In the Long Run: Lessons from a Panel Survey Respondent Incentive Experiment

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1 Introduction

This paper describes results from an experiment designed to test the potential effects of incentive payments on response rates and non-response bias in the Youth Cohort Study of England and Wales (YCS). The YCS is a study of young people (aged 16 plus), investigating transitions from compulsory education to further or higher education or the labour market.[1] Cohorts of 16-17 year-olds are typically sampled every two years and surveyed on three occasions, usually at annual intervals. Since the first wave in 1985 there have been eleven YCS cohorts and more than twenty five waves. For the cohort analysed here (cohort 10), core questionnaires were administered by post, while sub-samples selected for additional questions on particular topics were interviewed by telephone (CATI). Telephone interviews were also used to follow-up on non-respondents to the core mail questionnaire.

A proportion of cohort 10 sample members on both the postal survey and CATI survey were sent a £5 voucher at wave 2, while control groups received no incentive. Additionally, in the postal survey the incentives were either unconditional (the incentive was sent with the initial mailout) or conditional (the voucher was promised in the original mailout, but only sent on receipt of a completed questionnaire). Sample members were allocated randomly to treatment groups. The experiment was continued at wave 3, however, this time all incentives were paid unconditionally, and all lower achievers were approached in postal mode.[2] (Individuals were classified as 'higher achievers' or 'lower achievers' based upon examination passes reported at wave 1.) Non-respondents were not contacted in subsequent waves. Table 1 shows the issued sample sizes for the different survey modes and treatment groups at waves 2 and 3.

The remainder of the paper is structured as follows. Section 2 illustrates the effects of incentives on response rates, while section 3 investigates their impact on non-response bias. Section 4 takes a look at data quality issues, in particular at the effect of incentive payments on the completeness of the data collected. Section 5 concludes.

2 Response Rates

The wave-on-wave response rates, in other words, the proportion of previous wave respondents completing interviews at the current wave, are shown in table 2.[3] Looking first at the CATI sample at wave 2, 82% of the higher achievers who received incentives completed interviews, while 78% of the control group did. At wave 3 the incentives again improved the response rates for this group by 4 percentage points, although at a lower level. Among the lower achievers, incentives increased the response rate at wave 2 by 5 percentage points from 65% for the control group.

In the postal survey at wave 2, the unconditional incentives improved response by 5 percentage points compared to conditional incentives, and by 10 percentage points compared to the control groups for both achievement groups. At wave 3, where all incentives were made unconditionally, response similarly improved by 9 percentage points among the higher achievers and by 10 percentage points among the lower achievers.

Although the incentives have a similar absolute impact on both achievement groups, the level of response is consistently lower for lower achievers than for their higher qualified counterparts. For example in the postal survey at wave 2, unconditional incentives improve the response by 10 percentage points for both achievement groups compared to their control groups. However, while questionnaires were completed by 86% of incentivised higher achievers, they were completed by only 71% of lower achievers. This implies that the unconditional incentives reduce non-response by 42% (10/24) for higher achievers and only by 26% (10/39)

[1] The survey is currently managed and funded by the Department for Education and Skills (DfES), who jointly designed the incentive experiment with the National Centre for Social Research (NatCen), the survey contractors for waves 2 and 3 of YCS Cohort 10.

[2] Additionally, the higher achievers allocated to the telephone survey at wave 2 who returned a postal questionnaire were allocated to postal mode at wave 3.

[3] Ineligible cases are excluded. At wave 2 these were 28 pilot cases, 48 persons who did not want to be contacted again after wave 1, 13 individuals who died or moved abroad, and one case for which sample information was missing. At wave 3, 5 individuals died or moved out of scope. The wave 3 pilot cases were re-issued at the main stage and are therefore included, and the post wave 2 refusals are treated as wave 3 refusals in this analysis.

for lower achievers. Further analysis is necessary to assess the effect on non-response bias (see section 3).

The highest response rates are achieved for the postal unconditional incentive sample. Among the wave 2 control groups, on the other hand, response is highest for the CATI samples. This discrepancy emphasises the strong effect of unconditional incentives in the postal mode, increasing response rates by 9-10 percentage points across both achievement groups and waves. In comparison, incentives in the CATI survey only increase response by 4-5 percentage points.

