

Personal Contact and Performance Base Incentives - Two Approaches to Raise Long-term Panel Compliance and Reduce Missing Data

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Abstract

In multi-wave longitudinal surveys, panel fatigue refers to the tendency of respondents to be less willing to cooperate or to provide less complete and accurate data in each subsequent wave of the panel. In most surveys, this means not being willing to be interviewed at all or not answering questions as completely and accurately in later waves of data collection compared to earlier waves. When measuring television tuning and viewing in Nielsen's long-term People Meter panels, the challenge is to gather complete and accurate data from all household members in more than 10,000 panel households everyday of the year for 24 months. To counter panel fatigue and noncompliance among certain demographic cohorts in Nielsen's people meter households, a comprehensive program called Personal Coaching was introduced in 2005 that included a monthly performance-based incentive plan coupled with intensive personal contact from at least one Nielsen field staff member. This personal contact took the form of diagnosing the causes of noncompliance and identifying proactive solutions with the household's involvement, the use of positive reinforcement, and routine feedback to the household about their monthly performance. In the 2006 AAPOR conference, Nielsen presented the results of Personal Coaching and showed that the program was very successful in reducing missing data and raising long-term panel compliance. In 2008, Nielsen introduced a new program, On Track, which relies on the use of monthly performance-based plan only thus reducing the cost associated with the intense personal contact. On Track was introduced as part of a split-test in conjunction with Personal Coaching in four people meter markets. This poster will present a myriad of results comparing the before/after compliance and the amount of missing data for households assigned to On Track program with the before/after data of a group of demographically equivalent households assigned to Personal Coaching Plus.

Key Words: Long term panel compliance/cooperation, incentives

1. Background

In multi-wave longitudinal surveys, panel fatigue refers to the tendency of respondents to be less willing to cooperate or to provide less complete and accurate data in each subsequent wave of the panel. When measuring television tuning and viewing in Nielsen's long-term People Meter panels, the challenge is to gather complete and accurate data from all household members in more than 18,000 panel households everyday of the year for 24 months. To counter panel fatigue and noncompliance among

certain demographic cohorts¹ in Nielsen's people meter households, a comprehensive program called Personal Coaching (PC+) was introduced in 2005 that included a monthly performance-based incentive plan coupled with intensive personal contact from at least one Nielsen field staff member. This personal contact took the form of diagnosing the causes of noncompliance and identifying proactive solutions with the household's involvement, the use of positive reinforcement, and routine feedback to the household about their monthly performance.

Since its institution, the Personal Coaching program has been very successful in reducing missing data and raising long-term panel compliance. Missing data or what Nielsen terms as *faulting* causes a household's viewing and non-viewing information to be excluded from the TV ratings. (The percentage of days that missing data occurs is referred to as the *fault rate*).

In 2008, Nielsen introduced a new program, On Track, which relied on the use of monthly performance-based plan *only* thus reducing the cost associated with the intense personal contact.

2. Methodology

On Track was introduced as part of a split-test in conjunction with Personal Coaching in four People meter markets. The goal of the test was to compare the before and after compliance and the amount of missing data (fault rate) for households assigned to On Track program with the before and after data of a group of demographically equivalent households assigned to PC+.

2.1 Baseline Fault Rate

In order to accurately dimension the improvement of a PC+ or On Track household's fault rate while in either program, a baseline fault rate for each program household was created. The baseline fault rate for the program household was based on the faulting performance that ended on the last day of the calendar month prior to the household's inclusion in the PC+ or On Track program. The average baseline fault rate among households selected to participate in the PC+ or On Track program for the 4 month evaluation was 29%. The baseline varies over time as households enter and leave the program.

2.2 Approaches to raise compliance and reduce missing data tested

- A) Personal Coaching Program: Personal Contact and Performance Based Incentives
- B) On Track Program: Performance Based Incentives

3. Summary of Findings

The On Track program is able to achieve a significant level fault rate reduction and at the same level as PC+ in the first month a household is introduced to the program.

