From: Statistical Society of Australia
To: Marie-Louise Rankin
Subject: Stats Matters & Events

Date: Thursday, 24 August 2023 2:14:12 PM



In a series of harrowing <u>media releases*</u> referring to its 2021-22 Personal Safety Survey (PSS), the Australian Bureau of Statistics (ABS) recently shed light on the alarming prevalence of violence and harassment across the nation.

The statistics published on 23 August 2023 provide a sobering insight into the scope of physical violence, sexual violence and sexual harassment that a sizable proportion of Australian adults have experienced, underlining the pressing need for awareness, support and change.

An estimated 36% of the adult population have encountered physical violence since the age of 15. A closer look at the numbers reveals that 4 million men and 3 million women have endured physical violence.

Both men and women are three times more likely to be subjected to physical violence at the hands of male perpetrators than females. For men, the assailant is most often a stranger (57%), with the violence more likely to occur outside the home (74%). For women, on the other hand, the most common perpetrators are their intimate partners (53%), and the assaults typically occur within the confines of their own homes (69%).

The PSS also explored sexual harassment, revealing that 8.7% of our adult population encountered sexual harassment in the financial year 2021-22. This issue is not confined to any specific gender; rather it affects both men and women, with 1.3 million women and nearly half a million men experiencing such behavior during the survey period.

The statistics unveiled by the 2021-22 PSS are a sombre reminder of the urgent need to address violence and harassment in Australia. The voices and experiences of those impacted by violence and harassment must not only be acknowledged but used to bring about change. We need to work together as a society to raise awareness, support victims and create safer environments for all individuals.

Government agencies, community organisations and individuals alike have a role to play in challenging harmful behaviors, promoting education and offering accessible support services. It is through collaborative efforts and a commitment to change that Australia can strive for a future where every individual feels safe, respected and empowered.

If you or anyone you know is in need or crisis, please call the National Sexual Assault, Domestic and Family Violence Counselling Service on 1800RESPECT (1800 737 732) or Lifeline (13 11 14).

Marie-Louise Rankin

Executive Officer

*Read the full ABS media releases for deeper insights here:

1 in 3 Australians have experienced physical violence

1 in 5 women have experienced sexual violence

1.7 million Australians sexually harassed in 2021-22

Read newsletter in your browser

In this newsletter:

SSA and ASPAI AGMs tonight!

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The Random Sample Podcast - Latest episode out now

STA welcomes response to the review of the ARC act

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SSA and ASPAI AGMs tonight!

The 2023 Annual General Meetings of the Statistical Society of Australia, Inc (SSA) and the Australian Statistical Publishing Association Inc (ASPAI) will be held via Zoom today, on Thursday, 24 August 2023 from 5:30 pm to 7:00 pm AEST via Zoom. All AGM documents, including the agenda, are available on the SSA website.

While only members of SSA can vote at the AGM, non-members are welcome to attend this event as well, especially as this event will be immediately followed by a presentation commencing at 6:15 pm AEST. SSA President, Professor Ian Gordon will be discussing the recently finalised strategic plan, followed by a Q&A session.

After the Q&A, Ian will give a brief talk on the estimation of total amounts of loss in class actions.

Please register <u>here</u> to let us know you are attending, and to get the Zoom link. We look forward to seeing you tonight!

NSW Branch August meeting - Bayesian Brilliance and Football Fervor: A Night of Seminars, Soccer, and Support

On the 16th of August, the NSW Branch hosted its August event: a double seminar on Bayesian methods for variational Bayes and forecasting. We can say that we knew the event was taking place before the Matildas assured their place in the semi-finals on the very same day, but they probably did not care too much! Nevertheless, we had an interested and engaged audience who decided to spend the evening with us before rushing home to watch the match.

The first speaker, Mr Paco Tseng, a PhD student at the USyd Business School supported by DARE (ARC Training Centre in Data Analytics for Resources and Environment), delved into "Applications of Wasserstein Gradient Flow in Bayesian Computation." By merging variational Bayes and optimal transport, the talk led to a fascinating direction of research. Paco did an excellent job of explaining the procedures step by step to an audience who may not have been familiar with optimal transport. The support of DARE was great, with a big part of the centre present (in person or online).

Associate Professor Anastasios Panagiotelis led a seminar on "Forecast Reconciliation in Hierarchical Time Series." The idea of forecast reconciliation was quite new to me, even though it felt very natural: envision time series as a jigsaw puzzle—each piece a distinct variable forming a bigger picture. Anastasios demonstrated ways to perform forecasting in this situation in a coherent manner, and I am eager to see the next steps in his research. Could this be a way to leverage the strength of different time series when faced with significant uncertainty?

