Incentives strategy at the ONS - a review

1. Background

Survey response rates have been declining over the years across all modes of data collection worldwide (Brick and Williams, 2013; De Leeuw and de Heer, 2002). Declining survey response is a major problem for gaining accurate survey estimates, this is especially a problem for policy makers such as government, local authorities and businesses, as they require accurate data to estimate and provide efficient services to employees and revenue services including local opportunities for jobs or training and school and health services provision.

Survey non-response can be attributed to survey respondents not being contactable, refusing to participate, or choosing not to participate due to circumstantial reasons at the time of the data collection, which may include poor health, language difficulties or being too busy (Brick and Williams, 2013).

In the UK, the general public are becoming more resistant to taking part in surveys due to increased general demand for survey participation in people's day to day lives. The Office for National Statistics (ONS) is the largest statistics producer. Data on ONS survey response trends show that response rates over last the 14 years have been decreasing gradually. Typical survey response rates in the most recent years range between 50 per cent and 60 per cent, whereas in 2004 response rates ranged between 55 per cent and 75 per cent. The downward trajectory has been most marked for the Labour Force Survey (LFS), first issue response rates in 2004 were around 75 per cent and in 2018 stood at just under 55 per cent.

Studies have shown that monetary incentives play an increasingly important role in helping to increase and maintain survey response (Singer and Ye, 2013; Groves, 2009; Simmons and Wilmot, 2004). However, use of incentives is associated with higher survey costs, which are in addition to the normal data collection costs. Many survey organisations including the ONS already use incentives in household surveys. Due to associated costs, it is important to maximise the effect of incentives by using existing evidence to guide strategies to employ the most cost-effective incentive strategy.

As a result of a recommendation made at the National Statistics Executive Group meeting at the end of 2017 the ONS's Survey Operations Research Team was asked to conduct a review of incentives research and the current incentive strategy in place for social surveys at the ONS. This review looked at various evidence and best practice regarding the use of incentives from within and outside the ONS, with the aim of making recommendations about incentives to increase the response rates for ONS's social surveys. As part of the review the team reached out to other survey taking organisations in the UK (e.g., NatCen, Kantar, etc.), other UK government departments and other national statistical bureaus abroad. Further, over 100 research papers

were reviewed, and information was also gathered by attending the Cross-Government Survey Group in London in November 2018.

The paper will further discuss the recommendations that are directly applicable to the current Labour Force Survey (LFS).

2. Increasing role of conditional incentives

Currently the LFS respondents are offered a mixed monetary amount (£5 or £10) unconditional incentive, which is currently effective for achieving the desired average response rate, the incentives are relatively costly to implement.

There is a vast amount of research which has found that unconditional incentive payments are more effective in gaining survey response when compared to promised incentives, however the evidence is far less compelling when focusing on interviewer mediated face-to-face surveys. Goyder (1994) found that a prepaid incentive of \$1 significantly increased response rates and introduced less sociodemographic bias in comparison to conditional incentive payments of \$1 or \$10 in a face-to-face survey. However, the item nonresponse did not significantly differ across the incentive conditions. Similarly, the Dutch Longitudinal Internet Studies for the Social Sciences (LISS) trialled $\in 0, \in 10, \in 20, \text{ and } \in 50$ incentives conditionally and unconditionally for recruitment to an online panel study (Scherpenzeel & Toepoel, 2012). It was found that none of the conditional incentives had influenced recruitment rates whereas all the unconditional incentives significantly increased recruitment rates. As neither the $\in 20$ nor $\in 50$ were more effective than the $\in 10$, it was decided to implement the unconditional $\in 10$ for the LISS recruitment. This finding indicates a diminishing return in the effectiveness in higher paid incentives.