Additionally, although the absolute effects of the incentives at wave 3 are comparable to wave 2, the level of response is consistently lower. The response rates for both CATI samples are 9 percentage points lower than at wave 2, while they are 5 (4) percentage points lower for the postal HA incentive (control) group, and 1 percentage point lower for the LA postal module. The postal mode therefore seems to have performed better, in two senses: the response rates achieved with incentives are higher; and the increase in non-response experienced between waves 2 and 3 is lower than in the CATI mode. This is despite response rates being higher with CATI in the absence of incentives. It is worth noting that the reduction in wave-on-wave response rates – which is unusual amongst longitudinal studies – is at least partly due to the high level of mobility amongst this age group causing increasing levels of non-contact. This may also provide a partial explanation for the relative success of the postal method: a postal questionnaire might be more likely than a phone call to be forwarded to a new address.

To summarise, incentive payments significantly increased response rates, with unconditional incentives having about twice the impact of conditional incentives. The effect of incentives in the postal mode is double the impact in the CATI survey, making the postal unconditional treatment the most effective at maximising response rates. Furthermore, the incentives have similar absolute effects for high and low attainment groups and in both waves, but the level of response is lower both for the lower achievers and at wave 3.

3 Non-Response Bias

This section investigates the effect of incentives on non-response bias. First, we look at effects at wave 2 on the frequency distributions of weighting class variables. For these variables, the true population distributions are known so the extent of bias reduction can be assessed. Then a number of key survey measures are selected, reflecting characteristics by which non-respondents are likely to differ systematically from respondents. Non-response theory is used to predict the direction of bias for these measures. We then compare estimates obtained from the incentive and corresponding control samples to see whether differences are significant and go in a direction that implies bias reduction.

Finally, this analysis of differences is repeated after applying weights to adjust for differential non-response. This allows us to assess the success of the weighting at reducing any non-response bias. Weights have been developed for each of the treatment groups at wave 2, based on the weighting classes derived for wave 1. These are defined by year 11 school type, gender, examination results and government office region. At wave 1, some adjacent groups of cells were combined to constrain variability in the weights, for example because of small sample sizes in a cell, leaving 149 weighting classes (see Russell et al., 2001). At wave 2 some further groups have been combined, yielding 93 weighting classes.[4]

3.1 Weighting Class Variables

For the weighting class variables, school type, gender, qualifications and region, the population distributions are known and used as wave 1 weighting targets. Comparing these population proportions with those obtained for the control groups at wave 2 provides an indication of the direction of non-response bias. Table 3 illustrates the distribution of weighting class variables for the different treatment groups, as well as the population estimates. In many cases, the incentives lead to significant differences in estimates between the control and incentive groups, in a direction implying bias reduction.

For school type, incentives significantly reduce bias in all postal samples. To illustrate, while 33.4% of the population attended comprehensive (16) schools at year 11, only 27.2% of the responding postal control group did so. This proportion rises closer to the population estimate to 33.4% with conditional and 35.2% with unconditional incentives. For the CATI samples the effects are significant for comprehensive (16) and independent schools.

The effects on the distribution of gender are less strong. The differences are in the right direction compared to the population values, with CATI and postal incentives increasing the proportion of boys. However, the effects are not significant.

Looking at qualifications, the effects are significant and in the direction of the population

[4] Non-response bias has also been analysed for wave 3, although it is not reported here. The results are similar to wave 2 for the postal groups, but less strong for CATI (probably because at wave 3 all 'lower achievers' were moved to postal mode making the CATI groups more homogeneous).

estimates for all measures in all three incentive groups, except for the CATI incentive sample with 1-4 GCSEs at D to G. For example, the proportions of individuals with 5+ GCSEs at grades A* to C is 65.5% in the CATI control and 80.9% in the postal control group. These proportions shrink closer to the population proportion of 48.8% with CATI incentives (51.7%) and unconditional (63.1%) and conditional (62.0%) postal incentives. The proportions of the remaining lower qualification groups increase with incentives, consistently reducing bias compared to the population estimates.

The effects of incentives on the distribution by region are much weaker. This is what one would expect, since the standard errors are large as the sample clusters (schools) are confounded with region ($\rho = 1$, so DEFF = $\bar{b}$). The differences which are significant go in the direction of bias reduction with incentives.

