

# White Paper

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## **The Effects of Survey Frequency on Panelists' Responses**

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## Introduction

Researchers have always had a concern that the same people are answering a lot of surveys—whether it's the case that only a few people are prepared to drive to a focus group facility to discuss an issue, or only a few people will test-market a product, or that many people are never at home to answer the phone when researchers call. Response rates continue to fall, online as well as on the phone, and panel recruitment is becoming more difficult and costly, adding to the pressure of fewer numbers of people to support survey research needs.

The issue of non-response error is certainly nothing new. With online research now firmly established as a widespread, reliable research methodology, and large online panels having become the primary online research methodology, the perennial issue of “professional respondents” continues to receive attention. Researchers are asking questions, such as:

- Do newer, less experienced panelists respond differently than established, experienced panelists?
- Is it longevity on a panel that makes the difference or is it the frequency of response of each panelist?
- If a “seasoned” panelist does, in fact, respond differently, what are the differences?
- Which are the “true” answers?

### **Can the differences be prevented or controlled?**

Although we are not researchers at SSI, as a provider of online samples we have a strong interest in understanding these issues and their potential impact on quality research. Online research offers huge benefits over phone or face-to-face methods in terms of efficiency, speed and the capability to conduct more and better research. But what has not changed is the fact that the sample is still the foundation upon which the entire survey project is built.

### **How many is too many?**

In the current environment of precise targeting and very low-incidence studies, it is inevitable that some segments of the population will be exposed to more studies than others. Targeted, low incidence samples are the easiest to move to the web. Today's researchers want to reach, for example, the high-income IT professional with a certain level of investable assets, who owns a boat and is in the market for a particular type of car. The beauty of online research is that it allows researchers to drill down and zero in on this type of specific population. The result, however, is that no matter how large an online panel grows, inevitably some segments of it will be used more often than others.

If an average member of an online panel completes a survey 3 or 4 times a year, it is likely that a highly desirable and cooperative panelist may be completing one survey a month or even more. This level of survey response has traditionally made researchers uncomfortable, because taking one survey is seen as having the potential to “taint” and prejudice the respondent's responses to subsequent surveys. The best respondent, it has always been thought, comes fresh and clean to the survey process.

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Is it time to question that assumption? Is it realistic to think that any modern consumer comes without bias to your concept and marketing message?

The average American sees hundreds of marketing messages on a daily basis. While there is some debate about the exact number, it ranges anywhere from 247 (Consumer Reports) to 3,000 (Union of Concerned Scientists 2001) advertising messages per day. Whatever the precise number, from the time we wake up to see the designer logo on our pillow covers to the last product placement in that best-selling novel we read as we fall asleep at night, our world is a mass of marketing messages. Ads light up and talk to us as we walk down the street or through the mall; we are exposed to product concepts in TV shows, movies, and books, at sporting and political events, on web sites, on roadways, and in our cars, buses and trains. The acquaintance showing off his latest electronic gadget might be a viral marketer by the gadget's manufacturer. Even gas pumps engage us in conversation and takeout pizza boxes have an urgent message to share. Pop quizzes and quick surveys are everywhere—online, in newspapers and on radio and TV. The very few, very heavy responders on a panel may take one or two “real” surveys in a week. The question remains, to what degree is their previous participation significantly biasing their answers in the face of the frenzy of marketing messages to which they are exposed?

We like to think that consumers distinguish between marketing clutter and real research, but consumers may be more confused between commercial messages and research than we think. A survey by the Pew Internet and American Life Project found that 38% of respondents were unaware of the difference between the paid and unpaid search results displayed on search engines that they frequently used. And only one in six said they could always tell which results were paid or sponsored and which were not. The ReturnPath Holiday Email Consumer Survey reported, “consumers define spam as anything they don’t find interesting.”

## What the Research Shows

In order to examine the differences between the responses of panelists who respond to many surveys and those who respond to few, SSI, in cooperation with two of our research partners, conducted additional analysis to more fully understand the possible biases. Each research company's studies were online studies using the SurveySpot US panel. The first study was carried out by a major research company running a continuous tracking study on SurveySpot in the food segment and the second was conducted by researchers at a large, U.S.-based consumer packaged goods firm in the food and beverage sector.