Further, Singer et al. (1999) conduced meta-analysis of 39 incentive experiments directly comparing no incentives, prepaid and promised incentives on interviewer-mediated surveys and found that, both types of incentives lead to a significant increase in response rates, they estimated that each dollar of incentive paid resulted in about a third of a percentage point difference between the incentive and the no incentive condition. However, their findings suggested that there was no significant difference between response achieved when prepaid or promised incentives were issued specifically in face-to-face interviewer mediated surveys. It was hypothesised that uniquely to face-to-face mode respondents personally meeting the interviewer instead of having an anonymous interaction on the web, phone or mail, could increase trust in promised incentives and make them more effective.

Currently all non-LFS surveys use the conditional incentives to boost response, however several limitations have been identified by the current issuing process. These limitations include the following: interviewers feel lack of control over issuing the incentive to respondents, large lag of time between completing the interview and receiving the incentive, respondents querying the missing incentives, which leads to distrust towards the organisation. Literature on conditional incentives suggest that the delay of receiving the incentive could be a key factor influencing its effectiveness on response rates. Diekmann and Jann (2001) hypothesise that the difference in

the effect of conditional and unconditional incentives could be attributed to different scripts being activated for a respondent, a strict rationality in case of promised versus a norm of reciprocity invoked by an unconditional incentive. Therefore, mistrust in promised incentives plays a role too and a delay in receiving the incentive can decrease the level of respondents' trust, especially for the follow up waves.

The current limitations highlight the increasing need for addressing how the conditional incentives are issued as evidence reviewed suggests that the current process could de-value the effect of the incentives. These were the reasons why it was recommended to issue an unconditional incentive on the LFS, however moving forward it would be desirable to change it for the conditional incentives. This also makes a good case for improving the issuing process of the conditional incentives in surveys that are going to remain predominantly face-to-face and also consider conditional incentives' role in the transformed surveys conducted in the mixed mode approach.

We are currently investigating the process for changing the way that conditional incentives are issued, with the aim to trial the new strategy in a large scale LFS test this autumn. The improved process would involve interviewers carrying empty voucher cards with them and issuing the incentive directly to respondents following an interview, the card would then be activated shortly after the interview. The improved process would allow the vouchers to be physically with the respondent immediately upon survey completion, and the vouchers would be activated quicker than 6-8 weeks as per current process. The process would also reduce the current audit processes, avoiding sending out all the incentives from HQ, and instead sending batches of empty gift cards to interviewers.

Operationalising the process of issuing conditional incentives would also enable exploration of other incentive strategies such as discretionary incentives that offer a higher monetary amount to convince reluctant respondents to take part on the doorstep. This recommendation will be discussed in more detail next.

3. Introduce functionality for carrying out discretionary incentives

Discretionary incentives are used when the aim is to convince the reluctant respondent to take part on the doorstep, or when it is thought that respondents may be swayed if they are offered a higher incentive amount than the standard. This approach would offer face-to-face interviewers an opportunity to use incentive at their own discretion and have more effective tools to convert reluctant respondents. This change has also been highly requested by the ONS interviewers. At the moment, the possibility of issuing discretionary incentives is dependent on the changes to the current conditional incentive process.

Discretionary incentives could be used for the LFS where a boost in response is needed either in certain periods of the year such as months of August and December or when there is a need to

boost an overall survey response with limited funds. When trying to increase response, discretionary incentives would also be more cost-effective than a blanket increase in the standard incentive amount as funds are targeted to where it is most needed via the use of the field force judgement.

Dykema (2015) found that offering non-respondents an incentive that was slightly higher than the initial incentive was effective in converting non-respondents to take part in a survey request. NatCen trialled offering a substantially higher discretionary incentive on National Travel Survey (NTS) of £25 or £50 following an unconditional incentive of stamps and a £5 multishop voucher as a conditional incentive¹. The lower discretionary incentive was not more effective than offering a monetary unconditional incentive followed by a conditional incentive, but the higher discretionary incentive resulted in significant gains in the overall response. The use of the discretionary incentives was limited to a certain number of respondents in the sample selected (e.g. interviewer was allowed to offer higher incentive to 1 in 7 within their allocation). Further, incentive module was programmed in a way that would not allow the interviewer to issue more discretionary incentives than instructed.

