

DAVID A. ELLIS – Narrative CV¹

October 2024

Module 1. Contributions to the generation of new ideas, tools, methodologies or knowledge

Working at the intersection of psychology and data science, my research has been published in world-leading psychology (<https://doi.org/10.1177/09567976211040491>), medical (<https://doi.org/10.1371/journal.pmed.1001953>), public health ([https://doi.org/10.1016/S2468-2667\(17\)30217-7](https://doi.org/10.1016/S2468-2667(17)30217-7)), computer science (<https://doi.org/10.1145/3544548.3580654>), and communication (<https://doi.org/10.1093/joc/jqz052>) outlets with results often re-appearing on radio and television. I have appeared on the Stanford-Elsevier list of scientists every year since 2021, which identifies the top 2% of researchers globally based on citations.

My primary focus has been on the descriptive or predictive value of new and emerging forms of data for understanding the dynamics of behaviour in the digital age. I have explored the psychological value and impacts of technology as it relates to privacy, security, and health. Theoretically, my research often translates and extends offline theories of behaviour (including intraindividual consistency and the establishment of homeostasis) into the online realm. For example, just as people regulate a variety of behaviours (e.g., sleep), we also control the level of technological interaction, keeping it both stable and close to a desired level. Not only has this research been instrumental in highlighting a myriad of problems in how our understanding of technology related impacts are conceptualised, but it has also provided practical improvements by developing methodologies to ensure that we can reliably quantify patterns of behaviour from digital systems.

These contributions have therefore changed how social scientists engage with and approach new technologies in the digital age.

Module 2. The development of others and maintenance of effective working relationships

I have led a variety of research groups that include the Social Processes group at Lancaster University between 2017-2019. I currently lead a Beacon as part of Bath's strategy to develop multi-disciplinary research capacity that aims to address grand challenges. This has always involved the curation of positive research cultures and effective working relationships. For example, I led the development of a research culture document based around core lab values and how these are demonstrated throughout our work. Entitled *ROSE* this encompasses **R**espect, **O**penness, and **S**upport that strive for **E**quality.

As a supervisor or line manager, I have mentored early career staff in a formal and informal capacity. This has led to some exciting developments whereby, for example, we are moving towards publications that have more authors. Not only does this improve the quality of our outputs, but it also supports a positive research culture where everyone's contribution is recognised and rewarded. 100% of my former PhD students and researchers have secured future employment at world leading universities or within industry. I was presented with a *Staff Doctoral Recognition Award* from *The University of Bath* in 2023.

At a university level, I sit on a number of committees that aim to transform and reform what I would sometimes describe as 'broken' research cultures. This includes the development of an action plan as part of a *Research Culture Steering* group that is not simply linked to research assessments, but which will allow the institution to develop a position of leadership in re-defining what positive research cultures should look like. As Chair of the of the *Social Sciences Research Ethics sub-committee*, I also

¹A narrative CV is [defined by the Declaration on Research Assessment \(DORA\)](#) as a CV format that provides a structured written description of a person's contributions and achievements that reflects a broad range of relevant skills and experiences, more than can often be seen in a traditional academic CV.

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play a leading role in associated decision-making processes that are both fundamental to all research activities that allow colleagues to thrive.

Finally, nationally and internationally, my research has touched on matters relating to how open research cultures can be supported by journals, funders, and institutions including how researchers might be encouraged and rewarded for various contributions that support computational reproducibility (e.g., <https://doi.org/10.3758/s13428-024-02501-5>, <https://doi.org/10.3758/s13428-024-02501-5>).

Module 3. Contributions to the wider research and innovation community

I have spearheaded innovative research practices alongside the analysis of digital data, which continues to advance the discipline of psychology and the wider academic community. Research projects have included experiments in labs, large scale surveys, focus groups, and the use of smartphones to collect data 'in the wild'. For example, academic outputs have helped develop infrastructures to support the secure collection of sensitive data from smartphones, while simultaneously providing recommendations about data sharing and computational reproducibility that align with ethical frameworks and open-science practices (e.g., <https://doi.org/10.1080/00224545.2021.1938811>). This includes the publication of a registered report that assessed the computational reproducibility of a leading psychology journal (*Behavior Research Methods*). Other research assessing the usefulness of data sharing has influenced editorial policies of major journals in the field including *Psychological Science*.

