Daniel R. R. Bradford

I am a public health researcher nearing completion of my PhD, with thesis submission expected in February 2027. My research examines health and developmental inequalities among preschool children in care and not in care, and how these vary with socioeconomic deprivation. I predominantly use R to analyse population-based linked administrative health data. My wider research covers mortality inequalities, postgraduate mental health, and sleep and chronotype.

Research experience

Doctoral and postgraduate research

PhD - Health of young looked after children in Scotland | 2021 – 2027 (expected)
School of Health & Wellbeing, University of Glasgow

- Led the research cycle from securing data access through the Health and Social Care Public Benefit and Privacy Panel (HSC-PBPP) to data cleaning, analysis, and journal submission. Worked with eDRIS on data access and statistical disclosure in the National Safe Haven.
- Managed and analysed linked administrative data for over 480,000 children, combining Child Health Systems Programme Pre-School 27–30 month review records, Scottish Birth Records, and the Scottish Index of Multiple Deprivation (SIMD).
- Examined differences in health outcomes between children in care and not in care, and how outcomes varied with area-level socioeconomic deprivation within each group.
- Developed reproducible R workflows for data cleaning, outcome construction, descriptive statistics, crude relative risks, adjusted logistic regression, and manuscript tables and figures. Used penalised regression as a robustness check for rare outcomes.
- Combined structured health-review fields and Read v2 clinical codes into 23 outcome groups: 19 physical-health and four psychosocial and developmental outcomes. Developed an ICD-10-informed classification when existing code lists proved unsuitable. All clinical code classifications were verified by a medical doctor.
- Independently identified and tested a methodological issue in using SIMD in health inequalities research, resulting in a first-author paper in Health & Place and an oral presentation at the Society for Social Medicine and Population Health Annual Scientific Meeting.
- Planned and conducted a scoping review of the physical health of children in care to assess the evidence, identify research gaps, and refine my linked-data research questions.
- Developed knowledge of public health methods for population data and inequalities research, such as age-sex standardisation and slope and relative indices of inequality.
- Co-supervised an MPH dissertation using open census and population data, supporting the student's skills in data linkage, reproducible research, and analysis. I continue to mentor the student informally and collaborate with them as a co-author.

Master of Public Health dissertation project | 2020 – 2021 | Distinction
School of Health & Wellbeing, University of Glasgow

- Analysed over 660,000 linked records combining 2009 Pupil Census data with seven years of national prescribing records for Scottish children.
- Completed elective modules in data science, advanced epidemiology and statistics, and social determinants of health.

MSc Psychological Science dissertation project | 2018 – 2019 | Merit
School of Psychology & Neuroscience, University of Glasgow

- Designed and conducted an online survey of young adults recruited through social media, university mailing lists, and community flyers.
- Used demographic and psychometric data to examine associations between sleep disturbance, chronotype, mental distress, and suicidal ideation through mediation analysis.
- Independently developed the dissertation research into two first-author peer-reviewed papers.

Research posts

Research Assistant | Jan – Jun 2024
School of Health & Wellbeing, University of Glasgow, and Glasgow Centre for Population Health

- Initiated the collaboration by approaching a senior researcher at the Glasgow Centre for Population Health and proposing a research internship break from my PhD.
- Led a study of stalled improvements in mortality and inequalities in England and Scotland in the context of UK austerity policies introduced in 2010.
- Used Office for National Statistics and National Records of Scotland mortality data covering 1990–2022 to examine time trends and inequalities, with sensitivity analyses addressing COVID-19.
- Developed the analysis and a manuscript draft during the six-month post, then led revisions through to publication as first and corresponding author in the Journal of Critical Public Health in 2026.
- Presented the findings at the 2024 Society for Social Medicine and Population Health Annual Scientific Meeting.

Research Assistant | Feb – Nov 2022
School of Psychology & Neuroscience, University of Glasgow

- Joined an established team to bring a partly written manuscript on postgraduate researchers' mental health to submission, drawing on psychometric and open-text survey responses and focus group data.
- Wrote the introduction and discussion, organised the results into a manuscript, and managed version control and co-author feedback through to submission. The paper was published in Higher Education.

Research Affiliate | Sep 2019 – Jun 2020
School of Psychology & Neuroscience, University of Glasgow

- Continued writing up my MSc research for journal publication.
- Contributed to screening for a systematic review and led the meta-analysis and write-up, resulting in a paper in Sleep Medicine Reviews.
- Analysed survey data for the British Psychological Society.