### Study 1

A study of 1,132 female SurveySpot members aged 25 to 54 years, who participated in an ongoing grocery product survey for a three-month period, analyzed their frequency of responding to SurveySpot surveys. Each respondent had to have purchased at least one of three food categories in the previous six months in order to qualify for participation and most questions were about products in one of those categories.

Respondents were grouped into five categories, according to how many surveys they had responded to during their SurveySpot membership. The most frequent responders (7% of all responders) responded

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to an average of more than four studies per 10-day period. (This does not indicate that they completed more than four studies; they may have screened out or quit studies in the middle.)

### **Demographics of frequent survey-responders were similar**

Thirty two percent of the most frequent survey responders reported not being employed—the same percent as for all completing the survey. The more frequent survey takers were more likely to be employed part-time rather than full-time (15% part-time, compared to only 11% for the least frequent responders and 12% for all respondents), however the survey found no evidence supporting portrayals of frequent online survey takers as individuals attempting to make a living from filling out online questionnaires.

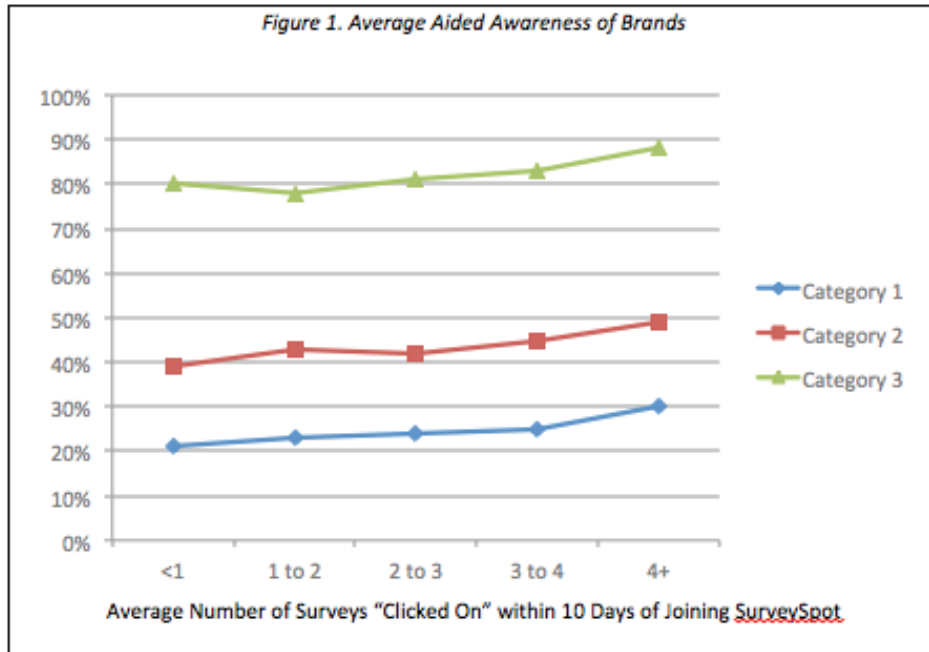
As expected, groups likely to be targeted more frequently appeared in higher proportions in the frequent responder group. The frequent respondent group was 11% African American and 7% Hispanic, compared to 5% and 3%, respectively, among all respondents. And 76% in the frequent responder group reported income greater than \$75,000 compared to only 40% of all respondents.

The frequent survey responders also reported slightly more exposure to certain types of media, for example, regularly listening to commercial radio stations (90%), reading Sunday newspapers (84%), traveling past posters on billboards, bus stops and elsewhere (72%), going to the cinema (59%) and reading daily newspapers (52%).