The discussion was engaging, with several questions for both speakers, both during the talks and the break, accompanied by a healthy and delicious buffet.

Can you guess where our brilliant minds ventured after these mental escapades? A local pub! (For a less healthy dinner). Paco, Anastasios, and I traded Bayesian algorithms for football, watching the FIFA Women's World Cup semifinals, Australia vs. England. It was one of the most exciting NSW-SSA dinners in my memory; the pub was undeniably Australia-oriented and, given that Italy exited the competition a while ago, I had no problem about that!

It was a great merger of statistics and football, a formal show of support from the Branch to our national team!

Clara Grazian President, NSW Branch, SSA







SA Branch August meeting - Unveiling research's hidden figures: tackling poor clinical study quality with statistics

The August event of the SA Branch of Statistical Society featured a talk by Dr. Jennie Louise, senior biostatistician at the Women's and Children's Hospital Research Centre and the Biostatistics Unit, SAHMRI. Dr Louise's talk was titled "The Role of Statisticians in Addressing the Poor Quality of Clinical Research".

Dr Louise referenced the famous 1994 Doug Altman editorial on the 'scandal of poor medical research' and discussed how former BMJ editor Richard Smith went on to say that things are not getting better 20 years on.

Key examples of bad research discussed at the webinar

- Fraud and falsification of results.
- Questionable statistical practices, including p-hacking, data dredging, selective reporting, etc.
- Poor research process by not including a statistician at all or too late.

Dr Louise presented an overview of the problems, presented an outline of the current best practice and some possible approaches including the reasons for the intractability of some of the challenges discussed. The discussion revolved around strategies for engaging with a statistician at the early stages of the research project, as early as formulating the research question.

The event was attended by 24 guests. Attendees engaged in a lively discussion, shared advice on better collegial approaches and a few interesting papers and resources were shared! See below.

A great paper on teaching people how to use spreadsheets for research is available <u>here</u>.

A checklist for better data capture for beginners starting data entry in excel is available here.

Barbara Toson President, SA Branch, SSA

Does anybody know/own this publication:

Bill Armstrong "Managing with Variations",

published in 1992 or earlier?

I received an enquiry from someone who is looking for this book. The person who sent the enquiry saw the publication mentioned in an obituary for Bill in our newsletter, issue 61 (30 November 1992).

The sender writes: "As a much younger person, it was Bill who first introduced me to statistics, quality, processes, leadership and W. Edwards Deming. Unfortunately, Bill was gone before I comprehended the value of what he had taught. And while I am only a lay person (although I do volunteer at gqc.org.au), I still live by those principles on a daily basis and would very much appreciate reading Bill's publication, that until I just saw this obituary, I was unaware existed."

If anyone can help, please contact SSA's Executive Officer, <u>Marie-Louise</u> Rankin, and I'll forward your message on. Thank you!

The Random Sample Podcast

Listen <u>here</u> to the latest episode to learn how a post from Australian mathematician Terence Tao inspired Professor Eva Miranda to take on one of maths' most famous open problems: The existence of solutions of the Navier-Stokes equation, which governs the flow of fluids.



In a media release published on 22 August 2023, Science & Technology Australia's CEO Misha Schubert welcomed the Australian Government's acceptance or acceptance in principle of all ten recommendations of a major review of the Australian Research Council Act.

"These changes will strengthen Australia's research system - on which our country's health, wealth and safety rely - and put in place guardrails to prevent political interference in awarding research grants."

"Curbing the temptation for Ministers to meddle in complex research is a powerful positive reform."

"These thoughtful changes will also safeguard discovery research funding, start a transformative shift to a two-stage application process, and foster deeper partnerships with Indigenous researchers and communities."

"A two-stage application process will be a win for productivity, wellbeing and morale in Australia's brilliant research workforce. It can free up researchers who spend hundreds of hours writing full funding applications – when only around one in five of those applications gets funded."

"These legislative and regulatory changes will strengthen the ARC's operations and independence - a powerful legacy to help secure our country's future prosperity."

Read the full media release here.

Read the full Review of the Australian Research Council Act report.

Read the full Australian Government response here.

