Small Business Issue: “how do we avoid the speed trap and not get hit by the speeders?”

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ABSTRACT

The authors examine the use of online panels, the assumptions that are being made, and the dangers of those assumptions for small business. Specifically, the authors investigate the existence and possible effects of speeders. They conclude with a discussion of the implications and how to avoid falling into the traps that this problem may create.

INTRODUCTION

While recognizing its value, small businesses have typically struggled with conducting research that meets their expectations in terms of time, cost, and ease of understanding. This is often due to the nuances and requirements of the research vehicle being used or the practices of those providing the research. One such example is the allure and promise offered by traditional panels.

For a small business with limited research knowledge and budgets, it may be attractive to retain a full-service provider who offers panel data as part of an all-inclusive research package; however, this can be an attractive yet costly proposition. For example, the average cost per respondent for a traditional panel is $40, with all-inclusive studies ranging from $5,000 to $15,000 or more. For a small business with $1 million in revenue and a marketing budget between 3% and 8% of revenue, a traditional panel could easily exceed 20% of their entire marketing budget.

Unfortunately, this is exacerbated due to the call center often experiencing lower response rates than the budgeted 9% average thus requiring higher hourly wages and more time to complete the contracted interviews. For a small business, an increase of a few thousand dollars and a delay of a few weeks can pose a serious threat to their marketing plan.

Given the prohibitive cost and time needed to deliver a traditional panel, especially to small businesses, the research community saw the internet as an opportunity to access more people...
faster and bring down the cost and time needed to provide a product to the customer. By 2012, online research accounted for 35% of quantitative research spend amounting to more than $2,000,000,000 in the U.S. alone. Unfortunately, this quest for speed was not a better, cheaper, faster solution.

A number of issues have been put forward concerning online panels. One of these is the phenomena of professional panelists. Within this group is a segment that are Speeders. That is, they try and get through the questions as fast as possible so as to maximize their own utility without regard to those who are paying for and using the information from the panel to make business decisions. As such, a key question for small businesses is, “how do we avoid the speed trap and not get hit by the Speeders?”

To begin, we present a brief review of the development of online panels and the issues that have been raised concerning online panels. This is followed by a discussion of panelists in general and Speeders in particular. To better understand this, we engaged a leading online panel provider to gather two online panels in two different sectors in one geographic region. We discuss the methodology and analyze the data to determine if speeder behavior exists. Then we perform a check to determine if the speeder behavior indicates the existence of Speeders. We conclude by discussing the implications of these findings for the business practitioner and some possible safeguards to being caught in the speed trap or being hit by the Speeders.

LITERATURE REVIEW

The beginnings of online panels can be traced to their use by the British, French, and Dutch in the 1980’s (Saris 1998). From the mid 1990’s through the mid 2000’s, there was significant growth in the United States and Europe (Faasse 2005, Postoaca 2006). Then a consolidation occurred as companies realized the income potential and sought to attain economies of scale as well as a strong position in the market by being able to boast of having the largest databases from which to draw (Callegaro, Baker, Behlehem, Gritz, Krosnick, and Lavrakas 2014). The two longest lasting probability based panels in the U.S. are: The GfK Knowledge Panel and Gallup. Within Europe, there are four predominant panels: LISS, GIP, GESIS, and ELIPSS (Bosnjak, Das, and Lynn 2016; Blom, Bosnjak, Cornilleau, Cousteaux, Das, Douhou, and Krieger 2016). Online panels have gained regular usage in marketing (Goritz 2010, Comley, 2007), sociology (Tortora, 2008), and psychology (Goritz 2007) to name a few. Callegaro, et al. (2014) did an analysis of the ESOMAR data from 2006-2013 and estimated that online research accounted for 35% of all quantitative spend in 2012, up from 19% in 2006. In an effort to monetize this, Inside Research (2012) estimated that this represented over $2 billion in the U.S. and over $1 billion in Europe. By 2014, online was estimated to account for 32% of all revenues from global market research, not just quantitative (Morea, 2014).

Unfortunately, the drive for better, faster, and cheaper data has not been without issues. First, the majority of online panels are not probability panels (Disogra and Callegaro, 2016). The driver behind this has been researchers in business and the social sciences being willing to accept the possible shortcomings of the nonprobability panels (Smith, Roster, Golden, Albaum 2016). This includes the reality that these “opt-in” panels do not have a recruitment sample frame which
means that the probability of selection is unknown (Disogra and Callegaro, 2016). Furthermore, it means that the term “response rate,” in an internationally accepted context, cannot be used (ISO Standard 26362). In addition, it violates the basic statistical assumption of what is necessary before making inferences about a larger population (Blom, et al 2016). A number of researchers also point out the fact that the noncoverage of those not online is often not dealt with appropriately.

