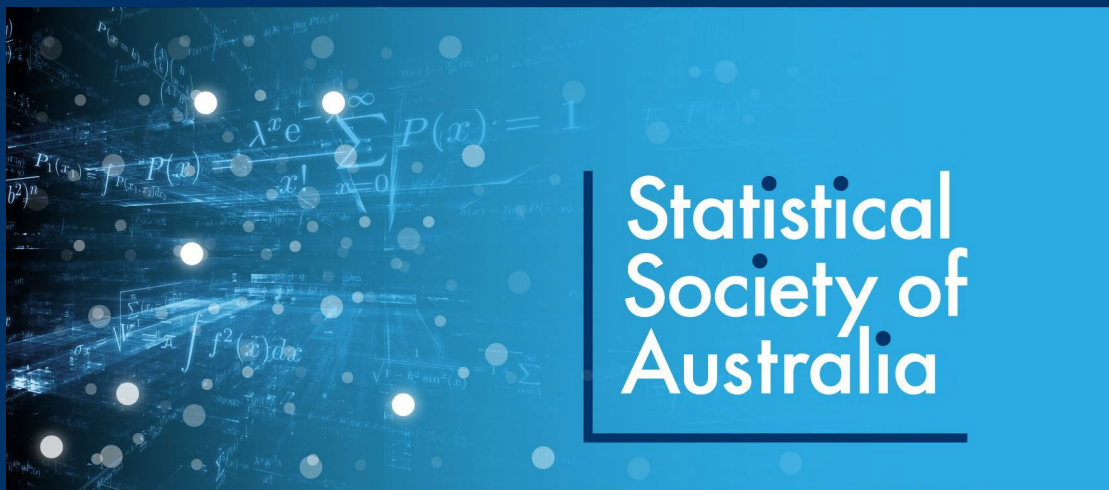


From: [Statistical Society of Australia](#)
To: [Contact us](#)
Subject: Stats Matters & Events
Date: Thursday, 15 February 2024 5:20:05 PM



STATS MATTERS & EVENTS

15 February 2024

Welcome to the first newsletter of 2024. I hope you had a good summer break, returning to work refreshed and full of energy and new ideas.

I spent most of my summer at home, but in late January I flew to Germany for a couple of weeks to spend a bit of time with my mother and three of my siblings. It's been almost twenty years since we have all been together and it was wonderful. While we may have wilted a bit on the outside, when we're together the banter and laughter is the same, just as it was all those years ago.

During one of our excursions into the local town, my sisters decided that we should put together some funds and go and buy a lottery ticket. I have been with SSA long enough to know that buying a lottery ticket is not really a good idea. Every time the jackpot hits a certain number, I get calls from journalists looking for some wise words from a statistician. What I hear from the wise statisticians is that the chance of winning is so minuscule that you're better off putting the weekly lottery fees into a savings account. But that's not as much fun as buying a lottery ticket, right? So, I contributed my share (EUR15!) to the lottery ticket.

After my return from Germany, I came across [an ABC article](#) explaining that

according to the most recently available data from Queensland's Statistician's Office, published in late 2023 but referring to the 2020-21 financial year, Australians are spending over \$7 billion annually on lotteries, and this is in the middle of a cost of living crisis! It turns out that, while for my sisters and I, the idea of buying a lottery ticket was just to add a bit of fun and excitement to our day, for some people buying a lottery ticket offers hope for a better life, particularly appealing to those in lower socio-economic status.

Personally, I have reservations about companies and the Government taking advantage of people's desperation. Lotteries are big business. In Queensland, as outlined in the latest report from the Queensland Audit Office, taxes from lotteries account for 20 percent of the \$1.9 billion collected in gambling taxes and levies. Lotteries were used in Australia by previous governments to fund major projects such as the Sydney Opera House and Harbour Bridge. On a smaller scale, every surf club I know sells lottery tickets, which we purchase happily, telling ourselves that our chances of winning are so much better since there is less competition than with a national lottery, and someone must win that prize home – why not me?

And even if we lose, at least we have supported a local community organisation. With arguments like that, which I use myself, despite working with hardened statisticians, lotteries will be with us for a long time.

Having said that, the lottery ticket I shared with my sisters did not win. Or so they told me.

[Marie-Louise Rankin](#)

Executive Officer

Gambling Help Online

For free and confidential support visit the [Gambling Help Online website](#) to find out more about online counselling, live chat and email support, self-help advice and information.

Telephone support

You can get immediate assistance by calling the National Gambling Helpline on 1800 858 858 for free, professional and confidential support 24 hours a day, 7 days a week.