3.2 Unweighted Survey Measures

Table 4 shows the unweighted estimates for the selected survey measures by treatment group. For example, 69.2% of respondents in the CATI incentive sample are currently in full-time education, while 75.5% in the control group are. The asterisks (*) indicate a significant difference between the estimates from the incentive sample and the corresponding control group in a direction that would imply a reduction in non-response bias. The independence of estimates was tested applying a one-tailed Pearson chi-squared test to the two-by-two tables for each treatment group and corresponding control group.

Unlike for the weighting class variables, the population estimates for these survey measures are unknown. For this reason, the following commentary will concentrate on the direction and significance of differences between estimates from the incentive and control samples.

Incentives have the largest impact, in terms of reducing non-response bias, in the postal sample with unconditional incentives. Compared to the control group, the difference in estimates of four out of seven of the views/expectations measures is in a direction that implies bias reduction, as are the differences in all five occupation measures, all five education variables, one of the reasons for being out of work and employment, and all three household composition variables.

When postal incentives are conditional, fewer differences are significant. They are, however, consistent with the effects in the unconditional postal sample. For occupation and economic activity again all five measures are significant. However, only three of the measures of views/expectations are significantly different from the control group, as are four of the education variables and one of the household composition variables.

In the CATI sample, incentives have a lesser – but still noticeable impact. Only one of the expectations variables shows significant bias reduction, as do three of the occupation measures, two of the education variables and one of the household composition variables .

Despite the differences across treatment groups, there is some consistency in effects. Measures which are significantly improved in all three treatment groups are the proportions of individuals in full-time education, in full-time employment, individuals with one or more unemployment spells during the past year, highest academic qualifications sought, those studying for vocational qualifications compared to those studying for academic qualifications and the proportion of individuals living with children of their own. Measures which are not significantly affected by incentives in any of the treatment groups are the proportions who agree that they know how to find future work, education or training, who get enough support in planning their future, and who have the qualifications for the job or course they would like to do. Further insensitive measures are the proportion of individuals out of work and education who think they need more qualifications or who believe there are no decent opportunities for them (note, however, that this group has a much smaller base, therefore the test of significance has less power).

3.3 Weighted Survey Measures

Although incentives appear to reduce non-response bias as expected for several survey measures, once the observations have been weighted to take account of differential non-response by qualifications, gender, school type and region, the effects practically vanish (see Table 4).

There are only four measures which display a residual significant reduction in non-response bias. These are the proportion of individuals who agree that their jobs/training worked out well (in the CATI sample), the proportion of individuals in full-time employment and the proportion out of employment and education with poor health (in the unconditional postal sample), and the proportion of individuals who have experienced one or more unemployment spells during the previous year (in the postal conditional sample). None of the education measures show any sensitivity to the incentives. This is unsurprising, since the weighting is mainly based on variables related to education (school type and attainment).

3.4 Summary of Effects on Non-Response Bias

Without weighting, the incentives have effects that imply significant – and often very substantial – bias reduction. Among the weighting class variables, bias is clearly reduced for the distribution of school types and qualifications. Among the survey measures, bias reduction is strongest for the occupational and educational measures. Overall, the effects differ by mode and are strongest in the unconditional postal incentive sample, followed by the conditional postal and the CATI incentive samples. Regardless of mode differences, the results are consistent in the sense that measures for which bias is significantly reduced in the CATI and conditional incentive samples, are also improved in the unconditional postal sample.

However, once the observations are weighted for differential non-response by school type, gender, qualifications and region, these effects mostly disappear. This suggests that the weighting effectively takes care of most non-response bias that arises, and that incentives do not lead to much further improvement. This finding must be understood in the context of the important characteristics of the YCS.

First, the YCS is fortunate to have access to a number of relevant individual-level auxiliary variables which can be used for weighting. This is likely to explain the effectiveness of the weighting in reducing non-response bias. For other surveys with fewer – or no – individual-level auxiliary data, weighting may not be as effective at bias reduction.

Second, the YCS has a relatively narrow focus on educational and labour market 'outcomes'. Consequently, this analysis is restricted to a limited range of items, all of which are expected to be correlated with the weighting variables – in some cases very highly correlated. The effects of incentives on non-response bias may be very different for measures which are not as strongly correlated with the weighting variables. For these reasons, the results for the effects of incentive payments on non-response bias should be generalised only with caution.