Mentioned in previous newsletters:

SSA Branches are offering funding to attend ASC/OZCOTS 2023

Branches of the Statistical Society are offering funding for student and early career members of the society to attend the <u>Australian Statistical Conference</u> (ASC) and <u>Australian Conference on Teaching Statistics</u> (OZCOTS) in Wollongong, 10th - 15th December 2023. All branch funding will cover registration to the conference, with some branches covering additional travel if funds allow. For full details see each branches' announcement.

For most branches the application deadline has passed, so at this stage there are only two left:

- Canberra (check your email for 'Canberra branch ASC & OZCOTS 2023 rego grant')
- NSW (application form)

With best wishes,

ASC & OZCOTS 2023 Programming Committee

SSA Events

SSA and ASPAI AGMs and Q & A for the Strategic Plan

24 Aug 2023, 5:30 PM - 7:30 PM (AEST), online

You are invited: SSA and ASPAI AGMs - 24 August 2023- SSA Members only

The 2023 Annual General Meetings of the Statistical Society of Australia, Inc and the Australian Statistical Publishing Association Inc will be held on Tuesday, 24 August 2023 from 5:30 pm to 7:00 pm AEST via Zoom.

The meeting documents, including the agenda, can be found here.

The AGMs will be followed by a presentation commencing at 6:15 pm AEST. SSA President, Professor Ian Gordon will be discussing the recently announced <u>strategic plan</u>, followed by a Q&A session and also give a brief talk on the estimation of total amounts of loss in class actions.

Register <u>here</u>.

Statistical Consulting Network July Meet-Up

25 August 2023, 12:30 PM - 1:30 PM AEST, held online

Come along with your thinking cap, maybe a problem, and some lunch!

The Statistical Consulting Network invites you to their monthly meet-up, a virtual lunchtime meeting where statisticians help each other out with problems that they aren't sure how to deal with. This virtual meeting is held on Zoom at lunchtime on the last Friday of each month, 12:30-1:30 PM (AEDT). We start each meet-up with announcements, or occasionally a special topic discussion, then discuss problems that attendees have brought along with them.

We also have a Slack workspace where members of the consulting network can communicate between meetings, or post problems or relevant materials they would like to discuss during a meeting.

Zoom link

Password: 660145

Slack Workspace link

Canberra Branch Meeting -- The practitioner's guide to machine learning quality in the ABS presented by Edwin Lu and Nelson Chua

29 Aug 2023, 5:30 PM – 6:45 PM (AEST), in person and online via Zoom

In recent years, the ABS has increased its use of machine learning to assist with the production of official statistics. To support this increased uptake, we have devised practical recommendations to ensure the quality of machine learning outputs, promote consistency in the use of machine learning, and help build machine learning capability in the ABS. In our presentation, we will outline some aspects of machine learning quality that are of general interest. We will also highlight some technical insights drawn from recent research findings in the literature, covering topics such as distribution-free prediction intervals, how to select performance metrics for classifiers, and some model-agnostic interpretability methods. Feedback on our findings and recommendations is very welcome.

If you are interested in attending the dinner, please let me know by 5pm Monday 28 August by entering your details at <u>SSACanberra meeting and dinner attendance sheet</u> or contacting me (<u>warren.muller@csiro.au</u>; 0407 916 868).

Risk & Insurance Insights: Why Statisticians should have Cyber & Professional Indemnity Insurance

Please join us for this webinar, where SSA's insurance partner KBI will give a 20-minute presentation followed by a Q&A opportunity for participants.

Wednesday, 20 Sep 2023, 11:00 AM – 12:00 PM (AEST)

Learn more about your more insurance options with KBI here.

Register for the webinar here.

Check out these pre-conference workshops held in Wollongong on 10 December 2023:

 Essential Skills for Statistical Communication presented by Professor Sir David Spiegelhalter, University of Cambridge and Dr Linden Ashcroft, University of Melbourne

The workshop will include a panel discussion. Presenters Prof David Spiegelhalter and Dr Linden Ashcroft will be joined by applied mathematician and science communicator <u>Dr Sophie Calabretto</u>, and ABC journalist and 'lapsed mathematician', <u>Casey Briggs</u>, to share their experiences.

