Abstract

In this short article I review the activities of the IASS, discuss the problem of its reducing membership and propose some possible directions for new developments in the future.

Keywords: Activities; Data science; IASS membership; Nonprobability samples

1 Introduction

The International Association of Survey Statisticians (IASS) is celebrating this year its 50 years jubilee, a milestone for celebration, reflecting on its big achievements so far, with a look to the future.

I believe that I joined the IASS already around 1980, shortly after completing my PhD. Why did I join? Probably because my PhD supervisor, the late Professor Gad Nathan, told me to do so. Mind you, I knew nothing about statistical organizations at that time. In 1985, I was elected as Fellow of the ISI. During the years 2001-2003, I chaired the programme committee of the IASS and 10 years later, during 2013-2015, I served as the President of the organization. So, it seems that I was quite an active member of the IASS in those years, which is probably why I was asked to contribute this short article that is due to appear in the July issue of *The Survey Statistician*.

2 The IASS mission and activities

The IASS was founded in 1973 “to promote the study and development of the theory and practice of sample surveys and censuses.” How is this done? Mostly through the ISI meetings (the world statistical congress, WSC), held every two years; the IASS is one of the sections comprising the ISI. These meetings provide a forum for discussion of survey statistics. They include several specific sessions on recent advances and applications in survey and census methodologies. Other than the ISI meetings, the IASS helps to sponsor regional meetings and workshops devoted to specific aspects of surveys, and it publishes twice a year the journal *The Survey Statistician*, which is devoted to survey sampling and censuses and is distributed to all the IASS members. I always found the country reports in the journal, on activities performed by their national statistical institutes to be particularly useful.

I assume that other authors will cover the history and big achievements of the IASS since its foundation. Hence, in what follows, I like to discuss briefly some possible directions for new developments in the future.
3 Membership in the IASS

The IASS needs to increase its membership quite extensively. Here is a contingency table of the registry in February 2023, with the cells defined by continent of living and gender.

<table>
<thead>
<tr>
<th>Region</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>South/Central America</td>
<td>11</td>
<td>18</td>
<td>29</td>
</tr>
<tr>
<td>Oceania</td>
<td>5</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>North America</td>
<td>21</td>
<td>71</td>
<td>92</td>
</tr>
<tr>
<td>Europe</td>
<td>54</td>
<td>79</td>
<td>133</td>
</tr>
<tr>
<td>Asia</td>
<td>8</td>
<td>31</td>
<td>39</td>
</tr>
<tr>
<td>Africa</td>
<td>8</td>
<td>21</td>
<td>29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>107</strong></td>
<td><strong>238</strong></td>
<td><strong>345</strong></td>
</tr>
</tbody>
</table>

When I started my presidency in 2013, the IASS had 445 individual members and 23 institutional members. Now we have 21 institutional members, but the numbers of members in the various categories have dropped quite significantly. The registration profile is also gloomy when looking at the distribution of the IASS members by age. Based on 284 members with known ages, out of 205 males, 106 are older than 65, 81 are at the age of 41-65 and only 18 are younger than 41. Out of 79 females, 30 are older than 65, 38 are at the age of 41-65, and only 11 are younger than 41. Thus, the majority of our members are in the older age groups.

I don’t know how many survey statisticians there are worldwide, but it is obvious that only very few of them choose to become members of the IASS. We need a larger membership for a number of reasons. First, since the outcome of our work affects directly so many applications and decision-makings, we should have broad representation from all the various areas. A broad representation will stimulate more joint research and collaboration efforts. A larger membership will of course allow for greater financial flexibility, which in turn will facilitate more diverse activities.

The IASS should continue its efforts to encourage more survey statisticians to join the organization. No reason why only 35% of its members are females, and why continents other than North America and Europe are so poorly represented. The fact that young survey statisticians tend not to join the IASS is particularly worrying. If this trend continues, the prospect of the IASS to continue its mission and activities is in real risk.

PhD supervisors should encourage their students to join us. This is a first step to increase young member’s registry. Social networks can be used as another platform to promote the IASS and motivate registration. A reviewer of this article proposed allocating a special section in *The Survey Statistician* for young survey statisticians from developing countries to publish reviewed scientific papers (possibly with discussion by senior members). These are all just examples of what can possibly be done to increase our membership.

4 Nonprobability sampling

In recent years there is growing research on the use of nonprobability samples. Such samples are not representative, and they require different kinds of inference on finite population parameters of interest, but they have their merits in terms of costs, logistic and possible reduction in nonresponse. See e.g., Beaumont and Rao (2021), published in *The Survey Statistician*. I think that the IASS should pay increased attention to this kind of samples, organize conferences and workshops and
encourage publications in *The Survey Statistician*, with emphasis on practical applications. IASS members and survey statisticians in general will undoubtedly benefit from this activity.

## 5 Survey sampling and data science

The last two decades have witnessed the rapid growth of data science. One of the facets of this growth is that there are people agitating that the existence of all sorts of “big data”, and the new advanced technologies that have been developed to handle them, will soon replace the use of sample surveys. In an article I published in 2015, I overviewed the problems with the use of big data for the production of official statistics but clearly, when such data sources are available, accessible and timely, they cannot and should not be ignored. I have no diploma in prophecy, but my own view is that survey samples will always be needed, at least in the foreseen future, so our profession is secured for many years to come.

I think that the IASS should play a leading role in the promotion of new theories and practices for the integration of classical survey sampling theory with data science, with the ultimate goal of improving the data and subsequent evidence-based decisions upon data obtained from only one of the sources. In simple words, how to benefit from both worlds.

## 6 Possible merge with the IAOS

Finally, I like to raise the possibility of merging with the International Association for Official Statistics (IAOS), another section of the ISI. I already raised this idea while I was president, some executive members of the IASS supported the idea, other objected, and IAOS executives with whom I discussed it were not very enthusiastic about it either, so I did not push it any further. I might be wrong, but I personally think that both organizations will benefit from such a merge, and if only because it will make the merged section the biggest or one of the biggest sections of the ISI. I propose therefore to examine the pros and cons of such a merge and if found worthy, negotiate it with IAOS representatives. The reviewer of this article proposed improving the interaction with the IAOS by organizing a joint conference. This is a nice idea, which could form a first step in a possible future merge.

## 7 Concluding remark

I think that the IASS is a very worthy and much needed organization, and I wish it to expand both in size and in its activities in the coming years.

## References