4 Data Quality

Apart from affecting response rates and non-response bias, monetary incentives may also have an impact on the quality of survey data collected. This section examines the completeness of records for all non-branched questions (44 questions at wave 2 and 48 questions at wave 3). Answers are treated as missing (item non-response) if they are coded as 'not answered' or, where applicable, as 'don't know'.

Table 5 shows the mean number of missing items in each of the treatment groups, again before and after applying weights to adjust for differential non-response. The differences of means between the incentive samples and corresponding control groups were examined using a test of linear combinations implemented in STATA's 'lincom' command (Eltinge & Sribney, 1996).

In the postal samples at waves 2 and 3, the average number of missing items increases significantly with incentives. This also holds once weights are applied. In the CATI sample, incentives increase missing data at wave 2, although not significantly. At wave 3 incentives have the opposite effect, decreasing the average number of missing items. When weights are applied this effect becomes significant.

In conclusion, there is evidence that the incentives impair the quality of YCS data in terms of the completeness of information collected, but only for the postal mode of data collection. These findings are consistent with the view that incentives persuade people to participate in the survey who are intrinsically less interested, and therefore less committed to providing complete information. This negative effect is stronger with unconditional than with conditional incentives. The effect persists when the samples are weighted for differential non-response by school type, gender, qualifications and region.

5 Conclusion

The incentive experiment conducted with YCS cohort 10 sample members at waves 2 and 3 yields different implications for response rates, non-response bias and data quality. The effects in turn vary in significance by mode, wave, and the survey measures examined.

The observed effects tend to be stronger in the postal samples than in CATI, and at wave 2 stronger with unconditional than with conditional postal incentives. Furthermore, the effects are generally stronger at wave 2 than wave 3. This may in part be explained by the fact that at wave 3 all lower achievers were moved from CATI to postal mode, possibly making the CATI groups more homogeneous.

Bias reduction among the weighting variables is strongest for the distribution of school types and qualifications. For the unweighted survey measures, current occupation and education display the largest assumed bias reduction. After weighting, the only measure for which incentives consistently reduce bias is the proportion of individuals who have experienced unemployment spells during the past 12 months. Most of the positive effects of incentives on non-response bias disappear after weighting. However, the effects on data quality, measured by the average number of

missing items per treatment group, are persistent even after weighting.

In conclusion, although the incentive payments significantly increase response rates in the YCS and seemingly reduce non-response bias, this effect largely disappears after weighting for differential non-response. With regard to non-response bias it therefore appears that the use of incentives offers no additional benefit to the YCS over weighting. However, this is largely due to the particular characteristics of the YCS in terms of the available auxiliary variables and their correlation with the survey information collected. For a similar survey without access to individual-level auxiliary data, incentives could provide an effective bias reduction mechanism.

On the other hand, the incentives have a negative effect on the quality of the data collected, in terms of the number of missing items. That is, although the incentives persuade more people to participate in the survey, these additional respondents seem less committed to providing complete information. This finding is consistent with other studies.

References

Eltinge, J.L., Sribney, W.M. (1996) svy5: Estimates of linear combinations and hypothesis tests for survey data, *Stata Technical Bulletin* 31: 31-42. Reprinted in *Stata Technical Bulletin Reprints*, Vol. 6, 246-259.

Fitzgerald, R., Finch, S., Kelly, S., Korovessis, C., Tipping, S. (2003a) Youth Cohort Study: Joint Survey of 19 and 17 Year Olds (Cohort 9 Sweep 4 and Cohort 10 Sweep 2) – Technical Report, prepared for the DfES by NatCen.

Fitzgerald, R., Finch,, Smith, L., Tipping, S. (2003b) Youth Cohort Study Cohort 10 Sweep 3 – Technical Report, prepared for the DfES by NatCen.

Russell, N., Phelps, A. (2001) Youth Cohort Study Cohort 10 Sweep 1 – Technical Report prepared for the DfES by Taylor Nelson Sofres plc.

Table 1: Issued sample sizes for cohort 10 at waves 2 and 3

		Issued samples				
		CATI		POSTAL		
		incentive	control	uncond. inc.	cond. inc.	control
Wave 2	higher achievers	777	2,145	1,170	1,111	3,706
	lower achievers	812	1,285	798	780	1,037
Wave 3	higher achievers	589	1,594	1,957	-	2,890
	lower achievers	-	-	1,656	-	1,468

Respondents were defined as higher or lower achievers depending on examination results reported at wave 1.

