni. As mentioned, direct incentives have led to increased survey response rates in certain contexts, whereas donation-based incentives have shown far less promise. Nevertheless, we still expected the philanthropic incentive to garner higher survey response rates relative to the control group for the following reasons: 1) The treatment is a group incentive rather than an individual incentive, and being part of a group working towards a common goal can be inherently motivating; 2) The certainty of the

donation to charity when the threshold is reached might be preferred over the uncertainty of receiving a monetary reward; and 3) Knowing you are helping to donate money to a good cause can evoke a sense of meaning when compared to receiving money individually.

In the following section we describe our methodology for conducting this experiment, including the tools we used, our data collection process, how we dealt with attrition and non-compliance, and other details. Next, we report our experimental results and provide a discussion of their meaning and generalizability. We also discuss potential follow-on opportunities from this experiment. Finally, we conclude our paper and provide a series of appendices containing the email text we used, Python and R code we used for data collection and analysis, the actual survey, and a summary of the survey responses we received.

Methodology

<>

Results

<>

Discussion

<>

Conclusion

<>

References

- Armstrong, J. S. (1975). Monetary Incentives in Mail Surveys. *The Public Opinion Quarterly*, 39(1), 111–116. Retrieved from <https://www.jstor.org/stable/2748074>
- Debell, M., Maisel, N., Edwards, B., Amsbary, M., & Meldener, V. (2020). Improving Survey Response Rates with Visible Money. *Journal of Survey Statistics and Methodology*, 8(5), 821–831. <https://doi.org/10.1093/jsam/smz038>
- Duncan, W. J. (1979). Mail Questionnaires in Survey Research: A Review of Response Inducement Techniques. *Journal of Management*, 5(1), 39–55. <https://doi.org/10.1177/014920637900500103>
- Gattellari, M., & Ward, J. E. (2001). Will donations to their learned college increase surgeons' participation in surveys?: A randomized trial. *Journal of Clinical Epidemiology*, 54(6), 645–649. [https://doi.org/10.1016/S0895-4356\(00\)00350-4](https://doi.org/10.1016/S0895-4356(00)00350-4)
- James, J. M., & Bolstein, R. (1992). Large Monetary Incentives and Their Effect on Mail Survey Response Rates. *The Public Opinion Quarterly*, 56(4), 442–453. Retrieved from <https://www.jstor.org/stable/2749201>
- Kanuk, L., & Berenson, C. (1975). Mail Surveys and Response Rates: A Literature Review. *Journal of Marketing Research*, 12(4), 440–453. <https://doi.org/10.1177/002224377501200408>
- Nesrallah, G., Barnieh, L., Manns, B., Clase, C., Mendelssohn, D., & Guyatt, G. (2014). A charitable donation incentive did not increase physician survey response rates in a randomized trial. *Journal of Clinical Epidemiology*, 67(4), 482–483. <https://doi.org/10.1016/j.jclinepi.2013.11.005>
- Pedersen, M. J., & Nielsen, C. V. (2016). Improving Survey Response Rates in Online Panels: Effects of Low-Cost Incentives and Cost-Free Text Appeal Interventions. *Social Science Computer Review*, 34(2), 229–243. <https://doi.org/10.1177/0894439314563916>
- Szelényi, K., Bryant, A. N., & Lindholm, J. A. (2005). What Money Can Buy: Examining the effects of prepaid monetary incentives on survey response rates among college students. *Educational Research and Evaluation*, 11(4), 385–404. <https://doi.org/10.1080/13803610500110174>
- Warwick, H., Hutyra, C., Politzer, C., Francis, A., Risoli, T. J., Green, C., ... Mather, R. C. I. (2019). Small Social Incentives Did Not Improve the Survey Response Rate of Patients Who Underwent Orthopaedic Surgery: A Randomized Trial. *Clinical Orthopaedics and Related Research*, 477(7), 1648–1656. <https://doi.org/10.1097/CORR.0000000000000732>