Second, there are significant issues regarding the samples delivered. A critical concern over samples centers on the competitive aspect of this space. There is a lack of transparency in terms of how companies are recruiting the panel members (Baker et al, 2010), how they are balancing the panels (Callegaro, et al 2014) and how they are managing the attrition and replacement process that can dramatically impact the results and the decisions made by those using the results to run their businesses (Smith et al, 2016). Adding to this is controlling for the conditioning effect upon frequent responders (Bosnjak, Das, & Lynn, 2016) and the motives of those who are responding.

Numerous studies have been done to determine what motivates people to respond to a survey. Two notable studies classify the respondents into different types of responders. Comley (2005) and Matthijsse, Leeuw, and Hox (2015) have each suggested four categories. Comley’s categories are opinionated, professionals, incentivized, and helpers. The opinionated enjoy doing surveys and as the title suggests, want their opinions heard. Professionals do more surveys than the other groups and rarely do so unless there is some type of incentive. Incentivized, as the name suggests, fill out the survey based upon the incentive being offered. However, they are more likely to fill out a survey without an incentive more often than the professionals. Helpers, like the opinionated, enjoy doing surveys and like the sense of being part of or helping to do something. Matthijsse et al (2015) suggest the following categories: altruistic nonprofessional, semi-altruistic, semi-professional, and professional. Their focus was on a clearer definition or profile of professional responders using a number of demographic and psychographic variables. Two noteworthy findings in this study were that professional respondents are not driven solely by the incentive but also by it being fun. In addition, they found that there are many demographic similarities between altruistic responders and professional responders. A common theme in these investigations is concern over a subgroup of professionals labelled Speeders. The primary concern over Speeders is their effect upon the data quality (Tourangeau, Rips, and Rasinski, 2000; Comley, 2005; Courtright, Brien, and Stark, 2009; Bruggen et al 2011, Callegaro et al, 2014) and the external validity of the data if too many Speeders are present (Smith et al 2016). Smith et al (2016) define Speeders as, “respondents who do not thoroughly read the questions and use minimal cognitive effort to provide answers that satisfy the question (to collect their incentive with as little time spent as possible. As such, the focus of this research is to determine if these Speeders exist in professionally provided panels, the implications of this phenomena for small businesses, and to suggest how small businesses can protect themselves from the associated risks.

SAMPLE
The sample for the study was comprised of 820 individuals who met the screening criteria of living in California and completed an online instrument intended to assess their behavior when using a search engine. Table 1 depicts the sample demographics.

<table>
<thead>
<tr>
<th>Sample Demographics</th>
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<tbody>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
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<tr>
<td>Blank</td>
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<tr>
<td>Generation</td>
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<tr>
<td>Silent Generation</td>
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<td>Baby Boomers</td>
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<td>Gen X</td>
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<td>Gen Y</td>
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<td>Nexters</td>
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**METHODOLOGY**

We sought to choose an offering from the for-profit and nonprofit sectors to determine if the speeder effect exists in both sectors. In an effort to use an experience that has the most familiarity to potential respondents, we chose what research suggested is the activity from each sector experienced the most: eating out and attending a worship service. Quantitative data collection was conducted in two waves using the Qualtrics Online Platform. The first wave yielded a sample of 400 and the second wave yielded a sample of 420. In order to determine if speeding behavior is occurring, we developed a higher order filter question using the criteria set forth by Smith et al (2016), that is, we designed a question that will elucidate behavior that can be characterized as using a minimal amount of cognitive effort and not having a sufficient level of thoughtfulness and thoroughness to answer the question properly. It is hypothesized that this will be evident when a respondent replies to the filter question about what they would enter into Google, Yahoo, or Bing when searching for a restaurant or a house of worship by taking the shortcut (Gummer & Roßmann, 2015) of merely repeating the word “Google,” “Yahoo,” or “Bing” in their response. Rao, Wells, & Luo (2014) suggest that if a significant level of speeding behavior exists in panels then there will be a minimum of 10.0% of panel respondents exhibiting speeding behavior.

