

NatCen

Social Research that works for society

NTS incentive experiment 2019

Analysis report

At NatCen Social Research we believe that social research has the power to make life better. By really understanding the complexity of people's lives and what they think about the issues that affect them, we give the public a powerful and influential role in shaping decisions and services that can make a difference to everyone. And as an independent, not for profit organisation we're able to put all our time and energy into delivering social research that works for society.

NatCen Social Research
35 Northampton Square
London EC1V 0AX
T 020 7250 1866
www.natcen.ac.uk

A Company Limited by Guarantee
Registered in England No.4392418.
A Charity registered in England and Wales (1091768) and Scotland (SC038454)
This project was carried out in compliance with ISO20252

Contents

1	Background	1
2	Methodology	2
3	Incentive experiment	3
3.1	Analysis.....	3
	3.1.1 Response rates	3
	3.1.2 Incentives issued	4
4	Conclusion	5

Tables

Table 3:1	Key outcomes by incentive group, Standard Response Rate.....	3
Table 3:2	Overall response rate by group by month	4
Table 3:3	Percentage of discretionary incentives issued	4

1 Background

In recent years response rates to major governmental surveys have been falling across the industry. While the National Travel Survey (NTS) response rate¹ remained stable at around 60% until 2015, it dropped to 58% in 2016 and then to 53% in 2017 and 2018.

The fall in response rates is largely attributed to an increase in refusal rates. Over recent years contact rates have remained stable and the number of calls that interviewers make for each case has remained high.

As a result, NatCen and the DfT have explored ways to encourage participation in the NTS. In 2018 an experiment was run, testing three types of incentive: one group received the existing unconditional incentive of a book of six first class stamps; another group received a £10 Post Office voucher instead of the book of stamps as an unconditional incentive; and a third group received the stamps as an unconditional incentive while interviewers were given two £25 'discretionary incentives' to use per point to encourage response.

The 2018 experiment concluded that changing the existing unconditional incentive from a book of first-class stamps to a Post Office voucher had no significant impact on response or sample quality. As the cost of administering Post Office vouchers is higher, it was concluded that no change to the unconditional incentive was necessary.

The interim report on the 2018 incentive experiment indicated that the discretionary incentive may have had a positive impact on improving the quality of the sample, but feedback from interviewers suggested that the value was not sufficient to convert many refusals.

As such, a further experiment was conducted in the first quarter of 2019, exploring the impact of using two £50 'discretionary incentives' per point.

This paper presents an update on the 2019 incentive experiment interim report. On recommendation of the interim report the discretionary incentive was not run in the final quarter of 2019 or 2020. This report presents analysis of the experiment run between January and March 2019 and provides recommendations for the NTS in 2021 and future years.

¹ In the NTS, fully productive response rates are based on households where all members of the household complete the survey and a 7-day travel diary.

2 Methodology

In order to control for geographic and seasonal characteristics for the incentive experiment, sample points were sorted using the standard NTS strata and then split into two groups, as follows:

- Incentive: Control (no discretionary incentives)
- Incentive: Treatment (2 x £50 discretionary incentive vouchers per point)

This ensured that two equal groups of sample points were created to test the different incentive options.

The analysis in this report is produced using data from the first three months of NTS 2019 (all sample points issued between 1 January and 31 March 2019). In total this covers 3,213 issued cases (or 189 sample points). Of these, 95 points were in the control group and not eligible for discretionary incentives and 94 points were in the treatment group.

This report explores the response rates achieved overall and across the two groups. The results of this experiment will help inform the incentive strategy for the 2021 survey.

Please note, there are some small differences in the figures in table 3:1, table 3:2 and table 3:3 between this report and the interim analysis report. This is the result of data cleaning.

3 Incentive experiment

For the first quarter of 2019 an experiment looking at the impact of £50 discretionary incentives was introduced. A split sample experiment was conducted, with two groups:

- **The control group** used a book of six first class stamps as the unconditional incentive;
- **Treatment group** used a book of six first class stamps as the unconditional incentive, but interviewers were also able to use up to 2 x £50 vouchers per sample point.²

All groups used a £5 conditional incentive for each member of a fully productive households.

3.1 Analysis

3.1.1 Response rates

Table 3:1 shows the outcomes for the first quarter for both the control group and the treatment group. Across the quarter there was no notable difference in the proportion of cases which went on to become fully co-operating. Similarly, there was no notable difference in the split between partially co-operating and non-contact cases.

	Control group (%)	Treatment group 1 - discretionary incentive (%)	Overall
Fully co-operating	53.9	54.7	54.3
Partially co-operating	5.5	5.4	5.5
Refusal to co-operate and other unproductive	34.7	33.0	33.9
Non-contact	5.9	6.8	6.4

Table 3:2 shows analysis of fully productive cases across the three survey months. There was a significant uplift in response for those in the experimental group in January compared to the control group, whereas in February and March the control group had a higher response rate.

² Sample points in the NTS consist of 17 addresses.

	Control group (%)	Treatment group 1 - discretionary incentive (%)	Overall
January	48.6	59.0	53.4
February	56.0	52.8	54.4
March	57.7	52.7	55.2

This monthly fluctuation could be caused by a number of different factors, such as area effects (on the NTS the sample is designed to be representative across quarters, so there will be some geographic variation by month) or interviewer effects.

Given this, it is also valuable to explore how many of the available incentives were used in each survey month.

3.1.2 Incentives issued

Table 3:3 shows the number of discretionary incentive vouchers available to interviewers and the number used, broken down by month.

	Incentives issued	Available Incentives	Percentage of Incentives Used
January	32	60	53%
February	20	62	32%
March	20	66	30%

In January a larger proportion of available discretionary incentives were issued by interviewers. In total 32 incentives were issued by interviewers in January out of an available 60 (53%). In February and March, the percentage of available incentives used was lower at 32% and 30% respectively. Qualitative feedback from the NTS interviewers themselves indicated that some interviewers were uncomfortable with the incentive, feeling that the value was too high, which may add context to this drop in usage.

Although the sample is relatively small, and it is difficult to draw many conclusions, available evidence suggests that there is a correlation between use of discretionary incentives and a higher response rate. However, more research would be needed to corroborate this evidence.

4 Conclusion

Although just a small-scale experiment, across a quarter of the NTS 2019 fieldwork period, use of discretionary incentives has had no overall impact on the response rate.

Looking at response rates across the two groups (control and treatment) each month shows substantial fluctuation. This may be caused by area or interviewer effects. Evidence from these three months suggests that usage of discretionary incentives may correlate with a higher response, but there is not sufficient evidence to substantiate this relationship collected currently. Further, the differences observed may not be large enough to justify the cost of using discretionary incentives.

Based on this experiment our conclusion is that there is not sufficient evidence of a boost in response caused by discretionary incentives to justify the cost of continuing with this experiment. Instead, efforts should be focused on exploring alternative incentive strategies, including looking at the conditional incentive.