Table 2: Response for incentive experiment at waves 2 and 3

		Treatment group by issued mode				
		CATI		POSTAL		
		incentive	control	uncond. inc.	cond. inc.	control
Wave 2	higher achievers	777	2143	1,170	1,111	3,703
		82% **	78%	86%***	81% ***	76%
	lower achievers	811	1,282	796	779	1,036
		70% *	65%	71% ***	66% *	61%
Wave 3	higher achievers	589	1,594	1,955	-	2,889
		73% (*)	69%	81% ***	-	72%
	lower achievers	-	-	1,654	-	1,468
		-	-	70% ***	-	60%

Number of eligible issued cases and percentage of wave-on-wave respondents. * mark p-values from one-tailed Pearson chi-square tests for the independence between response rates in the incentive and corresponding control group: (*) 6,7%-level of significance, * 5%-level of significance, ** 1%-level of significance, *** 0.1%-level of significance.

Table 3: Weighting class variables – unweighted frequency distribution at wave 2

	Wave 2 treatment groups (column percentages)					
Weighting class variable	cati incentive	cati control	postal uncond.	postal condition.	postal control	Population total[1]
Year 11 school type						
LEA Comp 16	37.8 **	29.8	35.2 **	33.4 *	27.2	33.4
LEA Comp 18	44.3	48.1	51.1 **	52.5 **	43.4	48.4
Modern	3.3	2.8	3.3 *	3.4 *	1.7	3.2
Selective	7.6	8.2	4.5 ***	5.4 ***	11.1	6.4
Independent	6.4 **	9.5	4.5 ***	4.2 ***	15.0	7.0
Other	0.4	1.3	1.3	0.4	1.2	1.3
N/A or missing	0.3	0.4	0.1	0.6	0.4	0.2
Gender						
Male	47.9	46.2	43.5	43.4	41.3	50.7
Female	52.1	53.8	56.5	56.6	58.7	49.4
Exam results						
5+ gcses at A*-C or equiv.	51.7 ***	65.5	63.1 ***	62.0 ***	80.9	48.8
1-4 gcses at A*-C or equiv.	30.6 ***	21.7	23.1 ***	23.4 ***	12.4	25.5
5+ gcses at D-G or equiv.	10.9 **	8.0	7.9 ***	8.6 ***	4.3	17.6
1-4 gcse at D-G or equiv.	2.3	1.6	1.5 **	1.7 **	0.8	3.5
none/not reported	4.5 *	3.2	4.5 ***	4.3 ***	1.7	4.7
Government office regions						
East Midlands	3.2 ***	10.5	9.1	8.9	7.9	8.2
East of England	7.7 **	11.6	10.8	9.7	11.3	10.2
Inner London	2.7	2.7	2.6	3.2	3.0	3.6
North East	5.5	5.3	6.2	5.0	4.8	5.2
North West	15.8	13.4	13.0	15.5	13.7	14.1
Outer London	7.1	7.3	6.4	6.8	8.5	8.0
South East	16.8	15.1	14.2	14.8	17.4	15.3
South West	11.4	9.7	10.7	10.1	9.5	9.0
West Midlands	11.1	10.4	11.4	10.8	11.2	10.7
Yorkshire	12.5 **	8.4	10.7 *	10.7 *	7.7	9.9
Wales	6.2	5.6	5.1	4.6	5.0	5.8

[1] Population estimates are based on the weighted wave 1 distribution of weighting variables.

* denote p-values from one-tailed Pearson chi-square tests for the independence between observations in the incentive and corresponding control group. All significant differences are in the direction that implies bias reduction. The expected direction of non-response bias is derived by comparing estimates from the control groups with the population estimates: * 5%-level of significance, ** 1%-level of significance, *** 0.1%-level of significance.

