SJIAOS Discussion Platform

Launch of the ninth discussion topic: 'The demand and format of Training in Official Statistics'

The Statistical Journal of the IAOS, Volume 37/3, on 'New Developments in Training in Official Statistics' discusses in 22 manuscripts the recent trends in training in official statistics.

The need and rationale for training in official statistics and the necessity to anticipate on the recent developments is described in section (I) of the issue. Section (II) expands this to the requirements needed for training in Data Science and section (III) illustrates a method for assessing the type and content of this demand for training. The other three sections give an overview of existing training in official statistics initiatives (section IV), report on the general trends in learning and training (section V), and illustrate these via a selection of examples of training in domains of official statistics or in regions (section VI).

From background and needs for training to specific examples of training initiatives

The ninth discussion on the SJIAOS discussion platform is based on the following 7 statements. Readers are invited to react on individual statements and of course can also choose to react on a combination of these statements, or simply comment on the overall theme.

Additional to these statements readers/commenters are invited to give specific examples of new modern training methods as they or their organization has developed, they have experienced or they have been participating in during the last two years.

In brief the statements as these will be opened for discussion mid September 2021 on the SJIAOS discussion platform (www.officialstatistics.com) are:

Statement 1: Are the new recent developments in training in official statistics as via on-line courses, webinars and MOOC's developed as a normal step in an evolution of training methods, or has the COVID-19 pandemic and the data revolution and the urgent need for more comparable data caused a revolution, creating

an avalanche of new methods, using advanced IT tools and new applications?

The commentator could consider that maybe there are evolutionary parts, but on the other side maybe also several have come as a revolution. With all these achievements in mind a question is, are we than at the end, or is there still more to come in this modernization and then, what will come next?

Looking to it from an other perspective, it could also be questioned if all these in new training methods sustain after the pandemic?

Statement 2: The manuscripts in this special issue describe how last decade the field of official statistics has expanded, and consequently is confronted with extra challenges, including quality. The audience is invited to comment on the current balance in training, especially if all fields receive sufficient attention. For example is there sufficient attention for the quality aspect.

Statement 3: Challenges the audience to react on the question when it will be the best moment to start with training in statistical thinking? Should training in statistical thinking start at an early moment in elementary or undergraduate schooling of the public/students, at lower and medium level?

Statement 4: There are many new models and procedures for training, and especially the on-line formats have become very popular during the COVID-19 pandemic. However, several authors and experts state that the face to face component stays very important, even, to well understand official statistics they state this component is indispensable.

Statement 5: Visualization of statistical outcomes is also as a result of the availability of modern visualization tools high on the training agenda, as well as conceptualization. However, mathematization, seems to receive less importance. One could wonder how this relates to the real work as the backbone seems for official statistics to be the ability to be part of the industrial process to make statistics in a process where mathematics still play and important role.

Statement 6: Training is no more a national or regional challenge but a global, due to the need for com-

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parable data all over. The focus in several manuscripts is on the necessity and effectiveness of international cooperation networks / inter agency cooperation in training. However, to what extent does training of staff working in official statistics still needs to have a local component? And, on what type of activities should this component focus?

Statement 7: Finally, from the manuscripts in this issue it appears that developing new methodologies is mainly done by experts from well developed statistical systems and international organizations. What about the less developed world that has a high demand for training? Will all these new developed methods be sufficiently applicable and can they be introduced also considering lower levels of internet speed and less well serviced training environments?

Examples of new modern training methods

Next to these statements, the readers are invited to give specific examples of new modern training methods as they or their organization has developed, they have experienced or they have been participating in during the last two years. We are looking forward to hear about interesting small scale but also larger initiatives that illustrate the fast and diverse developments in the domain of training in official statistics.

Other ongoing discussions on the SJIAOS Discussion platform (www.officialstatistics.com) Special discussion:

Crises, politics and statistics: Official statistics in the context of the Covid-19 crisis. The Covid-19 discussion is rejuvenated with new statements

A special discussion on the SJIAOS discussion platform (www.officialstatistics.com) focusses on the roles of Official Statistics in the context of the COVID-19 crisis. It states the important role that official statistics will have to play in the phase of world-wide recovery from the pandemic and the rapid investments and actions that are needed to fulfill properly this role. It also emphasis the importance of investing in achieving the objectives of the SDG indicators, the need to develop new statistics and using modern data sources, and last but not least the establishment of a new role of official statistics in the public statistical infrastructure.