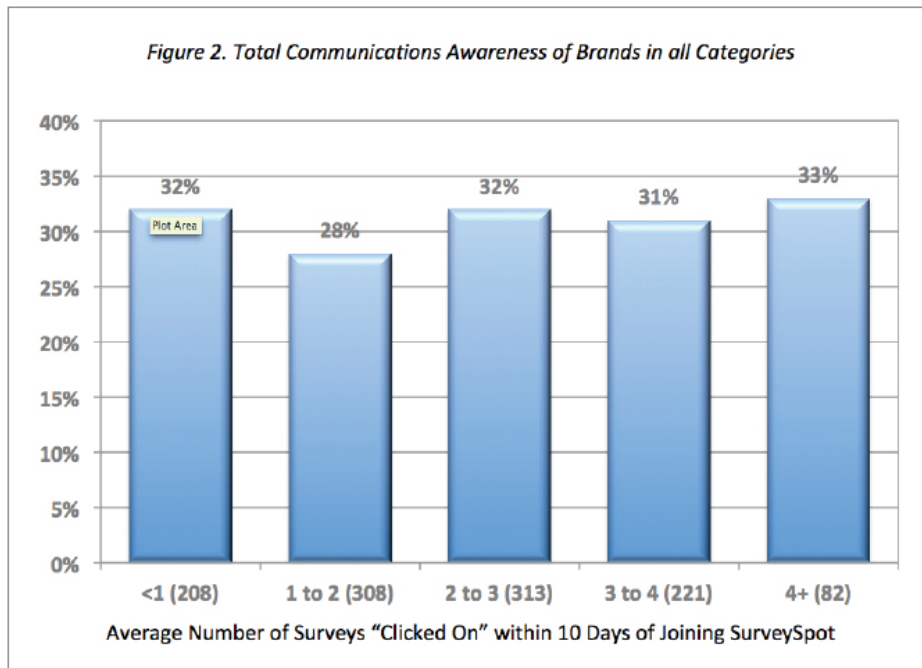
When examining their responses to the survey questions, this study found that the most frequent responder group responded to the survey as would be expected given their demographic profiles.

This group did indicate more aided awareness across all brands, but the differences were not dramatic. For example, aided awareness across three categories was 88%, 49% and 30% for the frequent responder group compared to only 81%, 44% and 26%, respectively, across all responders (refer to Figure 1).

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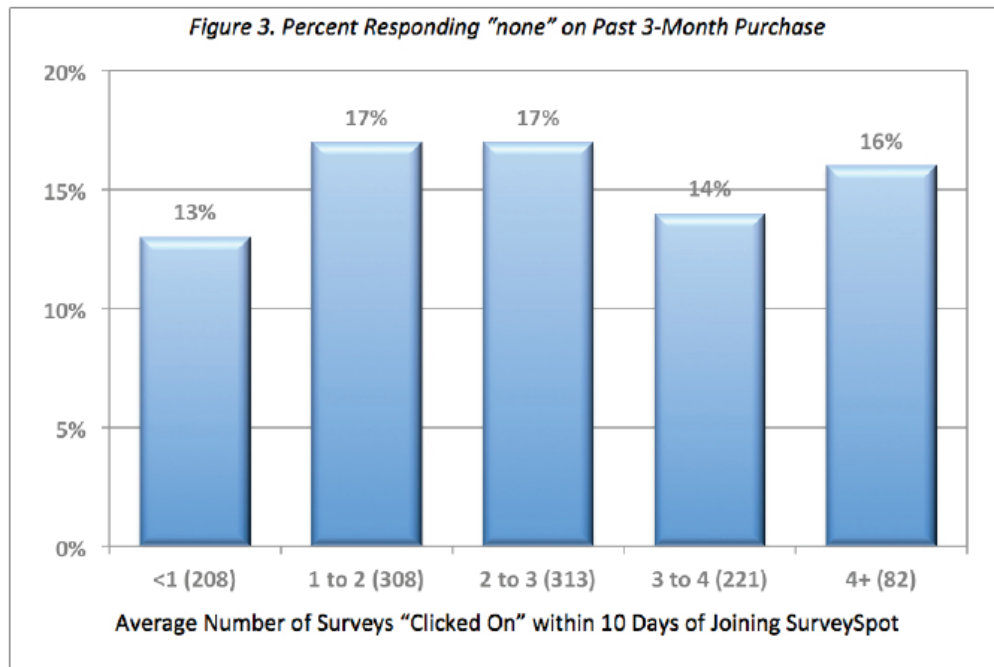
Only a slightly higher percentage of frequent responders indicated awareness of advertising communications about a brand included in all three categories, 33% compared to 31% across all respondents (refer to Figure 2).



