

# When easy doesn't do it: An attempt to simplify a mailed diary survey

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## Abstract

In an attempt to curb the declining response rates of the Nielsen TV Ratings Diary, Nielsen tested a newly-designed shorter duration diary in July 2008. The shorter duration survey period lasted for a two or three days compared to the seven or eight day duration of the control cell. We hypothesized that a shorter duration diary would greatly increase our response rates, as our sample households were being asked to maintain the diary for fewer days, and thereby have less of a burden than our control cell households. However, results showed only small gains in cooperation among households in this group. This cooperation rate was observed despite there being fewer incomplete or erroneous shorter duration diaries and more reported viewing compared to the control cell households. One plausible explanation for these unexpected results could be that respondents in the test group failed to open the diary packet or see that they were only being asked to participate for two or three days. Additionally, recent survey research has indicated that an increasing number of potential respondents are unlikely to comply regardless of the perceived burden. The impact of these findings on future surveys will be discussed.

**Key Words:** response rates, respondent burden, mail surveys

## 1. Background

Since 2001, Nielsen has seen a gradual decline in the response rates of their national TV Ratings Diary sample. While several factors can be attributed to the decline, there is still the possibility of leveling out or curbing the loss in response. Nielsen has also compiled a list of feedback from previous diary households indicating suggestions for improvements and simplifications to the current diary. Further, recommendations and research from survey and questionnaire design experts can also lead to several improvements regarding the look and layout of the Nielsen TV Diary. Thus, Nielsen recently attempted to “simplify” the diary-keeping process by redesigning the current diary and testing the new version of the diary against it.

## 2. Test Design

In this direct test of the standard Nielsen TV Diary versus a new, “simplified” diary, we looked at the following factors:

Diary Orientation: The standard diary is oriented landscape style and open from bottom to top while the simplified diary is portrait style and opens like a book.

Diary-Keeping Duration: We tested a 2-day diary vs. the standard 7 day diary.

Grid Length: The simplified diary grid was either the standard 15 minute time intervals or expanded to 30 minute time intervals.

Further, we used feedback from former diary-keepers to give the simplified diary a more modern look and feel. This included a completely revised cover and color scheme. This look was pretested using cognitive interviews and determined to be the most modern and appealing.

Lastly, we revised many of the instructions using past research and respondent feedback. The goal of this was to make the diary more user-friendly and appealing for household respondents.

**Table 1: Test Design**

| Cell    | Number of Days | Grid Length | Orientation            |
|---------|----------------|-------------|------------------------|
| Control | 7-Day duration | 15-Minute   | Flip-style (landscape) |
| 1       | 2-Day duration | 15-Minute   | Book-style (portrait)  |
| 2       | 7-Day duration | 30-Minute   | Book-style (portrait)  |
| 3       | 2-Day duration | 30-Minute   | Book-style (portrait)  |

## 2.1 Method

During the July 2008 TV Diary cycle, a separate, simplified diary was mailed out to approximately 28,000 households in all 189 Nielsen TV Ratings Diary Markets. The goal was to draw a direct comparison of the simplified diary to the standard diary in order to examine the effect of the newly revised diary. The 7-day duration diary was mailed out in Week 2 of the July diary cycle, while the 2-day duration diary was mailed out in Week 3. All households were randomly selected using a random digit dial telephone frame.

For the 2-day duration diary, in order to obtain an equal estimate of both response and viewing levels, diaries were sent out to begin on four different days during Week 3. Thus, the 2-day duration diaries started on Thursday, Saturday, Monday, and Tuesday of Week 3.

Besides making changes to the diary and varying the duration and grid length, we also attempted to decrease the contacts made to the household. One long-standing comment made by households is that, for a weeklong survey Nielsen seemed to contact households excessively, beginning one month or more before the survey began. To attempt to curb this complaint, we reduced the number of phone calls made during from the time of initial recruitment through to the return of the diaries. Specifically, we eliminated a call at the end of the diary week to remind the households to return the diary.

### 3. Results

Our main analysis for this test was a comparison of response rates (AAPOR RR3) between the standard diary and each of the test diaries. The test diaries were then compared to the standard diaries within the week in which the data was collected. That is, the 7-day simplified diaries were compared to Week 2 standard diaries and the 2-day diaries were compared to Week 3 standard diaries.

As can be seen in Table 2, there was very little difference between the standard diaries and any of the simplified test diaries. With one exception, there were no significant increases in cooperation from our test households.

**Table 2:** Response rates of test diaries vs. standard diaries

| Diary Type | Jul08 Wk2 | 7-day, | Jul08 Wk3 | 2 day, 15 min grid |       |       |       | Total | 2 day, 30 min grid |       |       |       | Total |
|------------|-----------|--------|-----------|--------------------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|
|            |           |        |           | T                  | S     | M     | W     |       | T                  | S     | M     | W     |       |
| All Type   | 29.9%     | 29.6%  | 30.2%     | 30.3%              | 29.9% | 32.5% | 31.1% | 31.3% | 30.7%              | 30.0% | 29.4% | 31.4% | 30.4% |
| Regular    | 26.9%     | 27.3%  | 27.3%     | 28.5%              | 27.6% | 30.3% | 27.3% | 28.4% | 28.3%              | 26.9% | 27.8% | 30.1% | 28.3% |
| DVR        | 47.3%     | 45%*   | 47.0%     | 42.2%              | 46.4% | 46.7% | 53.0% | 47.3% | 45.8%              | 48.1% | 42.4% | 42.0% | 44.9% |

We also wanted to examine the differences in response rates across different demographic groups. Although there was little overall increase in response among our households who received the simplified diaries, it could be that younger or more ethnic households reacted more favorably to the simplified diary. In order to assess this, we examined the sample characteristics for the households that returned a diary. Since we only have data for those households that return a diary, we took the proportion of returns within each demographic and compared it to the standard diary sample. Table 3 shows that the distribution across all of our hard-to-reach demographics was similar to the standard diary characteristics, indicating that none one particular demographic group was more likely to return the simplified diary compared to the standard diary.