Read newsletter in your [browser](#)

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[Australia Day Honours 2024](#)

Congratulations to SSA Members Professor Louise Ryan AO and Professor Helen MacGillivray AM for being recognised in the 2024 Australia Day Honours for their significant service to statistics and mathematics education.

About Helen:

Helen has dedicated nearly five decades to championing statistics and mathematics education at secondary and tertiary levels, both domestically in Australia and on a global scale. Widely acclaimed for her significant contributions particularly in statistics education, with over eighty publications and more than eighty keynotes and invited presentations, Helen is regarded as unparalleled in Australia and esteemed internationally. Her remarkable efforts have garnered numerous prestigious awards and professional accolades worldwide.

Even after retiring in 2011, she remains actively engaged in advancing statistics education, extending her impactful work to benefit educators and learners worldwide, including those in developing nations.

A local newspaper covered the award [here](#).

About Louise:

Distinguished Professor Louise Ryan was appointed as an Officer of the Order of Australia (AO) in recognition of her outstanding contributions to biostatistical research and methodology, environmental science, and professional societies.

Louise is one of the foremost biostatistical researchers globally and a leading scholar in Australia. Her work has significantly influenced statistical and

environmental science, revolutionising the utilisation of data by environmental and other scientists to comprehend natural phenomena.

Throughout her illustrious international career, she has demonstrated a steadfast commitment to applying her theoretical research to practical issues, such as assessing the cancer risk associated with arsenic in drinking water and understanding the effects of air pollution on birth weight.

In addition to her research achievements, Louise Ryan excels as an educator, mentor, and advocate, particularly for young women and other marginalised groups in statistics and science. She actively promotes statistical literacy in schools and communities while providing support to early career researchers.

Read more [here](#).

QS* Reimagine Education Award winners 2023 announced

Congratulations to SSA Member Rosie Ching, Principal Lecturer of Statistics at Singapore Management University, for having been awarded the QS' global "Blended and Presence Learning Award" (gold) for "Statistics For Social Impact" at the 2023 QS Reimagine Education Awards.

In its 10th year, the QS Reimagine Education continues to be the ultimate gathering for innovators pioneering the transformation of education. In 2023, they hosted the event in Abu Dhabi, supported by Khalifa University and welcomed delegates in person and virtually.

Alongside an exciting conference agenda which saw directors, vice-presidents, chief learning officers, CEOs and deans share their insights, the conference also celebrated educational achievement. The QS Reimagine Education Awards recognise the exceptional efforts of educators, institutions and Edtech start-ups in preparing learners for the challenges of the future.

"Winning the Gold for Blended and Presence Learning in the Global Category at the QS Reimagine Education Awards is a dream come true and would not have been possible without my loving family and my students through the years who have laughed, cried and toiled with me.", Rosie said.

The list of winners includes some Australian universities as well. The Australian Catholic University took out third place, also for "Blended and Presence Learning". The Australian National University, RMIT University, Griffith University, Deakin University and Curtin University all won awards as well. Congratulations to everyone involved!

You can see the full list [here](#).

Pie Charts: A recipe for confusion in Data Visualisation

If you follow “The Conversation” you may have seen SSA Members’ Adrian Barnett and Victor Oguoma’s article that was published there on 8 January 2024:

“Here’s why you should (almost) never use a pie chart for your data”.

The authors explain that the use of pie charts for data visualisation is often discouraged due to several drawbacks. Pie charts can be misleading, especially when representing more than two categories, as the slices can become difficult to differentiate and accurately interpret. The circular format lacks a common reference point, making comparisons challenging. Additionally, factors like tiny slices, unclear labelling and colourful designs can potentially further hinder comprehension, especially for individuals with colour vision deficiencies. Three-dimensional pie charts exacerbate these issues by distorting perceptions of data proportions.

A recommended alternative to pie charts is the bar chart, which presents data in a linear format, making it easier to compare categories and accurately assess proportions. However, it’s cautioned against adding unnecessary 3D effects to bar charts, as this can also distort perceptions and undermine clarity.

While pie charts may be suitable for a few categories with dissimilar percentages, they should be used sparingly, with preference given to more easily interpretable options like bar charts. Overly stylised visualisations can unintentionally reduce understanding and potentially mislead audiences.

You can read the full article [here](#).

If you have written for “The Conversation”, please feel free to email the details to the SSA Executive Officer (eo@statsoc.org.au).

Welcome to the first issue of Significance in 2024!

