

Contingent Incentives Effects on Survey Response

Nicole Bensky, Anh Thu Burks, Tracie Yancey,
Chuck Shuttles, Michael Link, PhD.¹

¹The Nielsen Company, 501 Brooker Creek Blvd., Oldsmar, FL 34677

Abstract

The current incentive structure for many surveys, regardless of amount, involves the use of non-contingent incentives; that is, an incentive that is sent prior to participation. Previous studies conducted within The Nielsen Company have shown that the use of non-contingent incentives can be an effective approach for improving participation. However, this approach has also been recognized as being very inefficient in that a large percentage of respondents never return the survey even though they were sent an incentive. By moving to contingent incentives (combined with an initial modest non-contingent incentive) the focus is on rewarding respondents that perform the requested task. Contingent incentives also provide an opportunity to offer responding homes a larger incentive than they would have received under the current incentive. The use of these larger contingent incentives is hypothesized to have a positive impact on participation rates and provide many cost efficiencies. In February 2010 a test was conducted involving the use of contingent incentives to help improve the responses rate within the TV Ratings Diary. For this test, approximately 32,500 households were mailed dairies using differential incentives with higher incentive amount for those households identified as having key demographics (such as younger ages of householder, Black race, or Hispanic ethnicity). Initial non-contingent incentives (\$1 or \$2) were sent to households along with the diary packet that also contained mention of a higher incentive once the dairies were completed and returned. Contingent incentives also depended on household demographics (amounts either \$20 or \$50) and were mailed when at least one non-blank diary had been received by the household. This paper will explore how this test design was determined through an initial test conducted in May 2009.

Key Words: contingent incentives, response rate

1. Background

Monetary incentives have become common practice within survey research in order to increase response. In Church's (1983) meta-analysis of the research conducted on the impacts of incentives, he states that incentives are often used to help promote respondent participation. Incentive amounts, the type of incentive and timing have continued to be evaluated to determine the optimal use in terms of response and data quality. This study focuses on the effects of promised incentives (contingent on the return of the survey) and investigated the incentive levels as well as the best practices that should be included for optimal response under this approach. Ultimately the results from this study lead to a more refined study on contingent incentives which were tested in the Nielsen TV diary study in February 2010.

Nielsen has long used non-contingent or pre-paid, incentives for their TV diary survey with results mimicking the majority of mail survey methodology. Recently, Nielsen has begun using contingent, promised, incentives within other surveys that are comparable to the TV diary study. Given the positive response to those surveys, the contingent approach was tested within the TV diary's national addressed based sample which currently consists of approximately 186 markets in all 50 states. For example, by paying households who returned a survey, incentives would be used more effectively by rewarding the participation instead and also rewarding households who are incented though never participate in the survey (i.e., mailing incentives to refusing households). Using a contingent incentive structure also allows Nielsen to offer responding participants a larger incentive than they would have typically received in a non-contingent environment. The use of these larger contingent incentives is hypothesized to have a positive impact on participation rates.

2. Methodology

This initial study on contingent incentives wanted to investigate several options for incentive payouts for participating in the TV diary study. For this study, an addressed based sample was selected and is recruited to participate through a phone call followed by the diary survey mailed to their homes. Households that have both an address and phone number, i.e. matched sample, are initially recruited through a telephone call that gathers the household's demographic and television information. During this call, the incentive the household could receive is leveraged to encourage household participation. These incentives are currently non-contingent in nature and are sent along with the diary packet and vary based on demographic information as well as the status of this recruitment call. For those records where they have identified themselves as the age of head (AOH) under 35, Black race or Spanish speaking Hispanic, are referred to as target households, and they are the households who receive the highest incentive amount to help encourage response given they are the lowest responding group. As well, households that agree to participate, i.e. Accepts, are incented higher than those households we couldn't reach or refused (non-contacts and refuse respectively). Table 1 visually depicts this incentive treatment.

Table 1: Current TV Diary Incentive Structure

Sample Type	Non-Contingent
Target	\$30
AOH 35-49	\$5
AOH 50+ or Unknown	\$1-\$10
RF/NC	\$5-\$10

Differential contingent incentives were mailed to test records when at least one non-blank diary was received by the household. Incentives were based on target treatment types, as described above. In order to gauge what amount was the most successful, three different groups of incentives were tested from low, medium, to high (see Table 2). The control group was our current non-contingent incentive structure.

Table 2: Test TV Diary Incentive Structure

Matched Sample			
Test Cells	Sample Type	Non-Contingent	Contingent
A	Target	\$2	\$30
	AOH 35-49	\$5	\$0
	AOH 50+ or Unknown	\$1	\$0
	RF/NC	\$0	\$5
B	Target	\$2	\$40
	AOH 35-49	\$5	\$0
	AOH 50+ or Unknown	\$1	\$0
	RF/NC	\$0	\$10
C	Target	\$0	\$50
	AOH 35-49	\$5	\$0
	AOH 50+ or Unknown	\$1	\$0
	RF/NC	\$0	\$10

In order to reinforce the promised incentive the household was to receive if they returned a completed diary, an insert that addresses the contingent incentive mailing was added to the diary packets. Thank You letters were mailed along with the contingent incentive payment. Samples of these materials are located in Appendix A.