Table 4: Wave 2 survey measures

		Unweighted Wave 2 (%)					Weighted Wave 2 (%)				
Question	Answer category	cati incentive	cati control	postal uncond.	postal condition	postal control	cati incentive	cat control	postal uncond.	postal condition	postal control
Jobs/training worked out well	agree	85.6 **	88.4	78.3 *	79.3	80.7	83.6 *	86.2	76.2	78.1	75.7
Know how to find future work/edu/training	agree	92.2	91.1	86.7	87.1	86.2	91.5	90.4	85.4	86.4	85.4
Plans for future are a waste of time	agree	5.7	5.5	4.9 *	5.1 *	3.9	6.5	6.7	6.2	6.4	6.3
Optimistic about the future	agree	87.5	87.3	73.5 ***	74.3 **	78.2	86.8	84.8	71.5	72.8	71.1
Get enough support in planning future	agree	85.2	86.0	70.6	73.9	72.7	84.8	86.0	70.1	73.2	71.4
Want to do more training/ education in future	agree	87.6	88.6	77.4 ***	78.5 ***	83.3	86.4	86.1	75.1	76.8	75.7
Have qualifications for job/ course I want to do	agree	34.9	35.1	28.4	28.9	28.6	34	35.1	28.7	28.7	28.8
Current occupation	full-time education	69.2 ***	75.5	71.3 ***	71.4 ***	82.3	67.2	67.1	64.7	65.7	66.3
	full-time job	12.3 **	9.4	11.3 ***	11.0 ***	6.9	13.2	12.1	14.4 *	13.2	12.0
	NEET[2]	5.5	4.8	4.8 ***	5.6 ***	2.6	6.4	7.4	5.4	7.2	6.2
Current economic activity	ilo unemployed	5.6	4.5	10.0 *	11.5 **	8.2	6.2	6.4	10.9	13.7	12.5
Any unemployment spells during past 12 mths	yes	11.3 ***	7.6	8.0 ***	9.6 ***	4.9	12.4	10.7	9.9	12.5 *	10.1
Highest academic qualification sought	2+ A-levels, degree	38.8 ***	50.8	44.3 ***	43.4 ***	61.3	36.3	38.2	35.9	36.8	36.9
Highest vocational qualification sought	level 3 or 4	58.7	62.6	63.3 *	62.5 *	68.5	55.3	56.1	55.5	55.3	58.4
Studying for vocational qualifications	rel. to academic	51.2 ***	40.7	44.9 ***	46.7 ***	32.0	53.6	50.9	51.3	51.5	52.7
	rel. to not studying	66.2	69.5	66.9 **	65.6 ***	72.5	65.2	65.5	63.1	61.5	65.9
In part-time education	yes	2.2	1.8	6.2 ***	4.7	4.1	2.5	1.7	6.8	4.9	5.6
Reason not in work/edu: Need more qualifications	applies to me	58.9	46.9	37.8	55.3	45.8	60.5	46.1	37.7	59.1	50.2
Reason not in work/edu: Poor health	applies to me	9.1	14.3	5.4 *	13.0	13.9	8.3	13.1	5.8 *	13.0	17.7
Reason not in work/edu: No decent opportunities	applies to me	25.5	35.5	31.1	39.5	31.0	31.1	39.1	28.7	43.2	33.4
Living with husband, wife or partner	yes	1.8	1.8	2.4 *	2.1	1.6	1.7	2.3	2.9	2.3	2.3
Living with own children	yes	1.3 *	0.8	1.3 **	1.3 *	0.6	1.5	1.1	1.6	1.4	1.3
Living with 1+ parent	yes	96.8	96.9	96.8 **	97.4	97.9	96.5	96.2	96.4	97.2	96.3

[1] Government supported training
[2] Not in employment, education or training
* denote p-values from one-tailed Pearson chi-square tests for the independence between observations in the incentive and corresponding control group. All significant differences are in the direction that implies expected bias reduction: * 5%-level of significance, ** 1%-level of significance, *** 0.1%-level of significance.

Table 5: Effects of incentives on data quality

Number of non-response items		Treatment group (mean)				
		cati incentive	cati control	postal uncond. inc.	postal cond.inc.	postal control
Unweighted sample	w2	0.36	0.32	3.8 ***	3.6 ***	3.2
	w3	0.25	0.30	3.6 ***	-	2.9
Weighted sample	w2	0.39	0.37	3.9 **	3.8 *	3.5
	w3	0.22 (+)	0.30	3.8 ***	-	3.2

* / (+) denote p-values from a test for the differences of means in the incentive and corresponding control group. The test was implemented using STATA's 'lincom' command (Eltinge & Sribney, 1996). Asterisks are used if mean item non-response increases with incentives, plus symbols denote a decrease: * / (+) 5%-level of significance, ** / (++) 1%-level of significance, *** / (+++) 0.1%-level of significance.