

SSI POV: Online

The Impact of Fraud in Low-Incidence Studies

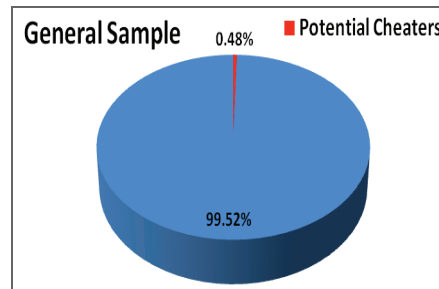
Many research studies, including the ARF's very large Foundations of Quality study (2009), have found that only a very small number of people (less than 5%) systematically give false answers on surveys; the rewards are simply not attractive enough to make this behavior widespread. At these low levels, the behavior of cheaters cannot affect the results of a general population study.

Two Trends: Fraud and Low- Incidence Studies

However, as sample providers, we see two current trends: a concern about fraud; and an increase in low-incidence studies. These two trends are related, because low-incidence studies terminate honest participants who cannot qualify and by doing so allow a higher proportion of cheaters to be present in the sample because they have given false answers during a screener section in order to qualify into a survey.

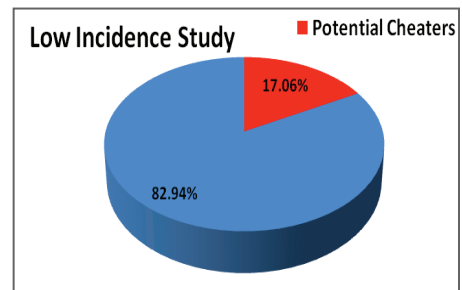
The example below demonstrates the impact of this behavior in low impact studies. It should be noted that for the purposes of this test, no data cleaning was done and participants SSI would normally deem "unacceptable" were not removed as is SSI's standard practice.

Participants were asked: "Do you have any of the following makes of car in your household?" followed by a list of 12 car makes sold in the US, an "other" option, and a "none of the above" option. 9 of 12 car makes are considered to be in the luxury brand category. For the purposes of this study, anyone selecting 5 or more cars from the list was flagged as a "potential" cheater.



Among 17,089 participants in the US exposed to the screener questions, only 82 were flagged as "potential cheaters" (owning 5 or more cars from the list). At this level—less than half of one percent—the responses from this type of cheater cannot have any material effect on the data.

What happens, however, if the researcher wants to target owners of Luxury Car A? There are 341 people who claimed to own this brand. Because the characteristic behavior of this particular type of cheating is claimed ownership of many brands, we would expect more of the potential cheaters to appear in any sample of owners of any particular brand. And that is the case here. When we look at the group of people who own Brand A, 17% were in the potential cheater group. Our group of potential cheaters, which was a trivial less-than-half-percent of the general population sample, makes up a worrying



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How to Prevent Cheaters from Entering the Study

17% of the low-incidence targeted sample.

This example shows how the same number of cheaters can have no material impact on a high incidence study but a serious impact on a low-incidence one.

- 1. Mask the survey topic and reward in the invitation.** Participants within the SSI system enter through a general invitation, which does not “tip off” a potential cheater on the topic, or the reward they might earn if they qualify to complete the study.
- 2. Prescreen without leading questions.** Potential participants should be asked questions on a variety of topics so a potential cheater does not know what answer to give in order to qualify.
- 3. Remove one reason for cheating.** Throughout the screening process, do not reveal information about incentives so that people have no incentive to try to qualify for one survey over any other.
- 4. Removes a second reason for cheating.** By working to place participants into studies they will qualify for, the participant has less opportunity to “cheat” during the screener section of the survey itself—if they don’t qualify during profiling, they will never see the survey.

Guidelines for Fielding Low-Incidence Studies

Awareness of the issue is key. When fielding a very low-incidence study, follow these guidelines:

1. Design screening questions meticulously to avoid tipping off potential cheats.
2. Use appropriate rewards. An unusually generous cash reward may encourage people to give false data. Information, especially for low-incidence, specialist surveys, can be an excellent way to reward a genuine specialist population.
3. Include quality control questions. For example, open end text questions connected to a keyword list in real time can be most effective for low-incidence studies, and allows for real time screenouts of people who don’t appear to truly qualify.
4. Assume that most people are honest (which they are), and avoid using wording that assumes people will cheat. An interesting study found that more people stole pieces of wood from a national park when signs were posted reminding people not to do so, compared to using no signs.
5. Be especially careful to create a survey which is short and pleasant to take. As the industry is increasingly seeking lower and lower incidence populations, we should expect higher frustration levels among the survey-taking population and consider the effect “terming” people has on their willingness to participate in survey research in the future, as well as the likelihood that they will be truthful next time they are confronted with a survey screener.