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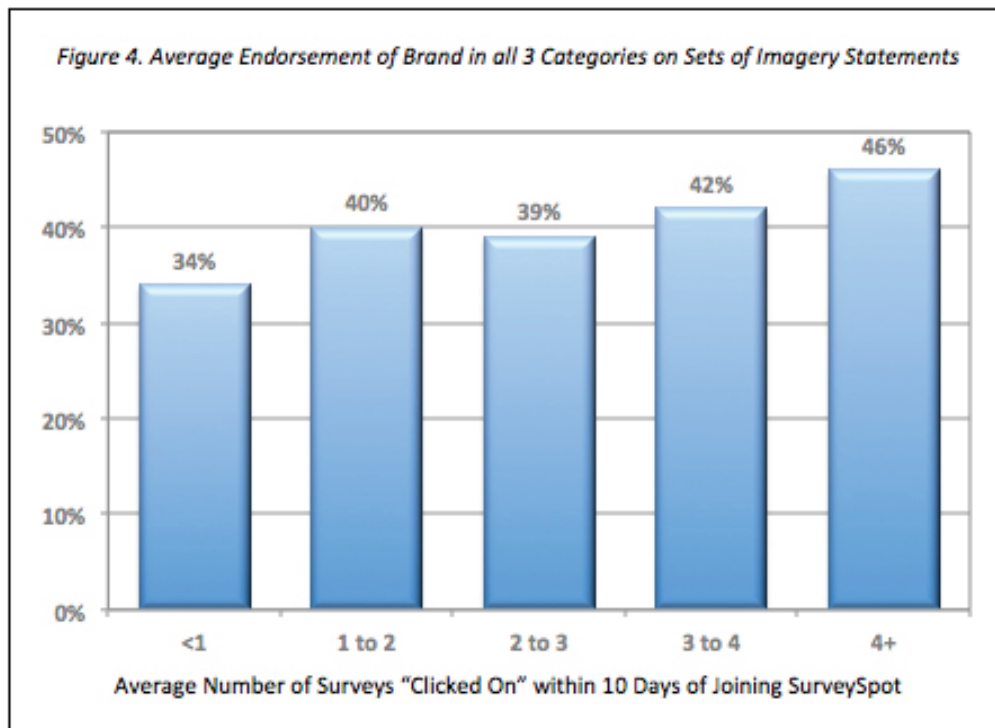
### No evidence of rushing

There was no evidence that the most frequent responders were trying to speed through the survey. They were no more likely to select “none of the above” on items such as what brands in the category they had purchased in the previous three months (refer to Figure 3).



In fact, this group made a relatively high number of marks on “check all that apply” questions. For example, one section of the survey presented a “brand imagery” grid question in which respondents were asked to indicate which of the 17 to 19 statements (depending upon the category) exemplified each brand of which they were aware. The frequent responder group indicated, on average, that 46% of the statements applied to a brand included in all three categories, compared to the entire group who, on average, associated only 40% of the statements with the brand (refer to Figure 4).

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## Study 2

The second study examined differences in responses among frequent survey responders. Interest in conducting this research was prompted by concerns voiced about “professional respondents” as the client company contemplated moving from an offline to an online data collection method in various countries. They were concerned that new panelists might respond differently from experienced panelists and wanted to measure the possible effects of tenure and survey response frequency. Additionally, they wanted to ensure that panel management policies were in place to moderate any potential bias.

The company focused especially on evaluative measures because experience had shown them that these measures are more sensitive than those which measure behavioral and attitudinal factors.

Responders were grouped into three categories:

- Inexperienced (responded to 1 to 3 surveys)
- Experienced (responded to 4 to 19 surveys)
- Very experienced (responded to 20+ surveys)

Responses were weighted to represent 33.3% of respondents in each experience segment so that each experience level was evenly represented.

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The sample was balanced outbound to age and gender and weighted after the fact to age, gender, income and households with children. The back-end weighting made no material difference to the responses.

The study conducted was a concept test for a new food product. Findings showed that intent-to-buy scores were similar across demographic groups (refer to Table 1).

**Table 1. Concept Appeal**

Intent to Buy	Yes	No
Age 35+	38%	38%
Female	36%	40%
Children in household	40%	37%
Income under \$50,000	38%	40%

However, inexperienced panelists were more positive than the very experienced panelists on all measures (refer to Table 2).