Publications and other research outputs

First-author peer-reviewed papers

Bradford, D., Brown, D., McCartney, G., Douglas, M., Dundas, R., & Walsh, D. (2026). *Excess mortality in England and Scotland in 2022: The long shadow of austerity and the return to an unacceptable pre-pandemic baseline.* Journal of Critical Public Health, 3(2), 57–76. https://doi.org/10.55016/8kkpa186

Bradford, D. R. R., Allik, M., McMahon, A. D., & Brown, D. (2023). *Assessing the risk of endogeneity bias in health and mortality inequalities research using composite measures of multiple deprivation which include health-related indicators: A case study using the Scottish Index of Multiple Deprivation and population health and mortality data.* Health & Place, 80, 102998. https://doi.org/10.1016/j.healthplace.2023.102998

Bradford, D. R. R., Allik, M., McMahon, A. D., & Brown, D. (2022). *Physical health of care-experienced young children in high-income countries: A scoping review protocol.* BMJ Open, 12(9), e063648. https://doi.org/10.1136/bmjopen-2022-063648

Bradford, D. R. R., Biello, S. M., & Russell, K. (2022). *Defeat and entrapment mediate the relationship between insomnia symptoms and suicidal ideation in young adults.* Archives of Suicide Research, 26(3), 1632–1643. https://doi.org/10.1080/13811118.2021.1885537

Bradford, D. R. R., Biello, S. M., & Russell, K. (2021). *Insomnia symptoms mediate the association between eveningness and suicidal ideation, defeat, entrapment, and psychological distress in students.* Chronobiology International, 38(10), 1397–1408. https://doi.org/10.1080/07420528.2021.1931274

Co-authored peer-reviewed papers

White, N., Milicev, J., **Bradford, D. R. R.**, Rodger, A., & Gardani, M. (2024). *The mental labyrinth of postgraduate research: A qualitative study of postgraduate mental health and wellbeing and the impact of the supervisory relationship.* Higher Education, 87(5), 1211–1226. https://doi.org/10.1007/s10734-023-01061-5

Gardani, M., **Bradford, D. R. R.**, Russell, K., Allan, S., Beattie, L., Ellis, J. G., & Akram, U. (2022). *A systematic review and meta-analysis of poor sleep, insomnia symptoms and stress in undergraduate students.* Sleep Medicine Reviews, 61, 101565. https://doi.org/10.1016/j.smrv.2021.101565

Preprints and work in progress

Bradford, D. R. R., Abou Saab, Y., McMahon, A. D., Leyland, A. H., Allik, M., & Brown, D. (2026). *Psychosocial health inequalities and socioeconomic deprivation gradients among preschool children in care and not in care: An administrative health data study.* Preprint, medRxiv; under review at BMC Public Health. https://doi.org/10.64898/2026.08.25.26361327

Bradford, D. R. R., Swift, A., Allik, M., McMahon, A. D., & Brown, D. (2025). *Physical health of care-experienced young children in high-income countries: A scoping review.* Preprint, medRxiv; not peer reviewed. https://doi.org/10.1101/2025.04.15.25325761

Bradford, D. R. R., Abou Saab, Y., McMahon, A. D., Leyland, A. H., Allik, M., & Brown, D. [Working title] *Deprivation gradients in the physical health of preschool children in care and not in care: a cross-sectional study of national child health review records.* In preparation.

Oral presentations

2024 · OP40, Society for Social Medicine and Population Health Annual Scientific Meeting, Glasgow: Post-pandemic excess mortality in England and Scotland: is it a continuation of pre-pandemic trends?

2023 · OP108, Society for Social Medicine and Population Health Annual Scientific Meeting, Newcastle: Potential endogeneity bias when using composite measures of multiple deprivation in health inequalities research

Posters

2023 · UK Public Health Science Conference, London: Physical health of care-experienced young children in high-income countries: a scoping review

2023 · ADR UK Conference, Birmingham: Developmental concerns of preschool children in out-of-home care: a cross-sectional study using population-level child health review data

2023 · Glasgow Paediatric Research Day: presentations of the two preceding posters.

2019 · NHS Scotland Mental Health Network Annual Scientific Meeting, Glasgow: Defeat and entrapment mediate the relationship between insomnia and suicidal ideation and behaviour in young adults

Other outputs

Bradford, D. R. R., & Aletta, F. (2024). *UK Public Health Science 2024: a call for abstracts.* The Lancet, 403(10432), 1120–1121. https://doi.org/10.1016/S0140-6736(24)00527-0

Bradford, D. R. R., Bareham, B., Basterfield, L., & Stevenson, K. (2025). *UK Public Health Science conference 2026: a call for abstracts.* Journal of Epidemiology & Community Health, 79(12), 899. https://doi.org/10.1136/jech-2025-224575

Bradford, D. R. R. (December 2021). *Internal Rhythms, Sleep, and Suicide.* James Kirk Bernard Foundation, a blog explaining the sleep and suicide research for a general audience. jameskirkbernardfoundation.org