Our cover feature is the first in a six-part series by Gavin Freeguard on the R number, a.k.a. the reproduction rate. The metric became an early “breakout star” during the pandemic – along with the terms “furlough” and “social distancing” – affecting the lives and entering the everyday conversations of

people who hadn't paid much mind to mathematical concepts since they were 16. Was it right that the R number became so important and held such sway over government policy? Gavin's fascinating and easily digestible article expertly encompasses the diversity of opinion around this controversial concept and tells us where it came from in the first place.

Know any American National Football League coaches? They'll thank you for sharing our article about when it's best to throw the red challenge flag. Cricket fans, meanwhile, can now judge whether so-called 'Bazball' lives up to the hype with the help of our statistical exploration. We also step back into Victorian London to look at an early customer loyalty scheme and why it spooked Britain's ruling classes.

March issue highlights:

[The R number - part 1](#)

The first in a six-part series by Gavin Freeguard on the evolution and usefulness of the pandemic's famous epidemiological tool

[Slapdash stats](#)

Unearthing statistics-related blunders in academic papers and what they mean for science publishing

[American football](#)

When should a coach throw the red challenge flag?

[Data and getting dressed – part 2](#)

Jordi Prats' examination of the stats behind clothing sizes concludes. This issue: ready-to-wear and uniforms

[Victorian data mining](#)

The story of an eighteenth-century customer loyalty programme and the unique data it produced

[Bazball: is it for real?](#)

Analysing the stats behind the England men's team's new cricketing style

Access the digital version of *Significance* through [your membership portal](#). Print issues will be mailed to subscribers soon.

Significance is also online at www.significancemagazine.com.



The Swift Effect: Unveiling Taylor's Impact on NFL Enjoyment

The topic of statistics can be rather dry and for some students, it may not be their favourite subject. Imagine though, if your lecturer managed to combine the subject of statistics with Taylor Swift and football! Exactly this happened at Williams College (Massachusetts, US), where Professor of Psychology Steven Fein mixed things up in his Experimentation and Statistics class.

Professor Fein and his students conducted research to explore the impact of Taylor Swift's presence at Kansas City Chiefs football games on people's feelings about the NFL.

They recruited 500 participants from around the United States for an online study. Participants viewed various NFL game images, some including Taylor Swift and others featuring social justice messages like "Black Lives Matter" on players' helmets. They were then asked to rate their enjoyment of the NFL. Conservatives rated their enjoyment significantly lower when exposed to Taylor Swift or social justice images, while liberals' enjoyment remained unaffected.

Further research with 250 individuals aimed to gauge attitudes toward Taylor Swift at NFL games. Factors correlating with negative feelings included political conservatism, belief in conspiracies, sexism, opposition to societal trends, less social media usage, dislike of Bud Light (versus Coors Light) and not supporting the Kansas City Chiefs. Men were more negative than women, with age not being a significant factor.

Most participants overestimated Swift's screen time during games, particularly if they disliked her presence. Fein notes that while some dislike the distraction from gameplay, factors like sexism and political ideology contribute to anti-Swift sentiments.

Read the full article [here](#).

Election of Executive Members

Members are advised that the Executive positions of Secretary and Treasurer will become vacant at the Society's Central Council Annual General Meeting in 2024.

Members of SSA are invited to submit nominations for the two positions to be vacated. Nominations must be in writing and signed by the nominator(s), and must be accompanied by a written and signed statement from the nominee accepting the nomination. Nominations should be submitted to the SSA President (president@statsoc.org.au) or to a Branch President before 1 May 2024.

Doug Shaw, Secretary

The Tjanpi Award for best Student paper in Environmental Statistics

Nominations are now being accepted for the 2023 Tjanpi Award, the annual student prize for best student paper in environmental statistics, sponsored by the SSA Environmental Statistics Section. To be eligible a student must be:

- An author of a paper that has been accepted during 2023, having made a substantial contribution to the work
- A student as of 30 June 2023
- A current member of the SSA and the Environmental Statistics Section

The winner will receive \$500 and will be asked to present in an invited session on environmental statistics at the next annual stats conference.

Please submit your nominations to eo@statsoc.org.au (self-nominations welcome), with Tjanpi Award submission in the header, by 5 PM AEDT Friday 1st March 2024, including:

- Full name, institution
- Paper, as one pdf file.
- Letter of support from supervisor or other academic at the institution, confirming student status of applicant and describing the student's role in the paper.

