Survey Design for Mobile Video

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Introduction
Last year, US consumers watched roughly 50 billion online videos—a staggering number, to say the least\(^1\). From YouTube to Hulu, a limitless array of digital video content is available for consumption. And it has never been easier to share online content with friends and family, further fueling the growth in online video viewing.

Mobile devices are an important part of the online video landscape. The latest 2014 figures show that smartphone and tablet access represent close to a third of all online video views, which is double the share from the prior year. Industry experts cite more robust networks, increasing access and use of mobile devices, and growing availability of mobile content (including “TV everywhere” by broadcasters) as fueling this rapid rise\(^2\).
Given the growing importance of cross-screen video viewing, we set out to understand best practices for incorporating mobile video in survey research. Videos are commonly considered to be dropout triggers for online surveys, and we would expect this to be especially true for mobile users, whose overall survey participation rates are lower than traditional PC-centric survey participants. However, two factors—faster mobile connection speeds and sharper mobile device screens—made us curious if including video in mobile surveys would still present a significant challenge with survey drop out. Further, with increasing viewership of online videos and the resultant demand for research on mobile video viewing and behaviors, including mobile video in research is quickly becoming a necessity.

**EXPERIMENT**

We conducted an online survey of 1,350 U.S. consumers ages 18-54 who stated that they regularly watch mobile videos. Respondents were randomly assigned to one of the following cells:

1) **Video Length (Figure 2)**
   - Cell 1: 3 minutes
   - Cell 2: 13 minutes
   - Cell 3: 20 minutes

2) **Survey Intro Text (Figure 3)**
   - Cell 1: User informed of video length at survey start
   - Cell 2: No mention of video length

Our first variable tested how video length impacts survey participation and engagement. The expectation is that long videos reduce survey engagement and participation. But how long is too long? Industry reports find that more than half of all videos watched on a smartphone are 10 minutes or longer. What is the tolerance for mobile video in online surveys?

Respondents viewed a video that included a 30-second pre-roll advertisement. The total length of the video varied by treatment. Survey questions followed, which asked for the level of video engagement and brand recall, among other metrics.

![Figure 2. Test parameter: Video Length](image-url)
Our second variable tested whether survey engagement and participation is enhanced or compromised by giving respondents an advance indication about the video length. Our hypothesis is that the incorporation of videos reduce survey participation, so we want to find ways to minimize this. Pointing out that the video is a short one may enhance participation. And letting respondents know upfront about the video length, may foster a survey environment of trust. In other forms, building trust with the survey respondent has shown to increase survey participation and data accuracy.

Figure 3. Test parameter: Survey Intro

In our survey, respondents were allowed to self select the device on which they completed the survey. While mobile video was our focus, we wanted to benchmark our results against PC devices. And finally, we employed a responsive survey design, optimized to whatever device the respondent used to take the survey.

Figure 4. Devices used to take the survey
RESULTS

Impact of Video Length

During the test video, pause, forward and rewind controls were available to the respondent. A respondent could feasibly start the video, then fast forward to the end to continue with the rest of the survey. We wanted to mimic, to the extent we could, a real digital viewing experience. We also thought that this would help us understand the upper limit of video length people would be willing to watch.

Through meta data, we approximated the abandon rates for each of the video lengths by device type. Figure 5 clearly shows that video length matters.

For the short video, voluntary completion was high and relatively consistent across devices. Even at three minutes, three in four smartphone participants watched the entire video. On the other hand, video abandonment increased significantly for the medium and long videos. PC users showed greater attention spans, but abandon rates were still very high after a few minutes of video play. The 20-minute video for a smartphone user was clearly unacceptable, with only one in three watching the full video.

Figure 5. Video abandonment results captured from meta-data

Some slight differences emerged for video enjoyment ratings between the devices (Figure 6), but these differences were insignificant, regardless of video length. We had originally hypothesized that digital videos on the smaller screen would provide a poorer, less enjoyable video experience. And perhaps our results may have been different had we leveled the field and required all respondents to view the entire video. Yet even when we control for this, and look only at respondents who watched the entire video, the video enjoyment ratings across devices remains similar (Figure 7).
Figure 6 shows the medium-length video received lower ratings across the sample, simply because the content wasn’t as universally engaging to respondents: fewer people indicated that it was similar to something they would normally watch; fewer people indicated they would watch a similar video in the future.