**Table 3:** Sample characteristics distribution

| AOH       | 7-day, 30 min | 2-day, 15 min |       |       |       |       | average | 2-day, 30 min |       |       |         |       | Jul08 Standard |
|-----------|---------------|---------------|-------|-------|-------|-------|---------|---------------|-------|-------|---------|-------|----------------|
|           |               | T             | S     | M     | W     | T     |         | S             | M     | W     | average |       |                |
| <35       | 8.2%          | 8.8%          | 7.6%  | 8.9%  | 6.6%  | 8.0%  | 5.7%    | 5.6%          | 7.1%  | 9.4%  | 7.0%    | 8.3%  |                |
| 35-54     | 34.0%         | 27.8%         | 37.3% | 34.9% | 32.8% | 33.2% | 37.7%   | 35.0%         | 33.3% | 34.4% | 35.1%   | 34.0% |                |
| 55+       | 57.8%         | 63.4%         | 55.2% | 56.2% | 60.7% | 58.8% | 56.6%   | 59.5%         | 59.7% | 56.3% | 57.9%   | 57.7% |                |
| Size      |               |               |       |       |       |       |         |               |       |       |         |       |                |
| 1         | 22.6%         | 20.5%         | 24.5% | 26.2% | 21.3% | 23.2% | 23.8%   | 22.1%         | 22.7% | 21.7% | 22.6%   | 23.0% |                |
| 2         | 44.6%         | 48.3%         | 39.5% | 38.4% | 47.5% | 43.4% | 44.8%   | 44.9%         | 45.3% | 44.0% | 44.7%   | 43.3% |                |
| 3         | 14.6%         | 12.4%         | 13.5% | 16.9% | 15.7% | 14.7% | 9.9%    | 13.8%         | 16.4% | 13.2% | 13.3%   | 13.8% |                |
| 4         | 11.1%         | 10.7%         | 15.0% | 12.0% | 10.1% | 11.9% | 13.7%   | 11.9%         | 9.8%  | 13.4% | 12.3%   | 12.1% |                |
| 5+        | 7.2%          | 8.1%          | 7.6%  | 6.4%  | 5.4%  | 6.8%  | 7.8%    | 7.3%          | 5.8%  | 7.8%  | 7.2%    | 7.7%  |                |
| Kids      |               |               |       |       |       |       |         |               |       |       |         |       |                |
| Yes       | 25.6%         | 25.6%         | 27.7% | 28.2% | 24.4% | 26.5% | 26.9%   | 24.8%         | 24.9% | 26.1% | 25.7%   | 26.4% |                |
| No        | 74.4%         | 74.4%         | 72.3% | 71.8% | 75.6% | 73.5% | 73.1%   | 75.2%         | 75.1% | 73.9% | 74.3%   | 73.6% |                |
| Cable     |               |               |       |       |       |       |         |               |       |       |         |       |                |
| Yes       | 59.1%         | 60.2%         | 61.8% | 58.9% | 58.1% | 59.7% | 56.1%   | 62.4%         | 61.5% | 61.6% | 60.4%   | 58.3% |                |
| No        | 40.9%         | 39.8%         | 38.2% | 41.1% | 41.9% | 40.3% | 43.9%   | 37.6%         | 38.5% | 38.4% | 39.6%   | 41.7% |                |
| Race      |               |               |       |       |       |       |         |               |       |       |         |       |                |
| Black     | 13.1%         | 7.3%          | 5.8%  | 12.5% | 9.0%  | 8.7%  | 13.2%   | 11.1%         | 9.6%  | 8.9%  | 10.6%   | 13.6% |                |
| Non-Black | 87.0%         | 92.7%         | 94.2% | 87.5% | 91.0% | 91.3% | 86.8%   | 88.9%         | 90.4% | 91.2% | 89.4%   | 86.4% |                |
| Total     | 4562          | 410           | 408   | 450   | 427   |       | 424     | 412           | 397   | 448   |         | 53202 |                |

### 4. Conclusion

The results of this test were quite surprising to us. Despite our best efforts, we were unable to create a simplified diary that significantly increased response rates. This was

true even for a shorter duration diary that lasted only 2 days compared to the standard 7 days.

To learn more about why households did not respond, we followed up with a subsample of households (N = 1588) of households who completed and returned a mailed diary. Results from this follow-up indicated that households who returned the diary rated the simplified diary as easier to use and more modern looking than the standard diary. Thus, even though we seemed to accomplish our goal of creating a more user-friendly, contemporary diary, our response rates did not improve.

Our best possible explanation for this is that households who did not participate likely did not even open the envelope or take the time to look at the contents. For those who did open it, there is evidence from both pre-testing and follow-up testing that these people were more inclined to participate after seeing the easier, more modern diary.

Future research will focus on ways to persuade households to open the outer envelope without initially throwing it away. Creation of a more attractive envelope or one that stands out in the mail might lead to more people opening the envelopes and in turn seeing the incentives and simple tasks enclosed. Nielsen has already begun testing of a new envelope for future samples and will continue to refine this in hopes of increasing response.