David Warton
Chair, Environmental Statistics Section



Central Australian landscape dominated by Tjanpi, photo by Sara Winter

Tjanpi is the Pitjantjatjara word for Triodia, a spiny tussock-forming grass that dominates the vegetation across more than 20% of Australia's land mass. It is a long-lived plant that makes deep roots and can withstand the harshest of conditions. It can grow over decades into characteristic ring formations three metres in diameter. As a source of food and shelter, Tjanpi is fundamental to life in some of Australia's most extreme conditions, being central to highly diverse ecosystems dominated by termites and ants, as well as reptiles, birds and small mammals. It has also been traditionally used by Indigenous people for a range of purposes, including building shelters, making an adhesive resin, basket weaving, fishing and using its seeds as a food source.

Tjanpi is an analogy for the Environmental Statistics student award – because the development and application of appropriate statistical techniques is fundamental to good environmental research, and our hope is that the recipient of this award will grow over the

coming decades to become central to a diverse range of interesting research endeavours!

Guidelines for the reimbursement of SSA volunteers

The SSA recently finalised its guidelines for the reimbursement of volunteers. You can find them on the [policy page](#) of the SSA website.

Upload your resume to the SSA Career Centre

Searching for the right job can be time-consuming and your time is valuable. Upload your resume to [the Statistical Society of Australia Career Centre](#) and let the right job come to you!

The SSA Career Centre allows recruiters to search for prospective candidates and view resumes, all while protecting the privacy of the job seeker. Your contact information will only be provided to whom you allow, eliminating the chance of receiving unsolicited emails and phone calls.

How does it work?

When a recruiter is interested in speaking to you about an open position, they will complete a contact request form that provides their information and the description of the position. At that point, you will be notified to either accept the request or reject it. Your contact information will be provided to the employer only if you accept, protecting your anonymity!

Upload your resume [here](#).

You can also have your resume *evaluated* for FREE. Upload your resume to the Statistical Society of Australia Career Centre and find out how!

ADSN Team finishes 2nd in the World in the UN Datathon

Congratulations to the ***Down Under Data Wizards*** for taking home the following awards from the recently held U.N. Datathon.

- 1st Place – Oceania Region
- 2nd Place – Overall (out of 400+ teams from 100+ countries)

In November, the [ADSN hosted one of only seven worldwide Datathon sites](#) at

QUT's Centre for Data Science. Seven teams of researchers from around the ADSN came to QUT and Brisbane for the event. One team also participated in Melbourne. The Data Wizards were one of the seven teams in Brisbane.

One of the aims of the ADSN UN Datathon event was to get researchers from different universities and organisations talking and working together. We created teams of people who didn't know each other - and in the case of the Data Wizards, it worked brilliantly!

Congratulations to:

- Farhan Ameen, Sydney Precision Data Science Centre
- Sundance Zhihong Sun, The University of Melbourne
- Janith Chandula Wanniarachchi, Monash University
- Jamie Hogg, QUT Centre for Data Science
- David Wu, Monash University

Here are two links to some fun videos to watch:

1. [The Data Wizards Top 3 Finalist Team Presentation at the UN Datathon Awards Ceremony](#)
2. [ADSN video showcasing their Datathon event with interviews with many of the participants](#)

SSA Events

Statistical Consulting Network Monthly Meet-Up

23 February 2024, 12:30 PM – 1:30 PM AEDT, 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](#)

No installation required: Instant coding demos and workshops using dev containers and WebR

Tuesday 20th February, 6-7pm AEDT

Teaching or showing someone code used to involve a lot of setup: installing R, packages and other system dependencies, getting versions right, worrying about operating systems — and then you'd spend hours troubleshooting instead of teaching.

Those days are largely a thing of the past! In this talk, James will discuss two technologies in particular that make playing with R code interactively a matter of just a few clicks: development containers and WebR.

James will use examples to show just how easy it is to set up some reproducible research, a workshop or a browser-based demo that anyone can run, even if they've never coded before.

James Goldie is the Data and Digital Storytelling Lead with 360info, an open newswire supported by Monash University. He has a PhD in climate science from UNSW and has been coding in R since 2014.

The event will be held in-person in Melbourne with a viewing hub in Hobart and streamed online via Zoom. Dinner to follow the in-person event at attendees' own expense. Register [here](#).

Other events

Assessing the risk of bias in studies evaluating the effects of interventions and of exposures

21 Mar 2024 (AEDT) – 22 Mar 2024 (AEDT), Ground Floor Conference Rooms, Monash University, School of Public Health and Preventive Medicine, 553 St Kilda Road, Melbourne

Professor Julian Higgins, University of Bristol, will be leading this two-day (in-person) workshop, providing a unique opportunity to learn from the lead developer of the risk of bias tools. The course is designed for those undertaking systematic reviews,

synthesizing evidence for guidelines, or generally interested in how to appraise studies. For registration information, please see [here](#).