See: https://officialstatistics.com/news-blog/officialstatistics-methods-need-investments-be-robust-enoughmaintain-sufficient-product The first set of statements in the special discussion on the SJIAOS discussion platform focused on the roles of Official Statistics in the context of the COVID-19 crisis. It stated the important role that official statistics will have to play in the phase of world-wide recovery from the pandemic and the rapid investments and actions that are needed to fulfill properly this role. With the second set of statements we want the discussion to focus now on the impact of the pandemic on statistical methodology and especially the effect the of the strong economic downturn on techniques and time series data used for estimations in now- and forecasting.

Official statistics methods need investments to be robust enough to maintain sufficient product quality in times of economic downturns

Official statistics has not properly researched and understood how its methods and models behave at times of downturns (and potentially in the corresponding situation of similarly paced (unpredictable and fast) growths – though these seem to be infrequent compared to downturns). There is generally a wish to make methods robust to unusual changes, but these are often tackled situation by situation. Production of official statistics during COVID-19 has necessitated some radical changes in both data collection and statistical methods; these have been introduced with admirable speed and dedication, but this process would have been made easier with a body of research already in place to draw from.

This discussion on the SJIAOS discussion platform is based statements extracted from the article '*Robust* official business statistics methodology during COVID-19-related and other economic downturns' by Paul A. Smith and Boris Lorenc (respectively. University of Southampton; Bright Lynx Research; European Network for Better Establishment Statistics). This article is available as blog on: https://officialstatistics.com/newsblog/robust-official-business-statistics-methodologyduring-covid-19-related-and-other.

The eight discussion on the discussion platform focuses on the UN Fundamental Principles for Official Statistics

The discussion builds on one hand on the manuscript as published in this issue reporting on complementing the Fundamental Principles with the assessment of their compliance by countries and regions based on a Matu-

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rity Model for Continuous Improvement,¹ illustrating the acceptance of this main framework for high quality statistics as a still suitable instrument. On the other hand during the last decennium there where many events, as for example illustrated by the manuscript by Andreas Georgiou in Volume 37/1,² where the principles where consciously or unconsciously ignored.

The objective of the discussion is twofold: first to generate knowledge and experience with the implementation, application and effectiveness of the Fundamental Principles, second to inquire especially for major improvements, both to the Fundamental Principles themselves as well as to the compliance and the enforcement of compliance.

The seventh discussion on the discussion platform focuses on Misuse of Statistics, based on the section on Misuse of Statistics in Volume 37 (2021), Nr. 1: Misuse of Statistics; Time to speak out.

https://officialstatistics.com/news-blog/misusestatistics-time-speak-out

The seventh discussion focuses on Misuse of Statistics. It aims to centre around comments and contributions around the need for trustworthy information to guide decision making and enable citizens to understand issues that affect their health and livelihoods.

Misuse of statistics is a phenomenon as old a statistics it self. Regulatory systems like the Fundamental Principles for Official Statistics, statistical laws and rules for ethical behavior of statisticians aim to avoid and whenever needed correct forms of misuse of statistics. The data revolution, new data sets (Big Data) and open data all cause an even more complex society with an increasing number of stakeholders that is supposed to comply with these official statistics quality and behavioral requirements. In times of crisis like we are now in at a world-wide scale, 'invites' even more than in normal times those who have an interest in specific figures to massage, manipulate or even falsify information. The impact of misuse of statistics or false statistics is apparent.

All this makes a discussion on Misuse of statistics even more current, and surely justifies the second part of the title: Time to speak out. This discussion has came on line, with specific state-ments around the 22nd of February 2021. See www.officialstatistics.com.

The sixth discussion on the discussion platform: Successes and challenges of regional cooperation and capacity building in Statistics: the example of the Asia-Pacific region

The sixth discussion on the discussion platform centers around innovations and transformations in official statistics production and dissemination. The four statements are based on experiences from Asia-Pacific countries as reflected in the special section on the Asia-Pacific Statistics week in Volume 36 (2020) Nr. 4: https://content.iospress.com/articles/statistical-journal-of-the-iaos/sji200771.

The discussion aims to highlight, beyond the results and successes, challenges, problems and pitfalls of national and international initiatives to improve the national statistical systems of low and middle income countries. Participants will be invited to reflect on the role and impact regional organizations like UN ES-CAP, international statistical organizations (for example custodian agencies for the SDG's) and support from individual donor countries can have. The discussion will emphasize experiences and lessons with deploying methods and tools to support the development of national statistical systems at the policy, organizational and individual levels.