This test was conducted during the May 2009 TV ratings diary survey period. Each test cell consisted of 5% of the matched sample and was selected randomly nationally from an addressed based sample. Table 3 displays what the counts are for each test cell.

Table 3: Mailed Diary Sample by Test Cell

	Matched Sample	
	Percent	HH Diary Mailed
1	5%	18,527
2	5%	18,620
3	5%	18,550

3. Results

3.1 Analysis Plan

Analyses were conducted to examine diary cooperation rates (similar to AAPOR RR#4) for those households who returned valid diary data that could be used for the ratings versus those that had returned a diary unusable to measure ratings and those that did not return a diary at all. Return analyses helped determine whether the effects of using contingent incentives were valuable and if so which level of incentives worked the best.

3.2 Analysis

The impact of using contingent incentives on among matched sample households was evaluated for its success for those households that cooperated by provided valid ratings data. Results are provided separately for households with a placement call status of AC/VA/CP (Accept, Vacation or Cell Phone) and RF/NC (Refusers and Non-Contacts) given the differences in incentive levels. Note that in Table 4 all cases, the test

cooperation rate is significantly lower than the control rate with a 3.8% drop in cooperation across 3 test cells.

Table 4: TV Rating Diary Cooperation across Test Cells

Matched Sample					
Cooperation Rate	Control	Test A	Test B	Test C	Test A,B,C
AC/VA/CP	46.2	43.5*	44.3*	44.9*	44.2*
RF/NC	8.8	3.9*	4.2*	4.3*	4.1*
Total	22.6	18.3*	18.9*	19.0*	18.8*
*Statistically significant at a = 0.05					

Beyond just cooperation it was important to evaluate the proportion of households that return a diary that is unusable or no good. This helps to determine if homes that were offered a contingent incentive were more likely to return a diary that was no good than ones that received the incentive within the diary packet. This evaluation was also broken out in Table 5 by the placement call status with AC/VA/CP separate from RF/NC due to the varying incentive amounts. Despite there being no negative impact to the no good rate for AC/VA/CP households among the matched sample, RF/NC households we see a significant increase in the no good rate.

Table 5: TV Rating Diary No Good Rate Across Test Cells

Matched Sample					
No Good Rate	Control	Test A	Test B	Test C	Test A,B,C
AC/VA/CP	10.7	10.4	11.5	11.1	11.0
RF/NC	26.8	23.4	21.6*	21.4*	22.1*
Total	15.3	12.4*	13.1*	12.7*	12.7*
*Statistically significant at a = 0.05					

Further, when returned households were broken out based on key demographics (age, race, and Hispanic identity) there was continued statistical significance in the return between test and control. Mainly, with those who identified themselves as Black race or Hispanic origin.

Table 6: Demographic Breakouts for Returned Households

	Control	Test
Age of Head		
<35	17.7%	17.9%
35-54	31.4%	31.3%
55+	50.9%	50.8%
Race ¹		
Black	8.9%	7.3%*
Origin ¹		
Hispanic	8.9%	6.9%*

¹Treatment markets only

***Statistically significant at $\alpha = 0.05$**

4. Discussion

Overall, this test did not yield the anticipated results. The test results show that the incentive levels used were not high enough to improve or maintain cooperation rates. As well, the overall the test did not result in the type of improvements expected, with a 3.8% drop in matched cooperation. We also saw that the sample representation moved further from the universes estimates for some of the key sample demographics. Review of the cooperation rates, as provided in the tables above, also shows that households in test cells where the contingent incentive was \$40 or \$50 did not perform much differently from households in the other lower lever incentive test cells. Hypotheses is that the receipt of a small non-contingent incentive as used in most of the test cells convinced households that the promise of a contingent incentive was legitimate and may have had a significant impact on the households willingness to participate. This has also validated from Singer's (2002) study of incentives and non-response that when promised incentive comes from a trusted source there is a better response.

Even though ultimately this study did not yield the expected results, it does fall in line with previous research (Church, 1993). However, from this initial test we were able to come up with conclusions and recommendations to incorporate in future testing for any kind of contingent incentive testing:

- 1) Focus on limited treatment type for incentives while maintaining a small non-contingent incentive for all respondents
- 2) Materials that mention contingent incentive should leverage mention amount
- 3) Mail out of contingent incentives to be closer to return of the survey

Based on the results from this May 2009 test, The Nielsen Company conducted a second test of contingent incentives for the February 2010 diary measurement. This test refined the use of contingent incentives. Instead of various levels of incentives being tested, this test only had one treatment type for the sample where depending on household demographic information will receive either \$50, \$20, or \$0 contingent incentive. All households in the test received either a \$1 or \$2 non-contingent incentive based on the findings from the May 2009 study. Many of the recommendations listed in this report were incorporated into the design of the February contingent incentive test when applicable. Given the timing of the analysis results from the February contingent incentive test will be available at a later date.

References

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