Call for Papers

They invite submissions to the 27th International Conference on Artificial Intelligence and Statistics (AISTATS 2024), and welcome paper submissions on artificial intelligence, machine learning, statistics, and related areas.

AISTATS is an interdisciplinary gathering of researchers at the intersection of computer science, artificial intelligence, machine learning, statistics, and related areas. Since its inception in 1985, the primary goal of AISTATS has been to broaden research in these fields by promoting the exchange of ideas among them. The conference is committed to diversity in all its forms, and encourages submissions from authors of underrepresented groups and geographies in ML/AI.

Submissions are accepted at [here](#).

Formatting information (including LaTeX style files) is available in the [AISTATS2024PaperPack](#). We do not support submission in preparation systems other than LaTeX. Please do not modify the layout given by the style file. If you have questions about the style file or its usage, please contact the publications [chair or the program chairs](#).

Join R Exchange 2024

8 May 2024 (NZST) – 9 May 2024 (NZST), National Library in Wellington, New Zealand

Now in its 4th year, R Exchange provides a regional opportunity for New Zealand and Australian open-source analytics and data science enthusiasts to connect and learn from each other. The programme showcases how organisations across a variety of disciplines are using R and related tools to create insights for decision-making and align them with strategic goals. Learn with us how to better visualise outputs, automate reporting, and scale up work flows and data products. If you haven't worked with R and other open-source tools yet, get inspired by how others use them and what can be done.

R Exchange 2024 will take place on 8-9 May at the National Library in Wellington, New Zealand.

The event will include a conference day full of presentations, panel discussions and networking; as well as a pre-conference workshop (see details below).

[Click here for more details, the full schedule and to register.](#)

Fourth international conference on Stepped Wedge Trial Design

13th-15th May 2024, free online conference

The University of York will host the Fourth International Conference on Stepped Wedge Trial Design ONLINE on 13th-15th May 2024.

The conference is a platform to share ideas, experience, best practice and challenges for the design, implementation and analysis of the stepped wedge design model.

Keynote Speakers: Professor Richard Hooper (Queen Mary University of London) and former SSA President Associate Professor Jessica Kasza (Monash University).

Registration is FREE.

Abstract submissions are welcome now (**Deadline: tomorrow (!) 16th February 2024**).

Contributions from underrepresented groups and diverse fields of application are especially encouraged.

For further information and link to the abstract submission form, click [here](#).

2024 Teacher Professional Learning in Industry Day

Maths teachers and careers advisors from schools across Victoria are invited to attend the Teacher Professional Learning in Industry Day on Tuesday 21 May. Hosted by AMSI and The Australian Centre for Career Education with support from the Toyota Community Trust.

[Submit your expression of interest.](#)

Australasian Applied Statistics Conference 2024 (AASC2024)

You are invited to Western Australia for the Australasian Applied Statistics Conference 2024 (AASC2024) to be held on Rottnest Island at the Samphire Resort on 3-5 September 2024.

Imagine immersing yourself in the fascinating world of statistics and data science while surrounded by azure blue waters, unspoiled sandy beaches, and a vibrant array of local wildlife. Rottnest Island, fondly known as 'Rotto' by locals, provides the perfect serene backdrop for deep intellectual engagement and promises an unforgettable experience filled with exploration, adventure, and relaxation.

This conference is in the series which originated with the Australasian Genstat Conference held in Canberra in 1979. It became the Australasian Applied Statistics Conference in 2011 to encompass the wider community of applied statisticians. AASC conferences have been held in Palm Cove (Aus), Queenstown (NZ), Port Lincoln (Aus), Bermagui (Aus), Rotorua (NZ) and Inverloch (Aus).

The conference is small and friendly, so you can meet and get to know all the participants, providing a great opportunity for collaboration. Whether you're a seasoned professional, an eager academic or a bright-eyed student keenly exploring the vast and complex world of statistics, this conference is for you! Anyone studying or working in statistics, data science and related fields to welcome to join this event for an enlightening journey into how statistical methodologies can be leveraged across various biological disciplines.

The organisers are excited to facilitate sharing ideas, inspiring innovation, and fostering meaningful connections. Dive into the engaging universe of statistics together at AASC 2024.

[Find out more.](#)

Current Vacancies in SSA's Career Centre

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Western Australia

Curtin University

Seeking a talented and well-qualified statistician ...

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Western Australia

The University of Western Australia

As the appointee you will, conduct high quality ...

[Senior Management Auditor](#)

Sacramento County, CA

California Department of Public Health

The California Department of Public Health (CDPH) ...

[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.

[Unsubscribe](#)