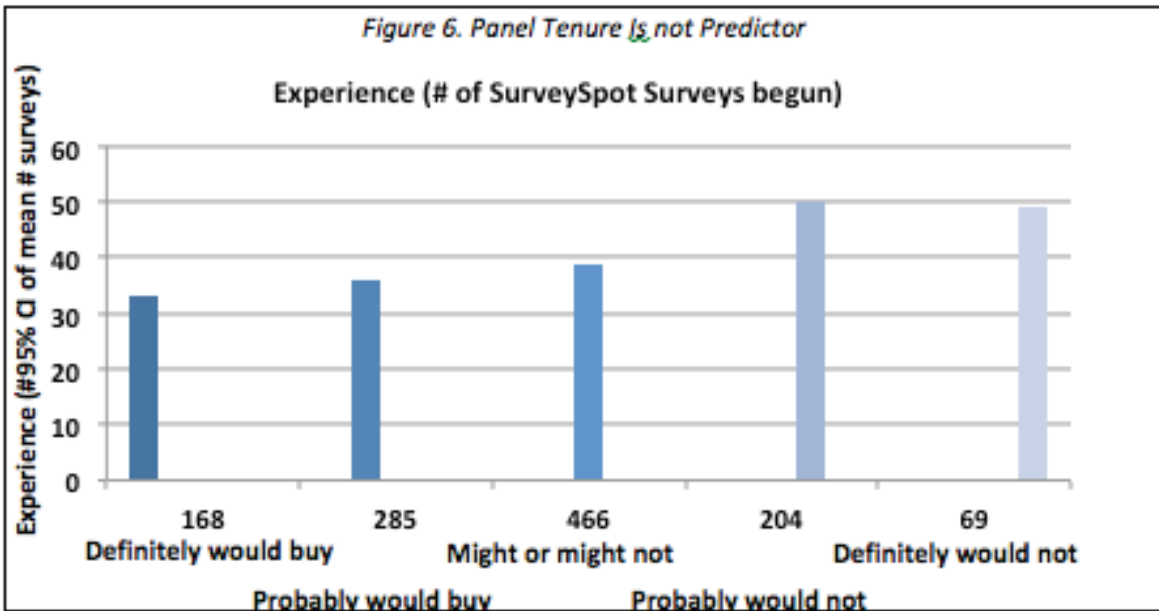
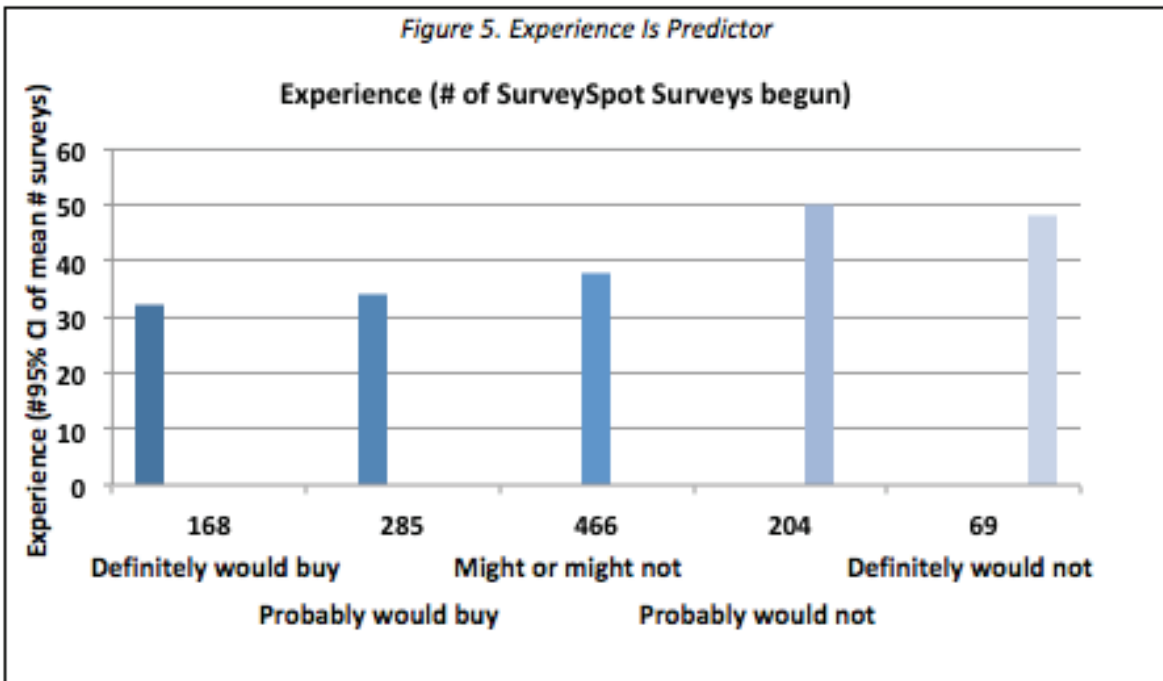
**Table 2. Very Experienced Panelists More Negative**