¹ Over 90% of households in these Nielsen people meter panels are in compliance on any given day. The cohorts with disproportionately below average compliance (i.e. greater missing and/or viewing data) are households (1) with five or more members, (2) with a householder 34 years of age or younger, (3) Black and/or (4) Hispanic.

- This can be attributed to the fact that both programs require an in person contact from a Nielsen field staff member when the program is first introduced to the home (i.e. the program treatments are very similar during the first month).

Even though, households in the On Track program are able to sustain a significant level of fault reduction after the initial month in the program, the magnitude of such reduction in subsequent months is significantly less for On Track homes in comparison to PC+ homes (months 3 and 4).

- For months 3 and 4, the 4.6% and 5.1% differences between PC+ and On Track treatment effects were statistically significant.

Table:1

Calendar Month(s)	(PC+ Fault Rate Difference) - (On Track Fault Rate Difference)		
	Diff	SE(Diff)	p-value
Dec 2008	0.0%	4.9%	0.997
Jan 2009	1.7%	3.0%	0.573
Feb 2009	-4.6%	2.8%	0.098
Mar 2009	-5.1%	2.6%	0.048

Source: PC+ and On Track Split Test Monthly Summary Report, March 2009, The Nielsen Company.

4. Conclusions

In multi-wave longitudinal surveys, the issue of missing data or non-compliance is concerned with whether data for all measures are gathered from all respondents. In most surveys, the data gathered from one respondent per household. For Nielsen, measuring the television audience requires data to be gathered about all members of the household two years of age and older, and for this to happen accurately each person needs to be actively logged in/out the television audience for each set in the household and to do this every day for up to two years.

The Personal Coaching program is very successful in reducing the amount of missing data among households through a combination of intense and on-going personal contact from a Nielsen staff member *and* performance-based incentives. The alternative program, On Track, tested in 2008 solely relied on the use of performance based incentives and it proved successful at reducing missing data at similar levels as PC+ but only during the first month it was introduced.

This finding speaks to the importance of the personal contact between employees of survey organizations and respondent households in lowering missing data and improving non-compliance in longitudinal surveys.

Future research calls for testing the main effect of personal contact *only*, that is, a program that relies on the personal contact sans performance based incentives.

Table 2: Personal Coaching Treatment Homes								
Calendar Month(s)	Number of Homes			Fault Rate				
	Reduced Fault Rate with Treatment	Increased Fault Rate with Treatment	Total	Adjusted Baseline ¹	Current Month	Diff	SE(Diff)	p-value
Dec 2008	38	8	46	29.6%	15.5%	-14.1%	3.7%	0.000
Jan 2009	52	14	66	29.9%	16.8%	-13.0%	2.4%	0.000
Feb 2009	68	12	80	29.0%	12.3%	-16.7%	2.0%	0.000
Mar 2009	83	9	92	28.3%	10.2%	-18.1%	1.5%	0.000

¹Maximum baseline period for homes added to treatment is the most recent 6 month period up to the last day of the previous month. Actual baseline period varies by household, depending on the installed date.

Only homes installed for 28+ days in the baseline period were included in the analysis.

Source: PC+ and On Track Split Test Monthly Summary Report, March 2009, The Nielsen Company.

Table 3: On Track Treatment Homes								
Calendar Month(s)	Number of Homes			Fault Rate				
	Reduced Fault Rate with Treatment	Increased Fault Rate with Treatment	Total	Adjusted Baseline ¹	Current Month	Diff	SE(Diff)	p-value
Dec 2008	38	13	51	30.8%	16.7%	-14.1%	3.2%	0.000
Jan 2009	59	12	71	29.2%	14.4%	-14.8%	1.9%	0.000
Feb 2009	65	18	83	28.9%	16.8%	-12.1%	1.9%	0.000
Mar 2009	74	16	90	28.6%	15.6%	-13.0%	2.1%	0.000

¹Maximum baseline period for homes added to treatment is the most recent 6 month period up to the last day of the previous month. Actual baseline period varies by household, depending on the installed date.

Only homes installed for 28+ days in the baseline period were included in the analysis.

Source: PC+ and On Track Split Test Monthly Summary Report, March 2009, The Nielsen Company.