Leadership and other professional experience

Conference chair | Nov 2023 – present
UK & Ireland Public Health Science Conference

- Chair a committee of about 40 academics and clinicians and oversee an annual conference for around 250 delegates, including researchers, clinicians, local authorities, and charities. Work with the senior steering committee, journal editors, sponsors, and keynote speakers.
- Manage the conference budget. Grew cash reserves substantially during my time as chair, to support the conference's sustainability and meet higher costs for future expected events in London and the South East.
- Oversaw improvements to communications and abstract submission and review processes. Abstract submissions increased from 242 for the 2024 event to 392 for the 2027 event.
- Personally promoted participation beyond academia. Introduced prizes for voluntary, community, and social enterprise organisations, and work with colleagues to select themes, speakers, and local partners focused on applied research and policy change.
- Worked with senior colleagues to present a new partnership proposal to the Society for Social Medicine and Population Health and the Journal of Epidemiology & Community Health.
- Oversaw the conference's formal renaming to include Ireland and worked with external design consultants on its website and visual identity.

Support worker | May 2015 – present
Direct employment, Quarriers, Spark of Genius, and various agencies

- Support primarily young adults with autism, developmental conditions, and learning disabilities, using a strengths-based, person-centred approach that prioritises respect and empowerment.
- Wide-ranging experience working with many different people and projects with unique needs, including social support in secondary schools, daily living support for people with substance-induced dementias, and support for people experiencing homelessness.
- I have continued to work part-time alongside all of my postgraduate study and research, necessitating strong time- and energy-management skills.

Aerodynamicist | Mar 2013 – Oct 2014
Aircraft Research Association, Bedford

- Built computational fluid dynamics models, ran simulations, produced flow visualisations, and presented findings to external clients.
- Fitted wind-tunnel models, collected test data, designed instrumentation, and contributed to client reports and presentations.
- Wrote and verified automation scripts to improve an image-processing method, with estimated savings of tens of thousands of pounds per project.

Peer review and academic citizenship

Peer review | 2021 – present
I have reviewed articles for many journals, including Archives of Disease in Childhood, International Journal of Population Data Science, and Journal of Epidemiology & Community Health. I have also reviewed abstracts for several editions of the UK & Ireland Public Health Science Conferences and Society for Social Medicine and Population Health Annual Scientific Meetings.

Postgraduate research representative | 2022 – 2023
MRC/CSO Social and Public Health Sciences Unit and School of Health & Wellbeing, University of Glasgow

- Supported postgraduate research peers, including during stressful periods.
- Represented students' views to postgraduate convenors and communicated convenors' feedback to students.
- Helped organise the internal postgraduate research conference and chaired a panel session.

Education

PhD - Health of young looked after children in Scotland | 2021 – 2027 | Thesis submission expected February 2027
MRC/CSO Social and Public Health Sciences Unit and School of Health & Wellbeing, University of Glasgow

Master of Public Health | 2020 – 2021 | Distinction
School of Health & Wellbeing, University of Glasgow

MSc Psychological Science (Conversion) | 2018 – 2019 | Merit
School of Psychology & Neuroscience, University of Glasgow

MEng Aeronautical Engineering | 2006 – 2010 | First Class
James Watt School of Engineering, University of Glasgow

Awards and funding

MVLS conference support award | 2024 | £750
Helped fund travel and accommodation for the UK & Ireland Public Health Science Conference

Glasgow University Sports Association Chancellor's Fund for Sport | 2022 | £500
Helped fund a high-altitude training trip to Kenya.

PGT Excellence Scholarship | 2018 | £5,000
Bursary to partially cover postgraduate tuition fees

Paul Shoda Prize | 2010
Discretionary award to a student graduating with a first-class honours degree in Aeronautical Engineering who has made an outstanding contribution to university life.

Engineering Society Medal (runner-up) | 2010
School-wide equivalent to Paul Shoda Prize.

About me

After my undergraduate degree in aeronautical engineering, I spent several years in aerodynamics research. In 2014 I left engineering, moved back to Glasgow, and began volunteering with cycling charities, leading rides for children with additional support needs while on a career break. In 2015 I became a support worker for adolescents and young adults with autism and learning disabilities and never looked back! I returned to study in 2018 with an MSc in Psychological Science. An MPH followed in 2020, and then a PhD at the MRC/CSO Social and Public Health Sciences Unit, where I was able to finally align my values of wanting to support marginalised people with my technical and analytical skills.

Outside work, I run competitively, racing the 1500m in the summer and the 10k for the rest of the year. I love going to live music of almost any genre and do the odd bit of DJing.