	Inexperienced	Experienced	Very Experienced
Intent to Buy (Top 2 boxes)	43%	38%	33%
Awareness (Ever seen or heard of)	64%	55%	50%
Liking (Top 3 boxes)	78%	73%	66%
Future Purchase Frequency (at least monthly)	60%	51%	46%

The study also demonstrated that experience (participation in a number of surveys) is a more sensitive measure than tenure (length of time on the panel). An inactive panelist can be a member for a long time, but have little experience. On the other hand, an active panelist can gain a lot of experience in a relatively short time. So for newer panelists, experience is a much better measure than tenure.

The following charts show that tenure does not impact how panelists respond to the concept, but panelists' experience level is a clearer predictor and shows that more experienced panelists are less positive (refer to Figures 5 & 6).

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Some panelists participate in more than one research panel. This study also asked how many other panels the respondent belonged to. The responses suggest that the number of panels they participate in did not impact how they felt about the food concept. Experienced panelists did not respond differently on all measures. The differences appear to be restricted to questions dealing specifically with the enthusiasm about the new product concept. When asked more general questions, responses were similar across the groups (refer to Tables 3 & 4).

**Table 3. Looks Appetizing**

Rating	New	Inexperienced	Experienced
1	2%	1%	2%
2	5%	5%	5%
3	22%	24%	26%
4	46%	48%	45%
5	25%	22%	21%

**Table 4. Hits the Spot**

Rating	New	Inexperienced	Experienced
1	4%	2%	2%
2	8%	8%	6%
3	43%	44%	47%
4	33%	33%	33%
5	13%	14%	12%

As would be expected, very experienced panelists move through the survey somewhat more quickly than new panelists (refer to Table 5).

**Table 5. Duration**

	Inexperienced	Experienced	Very Experienced
Average duration	10 minutes	11 minutes	9 minutes

However, the data regarding the general questions points toward the same conclusion as was noted in the first study—an integrity of response among heavy responders. In other words, frequent responders were not rushing through the survey clicking the right hand box in every case. Their shorter completion time appears to point to their greater experience and dexterity in navigating the survey page and instructions.

This research underscores the importance of maintaining a stable panel and of using a panel that can provide a consistent mix of respondent experience levels over time.

Which are the “true” responses? The less experienced panelists respond differently from experienced panelists, but the question is, which group is giving the “correct” answers? Which group is “right?”



There is some evidence that responses from frequent responders are more in line with actual consumer behavior than responses from less frequent responders. Intent-to-buy scores are frequently over-inflated in consumer survey research, but this study finds that the very experienced panelists have scores that are not as over-inflated. Therefore we would conclude that scores from experienced panelists appear to be more in line with the actual behavior that can be expected in the real world. This finding is a contradiction to conventional wisdom stating that past participation is not desirable.

A key question is—are the scores from very experienced panelists in line with reality for a good reason—are they free of a desire to answer in the way that’s expected, so they are more truth-ful? Or, are the scores different for a bad reason—respondents are trying to get through the survey quickly and they have discovered that when they give answers which indicate heavier usage and more enthusiastic intent-to-buy they are often given more follow-up questions to answer?

Results from Study 1 indicate that more experienced panelists are not trying to rush through the survey by under reporting their usage and/or intent-to-buy.

While more research is needed to determine which group is “right,” it is clear that consistency in the mix of more experienced and less experienced panelists is important in the sample selection process.

### **How can researchers and panel companies mitigate this effect?**

At SSI we have checked—start to finish—over 3,000 surveys in the past three years. We review each survey from the point of view of the average panelist taking the survey and we see a huge variation in survey quality. Some surveys, frankly, are so unappealing that only the most determined and dogged panelist (most likely someone fitting the profile of the frequent responder) will have the commitment to make it through to the end of the survey.

The panel screening surveys SurveySpot hosts, which take six or seven minutes to complete, consistently yield a 95% completion rate. However, other surveys, which may be long, complex and in which individual pages may each take up to several seconds to load, frequently achieve only a 60% completion rate or less.

