From: To: Subject: Date: Statistical Society of Australia Marie-Louise Rankin Stats Matters & Events Thursday, 2 May 2024 2:20:13 PM



Those who have spent more than five minutes with me know that I love cooking. When I wake up in the morning, my first thought is not about work (you'll be shocked to learn) but generally about what I could make for dinner that night. After a tiring day at work, you'd think I'd want to put my feet up, but as I walk into our kitchen and start the food prep, I can feel the stress of the day melt away, especially if my husband hands me a glass of wine at the same time.

Not everyone enjoys cooking as much as I do, so I understand a reliance on take-away or frozen meals from the supermarket. There is another reason for this fallback option though: It's often cheaper to buy ready-made meals.

The Australian Bureau of Statistics (ABS) revealed data from 2022-23 a couple of weeks ago, showing that Australians are consuming less of all the major food groups, but the the largest drop being fresh vegetables (down 14 grams per person per day), followed by fruit (down 12 grams), milk products (down 11 grams) and non-alcoholic beverages (down 9 grams). The overall food consumption decreased by 3.9%.

These numbers are not surprising when you see the price of certain food

items. Our milk of choice here on the Sunshine Coast sets us back \$5.80 (2L) these days. On the other hand, I could feed a family of four with two Woolworths BBQ meat lovers pizzas, which would cost \$10 for two. Try cooking a meal for four people for \$10!

In 2017 Coles ran a campaign "Feed your family for under \$10". They filled a basket with the ingredients for making cottage pie to show how easily this could be done. In December 2023, Channel 9News filled a basket with the same items. The bill amounted to \$23.18 – an eyewatering 131 % increase. Pizza, anyone?

You can read the ABS' media release on food consumption <u>here</u>. If you're interested in the comparison of the cost of meals created in 2017 versus 2023, check out the Channel Nine story <u>here</u>.

And on this note: Bon appetit!

Marie-Louise Rankin Executive Officer

Read newsletter in your browser

In this newsletter:

AMSI Report: Year 12 mathematics participation plummets to record lows

Launching Australia's visionary decadal plan for social science research Infrastructure 2024-33

Calling all statisticians working with health data!

Have you had your flu shot yet?

SSA events

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AMSI Report: Year 12 mathematics participation plummets to record lows

For years, the Australian Mathematical Sciences Institute (AMSI) has been gathering data on Year 12 mathematics participation. This week, AMSI released its "Year 12 Mathematics Participation Report Card", shedding light

on a concerning trend: participation in Year 12 mathematics is currently at an unprecedented low.

Over the past decade, enrolments in calculus-based mathematics subjects at Year 12 have remained relatively stable, albeit at a low level compared to overall high school exam completions. However, recent data reveals a significant decline in enrolments, extinguishing hopes of improvement.

The STEM industry relies heavily on fostering an early appreciation for mathematics as both a career path and a life skill. The participation report underscores several key points:

Participation in calculus-based mathematics at Year 12 has sharply decreased over the past three years.

Female involvement in advanced mathematics remains notably low, with only 6.4% of Year 12 females studying higher mathematics in 2022.

Enrolments in foundational mathematics subjects (Essential and General Mathematics) are also dwindling. In 2022, less than half of the Year 12 graduating cohort (45.8%) pursued a foundational mathematics subject.

Professor Tim Marchant, Director of AMSI, emphasised that these findings underscore the critical role of the STEM pipeline driving economic development, industrial growth and national success.

"Year 12 enrolments in calculus-based mathematics subjects remain at historically low levels and have yet to recover to pre-COVID levels. These diminished enrolment rates will undoubtedly impact Australia's ability to meet future STEM workforce demands," Professor Marchant remarked.

These insights are part of the forthcoming <u>Discipline Profile Report</u>, scheduled for release in mid-2024.

Read AMSI's full media release here. The reports are available here.

Launching Australia's visionary decadal plan for social science research infrastructure 2024-33

Last month, the Academy of the Social Sciences in Australia, in collaboration with several partners, initiated a Decadal plan aimed at revolutionising Australia's social science infrastructure. Titled "Connected, Innovative and Responsive: Decadal Plan for Social Science Research Infrastructure 2024-33," this plan presents an ambitious vision for leveraging the recent surge in social data availability to benefit the nation. At the launch of the plan, Dr Isabel

Ceron, the lead on the Academy's project, remarked:

"Much like how large telescopes ushered in a new era of discovery in astrophysics and space science, and how delving into our genes fundamentally altered our understanding of life and its determinants, we are now witnessing a flood of social and human data from all sectors of society."