The fifth discussion on the discussion platform centers around statements taken from Volume 36 (2020, Nr. 3, The Future of economic statistics: https://content.iospress.com/articles/statistical-journal-

of-the-iaos/sji209007

The discussion focuses on the four inter-related and mutually reinforcing building blocks of the emerging new statistical business model for economic statistics: outreach and user consultation; statistical framework; institutional and statistical operations, and data stewardship; and statistical infrastructure and data solutions

Under the purview of the United Nations Statistical Commission, consultation activities and discussions with the representatives of the national and international statistical organizations and senior economists led to the acknowledgement that the future system of economic statistics needs to be more responsive and agile to better meet the collective needs of users. Greater responsiveness of the statistical system can be achieved by

¹Milicich, R., T. Dickinson, G. Van Halderen, T.Labor, H. Neven: Assessing compliance with the United Nations Fundamental Principles of Official Statistics: A Maturity Model for Continuous Improvement. In SJIAOS Vol37/2.

²Georgiou, A.: The manipulation of official statistics as corruption and ways of understanding it, In SJIAOS Vol37/1.

allowing the statistical and institutional operations and supporting infrastructure greater experimentation, and by increased collaboration and co-investment in the areas of data access, data sharing and exchange, new data solutions and technological resources. The COVID-19 pandemic and its global impact has provided the official statistical community an opportunity to meet this challenge for official statistics collectively in demonstrating its resilience, maintaining its relevance, and proving its responsiveness.

The four statements focus on the most important elements of a new statistical business model that is needed to achieve such a more responsive and agile system of economic statistics. Main question is if we official statisticians and our environment are sufficiently up for the challenges, and adequately focused and resourced to make this new statistical business model a reality.

The fourth discussion on the discussion platform, launched in June 2020, centers around statements taken from the article by Andreas Georgiou and is still open for contributions: '*Pre-release access to official statistics is not consistent with professional ethics*'

Vol 36 (2020), Nr. 2: https://content.iospress.com/ articles/statistical-journal-of-the-iaos/sji200620

Pre-release practice to official statistics varies across and within countries, with pre-release practiced widely: pre-release access by government and pre-release access by the press. In defending their policies and practices countries argue for and against specific pre-release options. Relevant questions in this discussion will be for example if advertised pre-release access by policy makers preclude the possibility of pressure (or the perception thereof) on the independent production of statistics to serve political/policy interests? Is pre-release to government impartial when it gives at least a head start to the party in power relative to its opposition? Does pre-release access by the press adequately protect the level playing field for market participants, and does not lead to profiteering by some? Do the benefits of prerelease outweigh the costs associated with the risks? Is there a need for strengthening the existing movement away from pre-release access and a tightening of the guidelines in codes of practice for official statistics?'

You are invited to contribute to the discussions on: www.officialstatistics.com

Earlier (closed) discussions

The first discussion, kicked of in September 2019 is closed for contributions. The closing article for this discussion is published in the December 2020 issue (Vol36, 2020, Nr. 4, pp 1299-1306)

See: https://content.iospress.com/articles/statisticaljournal-of-the-iaos/sji200722

The second discussion kicked of in December 2019, '*Reflections on the future of official statistics in a digital and globalized society' is also closed for discussion. The closing* article is in this issue (Vol. 37, 2021, Nr. 2).

The third discussion kicked of in March 2020 on the Population and Housing Censuses is also closed. The closing article can also be found in this issue (Vol. 37, 2021, Nr. 2).

Some background on the SJIAOS discussion platform

In August 2019 the Statistical Journal of the International Association for Official Statistics (SJIAOS) launched the new on-line platform for discussion on topics of significant relevance for official statistics (www.officialstatistics.com) as part of the SJIAOS website. The discussion platform invites you to contribute to important discussions at a time of your own choosing.

The ISI World Statistics Conference, the IAOS conference and Journals like the *Statistical Journal of the IAOS*, are the traditional platforms where views on new developments and important issues in Official Statistics are exchanged. However, conferences occur only a few times per year, journal issues are released maybe four times per year and typically only reach specific interest groups. This new on-line discussion platform of the SJIAOS is an opportunity for anyone working or interested in official statistics, to contribute to topical discussions, at your own convenience.

Every three months there is a new discussion item. With each issue of the SJIAOS, a new discussion topic will be launched via a leading article. Statements from this article will then invite you to post your opinion and arguments. Each discussion will run for a year and be closed with a concluding commentary by the article author(s). When fully up and running (after four journal issues), there will be four different discussions topics open for your contribution at any one time.

The discussion platform can be found on a prominent place on the new SJIAOS website (www.officialstatistics. com). Contributions have to be in English, have to be clear and concise, specifically addressing one of the statements and should not exceed 25 lines. When considered useful, references to a longer text (article, paper) can be added as an attachment. Contributors are required to register on the discussion platform. Anonymous contributions are not appreciated. The SJIAOS discussion platform editor (James Whitworth) moderates the discussions and the quality of the contributions (but of course not on the positions taken), takes decisions on the integrity of the arguments and is available for support when needed.