- Statistical Consultancy The Essentials for Getting Started and Ongoing Success Presented by Professor Julie Simpson, University of Melbourne, A/Professor Emily Karahalios, University of Melbourne and A/Professor Karen Lamb, University of Melbourne, A/Prof Sue Finch from The University of Melbourne and
- <u>Deep Statistics for More Rigorous and Efficient Data Science</u> presented by Professor Xiao-Li Meng, Harvard University

<u>Australian Statistical Conference (ASC) and Australian Conference on Teaching Statistics (OZCOTS)</u>

10th - 15th December 2023, Wollongong



ASC and OZCOTS 2023 Social Events

December 2023, held at the Illawarra Brewery's outdoor terrace at WINN stadium. The ECSSN is organising a social get-together during the ASC2023! They are inviting students, early career and more senior statisticians to join them a lovely beach view and network with like-minded people you might not see very often, plus have some fun, nibbles, and drinks!

Statistical Conference Dinner on 13 Dec 2023, at the Grand Ballroom at the Sage Hotel. Just minutes from the beach, come and join us for a three-course dinner. (You register on the same page as the conference registration page)

OZCOTS 2023 Social on 14 Dec 2023, at Lucia's by the Sea, next to the Novotel Hotel. The OZCOTS committee invites you to come and join them for a lovely meal and catch-up at a beautiful beach front venue.

Other events

Workshop on Causal and Explainable Artificial Intelligence

Dec 2023, Shanghai, China

The 2023 Workshop on Causal and Explainable Artificial Intelligence (CXAI) will be held in Shanghai, China on 4 December 2023, as a part of the 23rd IEEE International Conference on Data Mining (ICDM 2023). Some of the topics of interest definitely have a statistical flavour, e.g. "Causal inference and Bayesian networks". Authors of accepted papers will be invited to submit extended versions for possible inclusion in a Special Issue on Causal and Explainable Artificial Intelligence in the Applied Sciences journal.

More details can be found at https://cxai2023.pyai.au or here.

For further information please contact <u>Yanchang Zhao</u> or <u>Ainura Tursunalieva</u>.

Bayesian Non-Parametric Networking Workshop

4-8 December 2023, Melbourne

The 2nd Bayesian Nonparametrics Networking workshop will be held on 4-8 December 2023 at Monash University (www.monash.edu) in Melbourne. The format will largely follow the 1st of these new BNP Networking workshops that was held in Nicosia (Cyprus) in April 2022, this time with 3 mini-courses delivered by Jim Griffin, Athanasios Kottas and Stephanie van der Pas, who will also deliver Keynote talks. The workshop will also feature invited talks,

contributed talks and a poster session each featuring a range of different topics presented by a blend of both junior and established researchers.

For more information, please visit the workshop <u>event page</u> at or contact the <u>local organising committee</u>.

2023 International Biometric Society Australasian Region conference

27 Nov 2023 – 1 Dec 2023, Bay of Islands, NZ

The 2023 conference aims to be a joint event with <u>Statistical Ecology and Environmental Monitoring (SEEM) conference</u>. Conference themes for 2023 are:

- Statistical Genetics/'Omics
- Spatial/Temporal Modelling
- Design/Surveys
- Biostatistics
- Agricultural Statistics
- Demographic/Population Modelling
- Multivariate Statistics
- Statistical Consulting—Best Practice & Collaboration
- Data Governance/Sovereignty
- Machine Learning for Environmental and Ecological Applications

A biennial meeting is one of the main activities of the region, which enables members and non-members to come together to exchange ideas, learn about new research methodologies and applications, network and establish important contacts and collaboration opportunities. These five-day conferences are renowned for being intimate regarding numbers of participants, yet large enough to facilitate worthwhile invited and contributed talks as well as poster presentations. The program typically has a reception gathering, a poster event, an excursion afternoon and an evening conference dinner, all to encourage social and professional networking. Specialist pre-conference short-courses on the first day are also a feature for those interested or wanting professional development.

You can read more about the conferences here.

Postdoctoral Fellow

Australian Capital Territory

Australian National University

Classification: ANU Academic Level A Salary package: ...

Internal Revenue Agent (Examiner) - Direct Hire (12 Month Register)

Multiple Locations (see description)

Internal Revenue Service

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Revenue Officer- DIRECT HIRE (12 Month Register)

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Internal Revenue Service

Duties WHAT IS THE DIVISION? SMALL BUSINESS ...

Internal Revenue Agent (Examiner) - DIRECT HIRE (12 MONTH REGISTER)

Multiple Locations (See Description)

Internal Revenue Service

WHAT ARE THE APPEALS (AP), LARGE BUSINESS AND ...

View All Jobs

If you have news from the Australian statistical community to share in Stats Matters and Events, please get in touch with us! We love getting feedback too.

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