It is therefore, recommended for ONS to explore feasibility of issuing discretionary incentives and conduct trials with discretionary incentives in order to determine the optimum amount also in a mixed mode approach, in order to quantify response increase benefits to the transformed surveys.

4. Surveys using web as the primary mode should use lower value unconditional incentives

Multiple studies comparing the response rates have shown that response rate in web surveys is often lower than in other data collection methods. Possible reasons include the nature of self-administered methods of data collection, lack of digital skills and data security concerns. Fricker et al. (2005) suggested that individuals find it harder to refuse or ignore phone/face-to-face survey requests than they do mail or web requests. Also, participating in an online survey results is higher burden for respondents than taking part in person or over the phone, as the online survey mode relies on intrinsic motivation to complete the survey with no interviewer guidance to help answering the questions. The participants' burden associated with self-completed online surveys could however be mitigated by an introduction of incentives to compensate respondents' for taking part and possibly increase the uptake rates for completion online.

In regard to the incentive amount, it has been seen that there is a trend of diminishing returns as the amount of incentive payment increases. That is, a small monetary incentive or a non-monetary

¹ NatCen NTS technical report

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/775068/nts-2019incentive-experiment-and-advance-letter-experiment-interim-report.pdf

token incentive is sufficient to increase reciprocity and encourage the respondent to take part in surveys especially when the baseline response associated with the mode of collection is low. Thus, the lower the baseline response, the greater the gains when an incentive is offered. Also, online surveys usually have an increased sample size to mitigate for the lower take-up associated with this mode. Therefore, it would be problematic to offer all respondents a higher unconditional incentive to gain the response rate required for the survey.

The effectiveness of a non-monetary incentive (fabric tote bag) has already been tested in ONS's online data collection trials for the transformed LFS. However, the research reviewed showed that the effects on response demonstrated in online mode was found to be not transferable to face-to-face interviewing. If this approach is rolled out to all transformed surveys it is arguable that this could require a recruitment of a logistics team especially for packing and despatching or outsourcing the logistics to an external provider as current in-house resources are highly unlikely to be sufficient for the large scale roll out. To operationalise the large-scale packing of tote bags in-house, it is recommended that other non-monitory unconditional low value incentives are trialled as a fall-back position.

For example, lottery draws are one low cost option where other organisations have demonstrated the benefits of this approach on online response rates. The use of lottery incentives as an incentive strategy for government research was evaluated by Statistics Netherlands. In their previous research into online response rates they conducted several experiments with different types of incentives which included a lottery draw to win an iPad. The results indicated that the lottery draw was the most cost-effective incentive trial and this incentive was adopted as a default for their online surveys. This kind of incentive strategy could be effective due to behavioural psychological techniques that are involved with decision-making. Kahneman (2011) explains that the possibility effect outlines that for low probability gain in for example lotteries the ticket buyer seems to be indifferent to the low probability of winning the high prize. People seem to think that they are better off with a ticket than without one, even if the chance of winning the prize is very low. That is, the chance of winning does not seem to matter as much to people. Kahneman explains that people are overconfident and over-optimistic. People might be over-optimistic of winning if they are never told the odds of winning. People understand what they can see, they see that they have been entered to a lottery and they understand that they could win. People also tend to be over-optimistic about their chance of winning, as they are not willing to undertake rational thinking and overweight each possible outcome scenario. That is, cognitive heuristics take their place and make a quick decision that is not always rational.

This approach is also the easiest logistically as it requires minimal amount of manual intervention. More complicated potentially, is setting up the lottery and gaining legal and ethical approval to do so if it has never been done as it is the case at the ONS. However, NHS digital (another government department) have used lottery draws in the past for incentivising children under 16 years olds for survey participation, therefore there is precedent of using this incentive in wider government in the UK.

