Prospects and Problems of the Recent Developments in Social Survey in Korea: Mixed-Mode Surveys and Volunteer Web Panels

Shin-Kap Han
Seoul National University

Extended Abstract

Mixed-mode (or multi-mode) surveys and (volunteer) web panels were recently introduced as ways to cope with changes in the social survey environment, which is going through a rapid and massive transformation. The direction, speed, and magnitude of these changes have been clear in Korea, too. Enumerated in Figure 1 are the social surveys between 1960 and 2010 archived by the Korean Social Science Data Archive (KOSSDA). The left panel shows the exponential growth in the overall volume. The other two panels, more importantly, show the changes in the composition. Mixed-mode and online surveys are rapidly increasing their shares and are fast becoming de facto standards in Korea, as in many other countries.

-----------------------------

1 The original, Korean, version of the paper was published in Josa Yeongu (Survey Research) 13(3): 1-31, 2012, which received the Gallup Award in 2013. This extended abstract is being published as part of AJPOR's project to introduce its readers to excellent public opinion research originally published in Asian languages.

2 KOSSDA (www.kossda.or.kr) is a non-profit organization established in 1983 to compile and provide an integrated digital archive of the social science data, both quantitative and qualitative, in Korea. While the archive may not be thoroughly all-inclusive, it is considered the most reliable and systematic source.
I review their formal and substantive characteristics and limitations, and examine the adjustment methods developed thus far to handle the problems they are likely to cause. While various technical solutions are being proposed, they too, in the end, require references to the baseline population distribution and proper sampling frames thereof. Of central concern hence is the fundamental question about the quality of data obtained with those new tools—in particular, how well, if at all, such data represent the population.

Figure 1

*Social Surveys in Korea, 1960-2010*

[Notes: Based on 1,194 surveys KOSSDA has in its archive as of March 2012.]

A simulation was run on an artificially generated population, which closely follows the popular procedural template. Depending on whether they are available at home and/or accessible online, the hypothetical respondents are divided into four groups. Then they are put in various combinations as shown in Figure 2. The results from 100 runs of sampling 1,000 respondents for each combination clearly shows, for example, that the surveys that are based only on those respondents available at home and the ones only on those accessible online will be biased in opposite directions. On the right side of Figure 2 are the margins of error in predicting election based on the sample shown on the left. In (iii), for instance, which surveyed only the population accessible online, the margin of error was larger than -5% in most of the runs. These are the biases produced when the
basic issue of how to represent the population as a whole is not taken into consideration and they indicate that there could be serious substantive problems.

Figure 2

*Distribution of Simulated Criterion Variable by Sampling Frame*

<table>
<thead>
<tr>
<th>Available at home?</th>
<th>Accessible online?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>a</td>
<td>i) a + B + C + d</td>
</tr>
<tr>
<td>b</td>
<td>ii) a + B</td>
</tr>
<tr>
<td>c</td>
<td>iii) a + C</td>
</tr>
<tr>
<td>d</td>
<td>iv) a + B + C</td>
</tr>
</tbody>
</table>

[Notes: Shown on the left is the simulated distribution of political orientation, and on the right the margin of error in voting behavior estimation. See the shaded box for varying sampling frame.]
However skeptical one may be about the reasons why the two methods are so quickly adopted and so widely used, the changes over the years in the diverse internal and external factors that have influenced the ecology of social survey seem irreversible. As such, they are positive developments in trying to solve the problems that arise. Along that line, some concrete and practical steps to take, including those suggested by AAPOR, are discussed. On the other hand, we should be reminded that the major driver underlying them all has been cost-efficiency. The paper brings to our attention the long-term public role expected of the social survey and urges one to reframe the issue of cost to take those factors into account.

Biographical Notes


He can be reached at shinkaphan@snu.ac.kr

Date of the submission: 2014-02-08
Date of the review result: 2014-02-08
Date of the decision: 2014-02-28