The Decadal Plan for Social Science Research Infrastructure 2024-33 emerged from a collaboration involving the Academy of the Social Sciences in Australia, the ANU Centre for Social Research and Methods, the ARC Centre of Excellence for Automated Decision-Making and Society, the ARC Centre of Excellence for Children and Families over the Life Course, the ARC Centre of Excellence in Population Ageing Research and the UQ Institute for Social Science Research (ISSR). This comprehensive initiative was crafted over a two-year period with input from numerous social science researchers, technical specialists, and stakeholder entities.

Find out more and read the plan <u>here</u>.

Calling all statisticians working with health data!

The Australian Data Science Network (ADSN) invites you to take part in a <u>survey</u> that was just created by the ADSN in collaboration with the Australian Research Data Commons (ARDC). The survey is designed to collect information to guide the development of a national digital research infrastructure initiative from the ARDC called the People Research Data Commons (People RDC).

Specifically, the survey is intended to understand the current state of digital research infrastructure in the health sector, with a particular focus on advanced analytics and compute resources.

The survey aims to

- Gather information on what digital resources and analytics methods are currently used by researchers in health-related fields.
- Identify the biggest challenges faced by the researchers in using and accessing these resources.
- Seek insights into how researchers would like to access and use these resources in the future.
- Find out which components are viewed as most important to support advanced analytics in health data, guiding where resources and development efforts should be focused.

Your responses will help the Australian Research Data Commons (ARDC) develop a comprehensive framework that supports digital health research and translation.

LINK TO SURVEY - Please share with your teams, especially those who work with health data and/or in health-related research. (QR Code also links to the survey)



The deadline to complete the survey is Friday, 17 May.

Have you had your flu shot yet?

SSA Member Allen Cheng, Professor of Infectious Diseases, Monash University, recently published an article in "The Conversation", explaining all about the different flu vaccines that are currently available in Australia. You can read his article <u>here</u>.

Have you recently had an article published? Please let SSA's <u>Executive</u> <u>Officer</u> know and a link to your article will be added to <u>our website</u>. We'll also mention your article in the weekly newsletter.

From previous newsletters:

SSA's Golden Jubilee Travel Grant

SSA's Golden Jubilee Travel Grant provides overseas travel funds to student members of the Society, who can prove consecutive SSA membership for a minimum of two years.

A maximum of \$1000 is available per application, limited to a single trip during the course of the student's studies. Students will not be supported in their first year of study and will have had to be members of the Society for at least two years prior to the application deadline. Applications are required to be lodged in advance of travelling.

Application deadline: 31 May 2024

Calling all AStat accredited members - join SSA's Accreditation Committee

The Statistical Society is representing a diverse community and would like to see this represented in the make-up of its Accreditation Committee. It would like to build breadth across the sector, across different areas of expertise.

You are invited to apply for a position on the committee and help more SSA members to become accredited. The time commitment is not terribly large. The committee meets approximately six weekly via Zoom, and meetings are kept to one hour. Preparation for meetings typically takes between one and three hours, depending on the number of applications (which can vary considerably from meeting to meeting).

Accreditation Committee members usually serve for a term of three years, with two members completing their terms on the committee each year.

If you are interested is joining the Accreditation Committee, please send an email with an expression of interest and a copy of your resume to SSA's Executive Officer <u>Marie-Louise Rankin</u>.

SSA PhD or Masters top-up scholarships 2024

SSA PhD Top-Up Scholarships: the SSA wants to support you!

Are you undertaking a PhD or Masters degree with a project in the development of statistical or data science methodology, in the assessment of statistical or data science methodology, or in the development of statistical/data science software?

The Statistical Society of Australia (SSA) wants to support you!

Up to 4 Scholarships, worth \$2500 each, will be awarded to SSA student

members. Find out more about the eligibility criteria and find the application

form <u>here</u>.

Application deadline: 12 May 2024

SSA Events

Statistical Consulting Network Monthly Meet-Up

31 May 2024, 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 (AEST). 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.