ONS online data collection trials also explored issuing lower monetary incentive payments of unconditional £5, and unconditional £5 followed by conditional £10 gift vouchers which were also seen to be effective in gaining survey response, however these were costlier and therefore ruled out. However, the trials showed that £5 unconditional voucher was the next most cost-effective incentive after the tote bags and given recommendation 1 is addressed the costs could be further reduced for this incentive. If the multishop cards with a 6 months expiry were issued unconditionally, it is feasible that the overall costs of this incentive could be brought down to be closer to the tote bag costs given the low encashment rate of the £5 multishop vouchers already demonstrated on the main LFS.

5. Explore loyalty points based incentives to mitigate attrition in online surveys

Future strategies involving incentives for online data collection modes could also consider loyalty points as in-between wave engagement to reduce attrition. The loyalty points achieved should increase in value with continued participation in longitudinal or panel studies to engage the participant to co-operate with data collection for ONS surveys.

Research on this incentive draws upon behavioural insights techniques such as loss aversion and endowed progress, which explains that people are more driven by losses than gains and that people that are already half-way through a process are more engaged to see it through. Further, goal gradient effect theory suggests that the closer the people are to reaching a goal, the harder they are willing to work to achieve it.

It is therefore recommended to explore this approach to incentivising respondents in ONS's longitudinal surveys such which includes the LFS. The proposed transformed model of the LFS might be suitable for trailing this incentive approach as it is currently proposed that W1 respondents will be followed up in further waves and asked further questions, which would make the follow up interview lengthier than the initial. Offering loyalty points could help to retain the respondents in the follow up waves.

6. Investigate offering a choice of conditional incentives

Evidence drawn from the LFS mixed monetary incentive trial shows that incentives effectiveness differs depending on respondent characteristics. The same incentive does not appeal to all respondents in the same way, therefore possibility of targeted incentive was explored. It deemed that it would be too cumbersome to target the incentives when no pre-existing information about the respondents is known prior to data collection or in initial survey waves. Targeting would be more appropriate in the follow up survey waves on when there is an ability to have respondent characteristics prior to data collection, thus targeting becomes limited to wave two and above

respondents in a longitudinal survey or previous LFS respondents that are sampled for further research studies and not appropriate for one wave surveys or initial sample of respondents in a longitudinal survey. Alternative approaches for these cases were explored and it was concluded that offering a choice of a conditional incentive could be an alternative to targeted incentives. Furthermore, research from behavioural science shows that merely offering the choice to respondents could increase cooperation rather than the incentives that can be picked, hence this could be a cost-effective incentives strategy if the incentives that could be picked are of mixed monetary value.

ONS's Survey Operations Research team have explored potential choices that could be offered to respondents, including the following: multishop gift card, e-voucher, donate your multishop incentive to charity of choice (limited), tote bag. With the choices that were considered a number of factors were addressed that have been identified as influencing the effectiveness of the monetary incentive and the tote bag in different circumstances. For example, it was found that monetary incentive was not effective at encouraging cooperation of respondents from ethnic minorities and higher deciles of the Index of Multiple Deprivation (IMD) (Pendleton, Kastberg and Lloyd, 2018). In contrast, interviewer feedback and some quantitative research suggests that the tote bags appealed to wealthier people and to residents in regions where there is higher proportion of higher IMD deciles (Ipsos Mori²). Further, it was shown that monetary incentives were effective to encourage respondents from the mid to lowest IMD deciles to cooperate (Pendleton, Kastberg and Lloyd, 2018). Thus, offering a choice of incentives may address the shortcoming of offering one incentive alone.

This process could be incorporated following the implementation of the interviewer issued conditional incentives.

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² Ipsos Mori report for LMS test 2 linked within the blog post about LFS online tests - <u>https://digitalblog.ons.gov.uk/2018/04/17/getting-ons-social-surveys-online/</u>

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