**H1:** Significant speeding behavior exists in professional panels.

To confirm that those answering Google, Yahoo, or Bing are actually Speeders, a check on this can be done by dividing the respondents into two groups. One group will be those who
responded Google, Yahoo, or Bing (GYB) and the other will be the rest of the usable responses. If the GYB group are Speeders then one would expect to find that the average time to completion for this group is significantly shorter than for the rest of the respondents. More specifically, the data distribution of individuals exhibiting “speeder” behavior will be in the lower half of the median survey duration for the entire sample of survey respondents. Within the lower half, Speeders will occupy the first quartile (Q₁) of data (Barnett & Eisen, 1982) which is comprised of the median of the lower half of the duration data set, that is, those exhibiting speeding behavior who are actually Speeders will be found in the lowest quartile. A similar cutoff criteria has been used in the analysis and choice of franchisees (Merrilees, B., & Frazer, L., 2013) and the impact of budgets upon choice sets (Carlson, K. A., Wolfe, J., Blanchard, S. J., Huber, J. C., & Ariely, D., 2015).

H2: A significant number of Speeders exist in professional panels.

RESULTS

To test Hypothesis 1, the quantity of respondents (N=820) exhibiting speeding behavior was analyzed. The results indicated that 23.9% exhibited speeding behavior. This exceeds the criteria of 10% suggested by Rao, Wells, and Luo (2014). Hypothesis 1 is supported.

Table 2

<table>
<thead>
<tr>
<th>Speeder and Non-Speeder Behavior Frequency</th>
<th>n</th>
<th>%</th>
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<tbody>
<tr>
<td>Speeding Behavior</td>
<td>196</td>
<td>23.9</td>
</tr>
<tr>
<td>Non-Speeder</td>
<td>624</td>
<td>76.1</td>
</tr>
<tr>
<td>N = 820</td>
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</table>

For Hypothesis 2, it was hypothesized that the duration of those exhibiting speeder behavior would be in the First Quartile (Q₁) of the duration for the entire survey sample. The results indicate that a statistically significant, positive association exists between those exhibiting speeder behavior and survey duration in Q₁. To test Hypothesis 2, the correlations (N = 820) were calculated using Pearson’s r to ascertain the significance and direction of the alignment between those exhibiting speeder behavior and the First Quartile (Q₁). Hypothesis 2 is supported (r = .154, p = .000). As such, the results show that not only is there speeder behavior but evidence that a significant number of Speeders exist in professional panels.

Table 3

<table>
<thead>
<tr>
<th>Speeder Behavior and 1st Quartile (Q₁) Duration Correlation</th>
<th>Pearson r</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speeder Behavior and 1st Quartile</td>
<td>154</td>
<td>.000***</td>
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</table>
IMPLICATIONS

Small business has been challenged over time by a variety of hurdles, whether they be financial resources, time, and/or expertise, to gain an understanding of their target market through the use of market research. The rise in the use of online panels to conduct research signifies a shifting reliance on this virtual form of data collection in comparison to other methods. The underlying motivation of adopting online panels for small businesses may be their lower cost, quicker data collection, and a DIY model that seemingly lowers the expertise required to design, execute and collect data than traditional methods.

While the popularity of online panels suggest a growing appeal among businesses, the results of our study indicate that there may be limitations in online data quality. Specifically, we focused on the issue of “Speeders” and their potential impact on the validity of data collected using an online panel. Our findings indicated that a significant portion of respondents (24%) who completed our online survey can be classified as Speeders.

The implications of the findings for the small business considering using an online panel to conduct market research is that extra steps in the research process may be necessary to mitigate the potential impact of Speeders on data quality. For instance, one step that may be warranted is to increase the size of the sample to limit the potential impact on data validity should Speeders be present. Moreover, it is recommended to conduct a small pre-test to determine if any survey question fuels speeder behavior, with the question subsequently modified to mitigate the presence of Speeders. In addition, the survey results from an online panel provider may need to be scrutinized for Speeder behavior, with those Speeders removed from the data analysis. Concerning the use of online panel providers, a business should be proactive not reactive. There are several questions that should be asked. First, is it a probability or nonprobability sample? If you have a choice then go for the probability sample. If this is not an option then ask if the company has been ISO certified for nonprobability samples. Second, does the company providing the panel actually host the survey? Third, does the company do the programming or are they just a middle man? In addition to these, several helpful guides have been developed by agencies around the world. For instance, The Canadian Market Research and Intelligence Agency has published, “10 Questions to Ask Your Online Survey Provider.” The bottom line is that the research you use to base your decisions on is going to affect your bottom line. As such, you need to make sure you are getting what you think you are getting, i.e., a valid set of data.

REFERENCES


ABOUT THE AUTHORS

Dave McMahon is an Associate Professor of Marketing in The Graziadio School at Pepperdine University. He teaches in the EMBA and FEMBA programs and serves as an advisor for several
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