<u>Zoom link</u>

Password: 660145

Slack Workspace link

NSW Branch

David Warton and Houying Zhu - Macquarie University and via Zoom – 16 May 2024, 11am – 2pm (AEST), lunch provided

Multivariate Spatial Models for Community Ecology Using a Basis Function Approach- David Warton

Statistical Solutions: From Wildfire Losses to Protein Engineering-Houying Zhu

Venue:

12 WW Room 803, Macquarie University and via Zoom

Schedule

- 11am 12pm: Dr Houying Zhu (Macquarie) Statistical Solutions: From Wildfire Losses to Protein Engineering
- 12pm 1pm: Complementary pizza lunch with speakers
- 1pm 2pm: Prof David Warton (UNSW) Multivariate Spatial Models for Community Ecology Using a Basis Function Approach

WA Branch: Early Career & Student Statisticians Evening

14 May 2024, 5:30 PM – 7:00 PM (AWST), at the Cheryl Praeger Lecture Room, The University of Western Australia

All visitors are welcome to attend this event, especially anyone studying or interested in pursuing a career in statistics or data science. Two speakers have been invited to speak at this event: George Malone (recipient of the 2023 Honours Scholarship) and Alistair Martin (Graduate student at Murdoch).

Members, visitors, and guests are invited to mingle over wine, beer, cider, soft drinks and pizza from 5:30PM. Following the meeting you are invited to dine with fellow attendees at a nearby restaurant. Early career and students will receive \$20 off their meal.

For more details on the talks and to register please click here.

SSA WA: Perth Biostats/Bioinfo Meetup 2024

11 Jun 2024, 5:30 PM – 7:30 PM (AWST), McCusker Auditorium, Harry Perkins Institute of Medical Research (North), QEII Medical Centre, 6 Verdun Street, Nedlands WA 6009

The purpose of this event is to bring together those with expertise and/or interest in medical and healthcare statistics in Perth. It is an opportunity to socialise and network, and to encourage upcoming professionals to pursue a career in this worthwhile field.

The invited speakers this evening are Dr Emma de Jong and Dr Charlotte Rasmussen.

For details on the speakers and their talks, please click here.

This event is **free** but please <u>register your attendance</u> to assist with catering and meeting dietary requirements.

Early Career & Student Statisticians Conference 18th - 21st November 2024

Join us for the biennial Early Career & Student Statisticians Conference (ECSSC). Organised by the ECSS Network of SSA and SECS Network of NZSA, this event offers invaluable insights and networking opportunities.

This year, we're excited to host local hubs in Perth, WA, Hobart, Tasmania and New Zealand, as well as a livestream option. Don't miss out on this incredible experience!

Important Dates:

- 1 July 2024: Call for abstracts
- 15 July 2024: Registrations open
- 26 July 2024: Deadline for abstract submission

Please note that these dates might be adjusted as the conference approaches. Bookmark the <u>event website</u>.

Also participate in our Logo Competition: Design the official conference logo for a chance to win a free registration to the conference! Submit your logo to <u>events@statsoc.org.au</u>.

Other events

International Association for Statistical Education (IASE)

(The SSA is currently trying to arrange this webinar for an Australian audience at a more practical time - watch this space)

think-cell & IASE - Data Storytelling Masterclass

15 May 2024; 15:00 UTC (1am - 2am AEST)

Presenter: Felix Malzfeldt

Presenting data can be a daunting task, often leaving audiences disengaged when presented with a sea of facts and figures.

The secret to holding your audience's attention lies in the timeless art of storytelling, something that has captivated and inspired humans since the dawn of time.

People buy stories, not data. The key when presenting data, therefore, is to turn your data into a compelling story.

But how do we combine the worlds of data and storytelling when presenting?

think-cell's new webinar, the Data Storytelling Masterclass, has been designed to teach you the guiding principles of data storytelling.

Here, you will learn how to turn your data into a compelling narrative and how to simplify and focus your message so that you drive action in every presentation you give.

Don't miss your chance to enhance your presentation skills – register here * for the Data Storytelling Masterclass and embark on a journey to captivate, inform and influence like never before!

Register here.

International Congress on Mathematical Education (ICME)

This event will take place 7-14 July in Sydney, with over 2,500 educators registered and set to attend.

Details of the event can be found on the <u>conference website</u>.

International Conference on Teaching Statistics (ICOTS) 2026

ICOTS12 will be held in Brisbane, Australia in 2026. Save the date!

More information available here.

Current Vacancies in SSA's Career Centre

0116496 Associate Researcher, Biostatistics

New South Wales

The University of Sydney

2x Full-time, 12-month fixed-term roles ...

View All Jobs

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

<u>Unsubscribe</u>