What to make of the similar video engagement ratings between PC and smartphone users? From previous research, we know that while people might report that they have a preferred device for specific digital activities—such as video watching or even survey taking—in reality people tend to grab the device that is most convenient (at hand and charged) in that moment. And then their expectations automatically calibrate to that device. In other words, people know what to expect when watching video on a mobile phone, and so their video enjoyment ratings don’t suffer simply as a function of watching on a mobile device.\(^5\)

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**Figure 6.** Overall, how much did you enjoy the video? (0-10 point scale)

**Figure 7.** Overall, how much did you enjoy the video? (0-10 point scale) Based to respondents watching the entire video.
Survey enjoyment showed a slight decrease among smartphone users when compared to PC users for each of the video lengths (Figure 8), though overall survey enjoyment levels were relatively high across devices. That the device distinction appears more pronounced here than with cross-device comparisons of video enjoyment indicates that the survey taking experience in general was less enjoyable for mobile users, and not (solely) as a result of the inclusion of video in the study. While our survey was optimized for the smartphone, we included several grids and an open end numeric question; also, depending on the video length, the total survey time was five minutes or longer. These are survey dropout triggers across all devices, and especially for smartphone users.

As with video enjoyment, overall survey enjoyment may have been impacted by engagement with the video content more so than the video length: for each device, survey enjoyment was statistically lower for respondents who viewed the less-popular medium-length video. In other words, the appeal/ Enjoyment of the stimuli included in a test can significantly impact the respondent’s overall experience participating in the study. Of course, at times this is unavoidable—sometimes we simply have to test unpopular or unappealing concepts or content to address research objectives—but this is an important caution to keep in mind especially when considering things like survey dropout rates, panelist engagement and overall survey enjoyability.

A final element that underscores the importance of engaging content, we included the same 30-second pre-roll advertisement in each of the three videos. Not surprisingly, respondents who viewed that ad within the less engaging medium-length video had significantly lower brand recall (Figure 9). This simply reinforces the notion that respondent engagement and therefore good, accurate data is less related to length (whether it is the length of the survey or the video) than content.
Correct Ad Recall

<table>
<thead>
<tr>
<th>Video Length</th>
<th>Ad Recall</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 minute video</td>
<td>76%</td>
</tr>
<tr>
<td>13 minute video</td>
<td>62%</td>
</tr>
<tr>
<td>20 minute video</td>
<td>77%</td>
</tr>
</tbody>
</table>

*Figure 9. Ad Recall*

**Impact of Video Length Mention**

Prior to watching the video, half of the sample was informed about the length of the video, while the other half received no indication of video length.

This mostly affected completion rates for the long video, with the effects most pronounced for those taking the survey on a mobile device. Giving respondents advance notice that their survey would include a 20-minute video prompted roughly one in five PC-survey takers to drop out of the survey, while slightly more than two in five mobile takers dropped out before viewing the video. This was the case even though watching the full video was optional.

For respondents completing surveys on computer, survey completion rates were higher overall, with less of a difference in completion rate by either video length or advance notice of video length. And while the video length itself impacted survey completion rates slightly (with survey completion higher among those assigned to watch the three-minute video and slightly lower among those assigned to watch the longer videos), giving PC-respondents advance notice of the video length had only a 4-5 percentage point decrease in survey completion rates.

In contrast, there was a 13 percentage point decrease in survey completion among mobile survey takers when they were given advance notice of the 20-minute video length. Ultimately, 20% more people dropped out of the mobile survey when given advance indication of the video length.

The researcher’s inclination here might be to maximize survey participation by not revealing the length of time required to view video stimuli within a survey, especially when those videos are longer than 3-5 minutes. But we found that being upfront with respondents affects their overall engagement and experience with the survey. When we warn respondents about the video length, there is a slight but statistically significant increase in survey and video enjoyment observed for the 20-minute video (Figure 10).
Figure 10. Completion Rates by video length and warning / no warning about the length

Figure 11. Survey engagement by video length and warning / no warning about the length
CONCLUSION

The obvious takeaway from our investigation is that limiting video length in the research environment is better for maximizing survey and video completion rates. Our results suggest that smartphone users show a relatively high level of tolerance for a three-minute video. However, longer videos increase abandon rates substantially—even if viewing the entire longer video is optional.

We also found that the content of the video can impact both survey enjoy ability and completion rates, as well as depressing various metrics related to the content itself (such as brand recall and message breakthrough). Among those who completed the survey (i.e., those who did not drop out), neither video length nor the device used to watch the video had as much impact on a person’s survey experience as the content of the video itself. That suggests that including truly engaging content (though certainly subjective) may mitigate data quality issues often associated with longer surveys; when testing potentially less appealing content, researchers should consider and account for the impact of higher dropout rates on sampling and field time.

And finally, we recommend being transparent with mobile survey takers about the length of the video they will need to watch to complete the survey. This may trigger more dropouts, but the tradeoff is for a more engaged survey sample who do not bring bias from a negative survey experience to their evaluations of the content itself.

References