I instigated membership of and was previously a local network lead as part of the *UK Reproducibility Network (UKRN)* at Bath. In 2023, I authored a case study commissioned by *Jisc* and *UKRN* that illustrated the wide variety of contributions to different aspects of open research when using digital data. Prior to this, I co-authored resources now provided as part of the UK's *Research and Innovation: UKRI Good Research Resource Hub* (<https://tinyurl.com/3xn8j2ky> under External Resources). Evidence from *UKRN*, which cited some of my research, has also influenced a recent House of Commons Committee report that provided recommendations to the government about Reproducibility and Research Integrity.

Beyond extensive reviewing for publishers and funders, I am a member of the Editorial Board at *Technology, Mind, and Behavior*. This is published by the American Psychological Association. The journal is part of *APA Open*: a new open access platform that empowers authors to dynamically present their research findings. I became a member of the *UKRI Interdisciplinary Assessment College (IAC)* in 2023, which is taking a new approach to funding interdisciplinary research and was invited to join the Chairs Pool in 2024.

Module 4. Contributions to broader research or innovation-users and audiences and towards wider societal benefit

Delivering positive social, economic, and industrial impacts, I have provided advice and research reports to private companies (e.g., *QinetiQ*, *Unilever*), charities (e.g., *Wavelength*), research infrastructure organisations (e.g., *DARE UK*, *Jisc*, *OSF*, *SDR UK*, *UKRN*), publishers (e.g., *PLOS*, *Springer*), funders (e.g., *UKRI*) as well as to the UK, Welsh, and Scottish governments. Some of these reports have explicated the relevance of current psychological theory and methodology for policy and practice. Others sit alongside specific strategic requirements. This includes contributions to various government reports and policy frameworks that consider the impacts of mass adopted technologies. Examples include UK Government investigations into Impact of social media and screen-use on young people's health (*Fourteenth Report of Session*) and the *Video Games Research Framework*, which rely on my research. Several patents also cite my work.

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Other award-winning research pioneered data-linkage methodologies using health service data, which explored the importance of patient behaviour across the lifespan, morbidity, and mortality outcomes. This has informed NICE guidelines and directly impacted NHS systems by identifying gaps in care and developing interventions to encourage engagement. Epidemiological work included a seminal paper which was the first to quantify ('missingness') of patients from digital data appears in the *Chief Medical Officer for Scotland Annual Report 2023-2024*. This has directly resulted in additional funding being provided to general practices serving Scotland's most socio-economically deprived populations to improve patient attendance. An independent qualitative evaluation is impressive and encouraging. These activities underpin impact case studies developed during UK REF processes.

At the same time, various networks allow knowledge-exchange activities to occur at any point in the research cycle. Collaborations regularly involve civil servants, government analysts, NHS staff, patients, artists, technology entrepreneurs and members of the public. Several of these predicated numerous public engagement and knowledge exchange activities. In 2020 and 2023, I received the *Dean's Award for Research Communication and Translation* from *The University of Bath*. Working with colleagues, I have curated/presented podcasts, delivered public lectures, and developed interactive exhibits for local, national, and international events including the British Science Festival. Finally, my own research has reached the eyes and ears of billions across the world. In the UK alone, my work is regularly featured in mainstream media outlets including ITV (e.g., *Tonight*), BBC One (e.g., *The Victoria Derbyshire Show*), BBC Radio 4 (e.g., *Inside Science*), and the BBC World Service (e.g., *Click*). Results also frequently re-appear in newspapers (e.g., *The Daily Mail*) and general science publications (e.g., *New Scientist*).