Since we are not researchers, the research needs which dictate certain survey designs are outside our core expertise, however we are beginning to work with clients to measure the effects of different survey designs on survey response. One study demonstrated that a graphics-heavy design took less time for respondents to complete and received much higher marks from panelists than a text-based alternative design of the same study. There is much that can be done within the survey design to encourage high-quality responses. For example, some survey programs now time respondents as they move through the survey and screen them out if their pace is inappropriately fast. There are many ways in which the careful use of graphics and tightly worded instructions can encourage thoughtful responses.

Making surveys a more pleasurable experience for panelists is a win for us all. Panel universes are finite. If surveys are more pleasant, response rates rise, panelists are more likely to remain loyal and engage in

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panels, and survey results will not be limited to a small subset of potential respondents.

Sample providers like SSI are attacking this issue on several fronts including:

- **Intelligent recruitment:** Recruitment diversification provides broader and more consistent representation on a panel. A panel that recruits from only one or two sources or methodologies may be vulnerable to sudden changes in composition.
- **Screen the panel carefully:** Pre-screening the panel makes for less panelist fatigue. Panelists like to be invited to surveys on topics they're interested in, so response rates rise and, in turn, panelists can be invited less often.
- **Removal of fraudulent panelists:** Sample providers usually have a system in place to remove frivolous or fraudulent survey takers based on observation and feedback from clients. These members are usually flagged or coded in order to prevent them from rejoining. "Remove" algorithms are experiential and improve over time.
- **Offer appropriate rewards:** Overpaying respondents may encourage less thoughtful responses. In contrast, a reward program with a lot of variety can keep panelists more focused on the survey rather than solely on receiving prizes or payments. A rewards program that involves panelists in charity programs may promote a mindset of altruism and responsibility, which may promote more honest, thoughtful responses.
- **Educate and develop trust:** Sample providers should clearly communicate that panel membership is not a "career." Other sample providers engage in other forms of educational efforts with their panelists to more fully explain the importance of research. They may share some top-level results or demonstrate via newsletters or web sites how research has made a difference.
- **Consistent churn rules and panel management practices:** A large panel, which is large only because no cleaning has been done, is not an effective panel. Panel management rules should be clear and consistent in order to prevent wide variations in the composition of samples over time. (For example, someone who has a high school education and lists their profession as "surgeon" should not be admitted to the panel.)

Six key questions to ask your panel company:

- What are your recruiting practices?
- What are your panel management practices and when and how are they modified?
- What are your cleaning rules and when and how are they modified?
- How do your reward policies promote quality responses?
- Are you available for consultation about invitation wording, appropriate rewards, length of time in the field and mail-out schedules? All of these elements will affect the types of people who will respond and the quality of data gathered.
- What do you do to encourage quality responses from your panel?

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## Conclusion

In a 21st Century environment where the average consumer faces a daily barrage of hundreds if not thousands of marketing messages and survey opportunities every day, it may be time to rethink some traditional ideas about what being a “frequent responder” means and what effect past survey participation has on survey research results.

Certain demographic and behavioral segments of a panel are more desirable than others and therefore have the opportunity to respond more frequently. The two studies described here found that differences in survey response among frequent survey responders were limited with the exception of “intent-to-buy” questions, in which responses from more frequent responders may in fact be more in line with actual market behavior.

The best protection against potential response frequency bias is for researchers to work with large, consistently recruited and managed online panels in which panel recruitment, composition and usage can be clearly explained.

More research is needed on these topics. The studies described here are the first in a series of studies SSI will be conducting along with our research partners to further analyze the effect of tenure and response frequency on response. SSI will be sharing more data on these topics via our web site and SSI Compass newsletter.

## About SSI

Bringing together Survey Sampling International and Opinionology, SSI ([www.surveysampling.com](http://www.surveysampling.com)) is the premier global provider of world-leading sampling, data collection and data analytic solutions for survey research. SSI reaches respondents in 72 countries via Internet, telephone, mobile/wireless and mixed access offerings. Value-add services include questionnaire design consultation, programming and hosting, data processing and real-time reporting. SSI serves more than 2,000 clients, including the top 50 research organizations. It has 30 offices serving clients around the world. To learn more or read additional press releases, visit [www.surveysampling.com](http://www.surveysampling.com).