

Reflecting on Five years of the European Health Psychology Society's Open Science Special Interest Group

Emma Norris

*Brunel University London,
UK*

Tuğçe Varol

*Maastricht University,
Netherlands*

Rory Coyne

*University of Galway,
Ireland*

Aoife O'Mahony

*University College Cork,
Ireland*

James A. Green

*University of Limerick,
Ireland*

Jo Brooks

*University of Manchester,
UK*

Elaine Toomey

*University of Galway,
Ireland*

Since the establishment of the European Health Psychology Society (EHPS) Open Science Special Interest Group (SIG) in 2019 (Norris & Toomey, 2020), we have been working hard to improve the awareness and uptake of Open Science practices within the European Health Psychology community. When we started, our aims were to 1) bring together health psychologists interested in Open Science behaviours, 2) share best practices/innovations in Open Science to health psychologists, 3) provide guidance and/or training on Open Science, 4) promote the role of health psychology for improving Open Science across disciplines, 5) liaise with organisations which promote Open Science and 6) encourage and reward replication and reproducibility within health psychology. Having now been established for five years and arriving back from successful SIG activities at the EHPS 2024 Conference in Cascais, Portugal, we wanted to reflect on our progress in recent years and share some of these developments.

Building the community...who are we?

As of September 2024, the EHPS Open Science SIG has fourteen committee members across five countries who meet up to four times a year, with 656 Twitter/X followers and 66 mailing list members. We aim to 'practice what we preach' as much as possible; as such we have created a publicly-accessible Open Science Framework (OSF) page which houses the minutes from all of our committee meetings, as well as previous SIG conference and Annual Meeting presentations and materials from training events. We have recently established a SIG webpage, which showcases a selection of Open Science resources useful in the context of health psychology. We plan to continue to maintain, expand and update this going forward. We disseminate a regular newsletter sent to mailing list members which shares training, updates and research related to Open Science in health psychology. To date we have sent 13 newsletters which can be accessed here. Not a member of our mailing list? Please sign up here.

Building the supports...our key activities

Training events and Webinars

We are passionate about providing training tailored to health psychologists on the principles and practices of Open Science. Since our launch in 2019, we have run five webinars, in addition to hosting annual sessions at the EHPS conference.

Recordings of our webinars are all available via our dedicated [YouTube channel](#) and webinar materials (e.g. slides and accompanying resources) are on our [OSF page](#). Webinars have addressed a wide range of topics, across Open Data, Open Educational Resources, Copyright considerations and more: see Table 1. We are always keen to hear what webinar topics are needed from our community, so please get in touch if you have any ideas.

Student Open Science Award

Since 2021, we have run an Annual Award to celebrate and incentivise Open Science practices in early career/student members of the EHPS. Previous winners include Dr Charlotte Pennington (2021: Aston University, UK), Rory Coyne (2022: University of Galway, Ireland) and Dr Andriana

Theodoropoulou (2023: University of Essex, UK). Over the years the applications have gone from strength to strength, with a record number of submissions in 2024. At EHPS 2024, we were delighted to announce our 2024 winner: Christopher M. Jones (PhD student at Heidelberg University, Germany)! Christopher's PhD research focuses on why users believe and share health-related misinformation on social media (Link to Christopher's [OSF page](#)). We were hugely impressed by Christopher's creation of a new open-source browser extension which can be used by others to conduct experimental studies on social media, alongside his routine preregistration of studies and open data and material practices. We were delighted that Christopher's Award was presented at the 2024 EHPS Conference Opening Ceremony and were also happy to have Christopher's expertise

Table 1. Webinars run by the EHPS Open Science SIG to-date

Webinar title	Speakers / Associated projects	YouTube link
Open Data in Health Psychology Research	Dr James Green (University of Limerick, Ireland) Dr Gjalt-Jorn Peters (Open University of the Netherlands)	Here
Open Educational Resources about Open Science	Dr Karen Matvienko-Sikar (University College Cork, Ireland): PaPOR Trail: Principles and Practices of Open Research (Egan et al., 2020) Dr Aswathi Surendran (University of Galway, Ireland): AGAPE: An Introductory Course to Open Science for Early Career Researchers Dr Flavio Azevedo (Utrecht University, the Netherlands): FORRT: Framework for Open and Reproducible Research Training (Azevedo et al., 2022).	Here
Copyright and Copywroing	Dr Gjalt-Jorn Peters (Open University of the Netherlands)	Here
Qualitative Data Sharing: the QualSHARE project	Megan McCarthy (University of Galway, Ireland) Dr Catherine Houghton (University of Galway, Ireland)	Here
Meaningful change definitions: a power-up for sample size calculation	Dr Gjalt-Jorn Peters (Open University of the Netherlands) Dr Stefan Gruijters (Open University of the Netherlands)	Here

as part of our Hackathon team (more on this below). We are also highly encouraged by the growing number of applications each year, and the exceptional quality demonstrated in all applications. The future of Open Science is bright!

Research in open science and health psychology

We are keen to apply our research skills within behavioural science to facilitate behaviour change towards Open Science: across countries and career stages. This includes conducting meta-science projects: studying science itself with the aim to describe, explain, evaluate and improve scientific practices (Parsons et al. 2022). Our first piece of meta-research in 2022 was a Delphi study to understand what the research priorities should be for Open Science in Health Psychology going forward (Norris et al., 2022). From this, we identified that the top five ranked research question priorities were: 1. 'To what extent are Open Science behaviours currently practised in Health Psychology?', 2. 'How can we maximise the usefulness of Open Data and Open Code resources?', 3. 'How can Open Data be increased within Health Psychology?', 4. 'What interventions are effective for increasing the adoption of Open Science in Health Psychology?' and 5. 'How can we increase free Open Access publishing in Health Psychology?'. We thank the EHPS community for their support and participation in this work: receiving 90 responses across the three phases of the Delphi study. As you will read in the remainder of this article, our research work and ongoing plans are very much driven to address these priorities as best as possible. However, these questions are also very much open for the community to address, as we work towards the same aim of maximising Open Science uptake within health psychology.

A key research priority identified in this work was the need to assess where health psychology currently stands in terms of Open Science uptake

by researchers. Accordingly, we are currently establishing a study to assess Open Science awareness and behaviours in the health psychology community. This Registered Report, led by Rory Coyne (University of Galway, Ireland), is currently under Stage 1 peer review. We look forward to inviting health psychology researchers across EHPS and globally to participate in this shortly. Sign up to our mailing list to be alerted when the study launches.

Promoting Open Science in health psychology and behavioural medicine journals

SIG Co-Chairs Dr Elaine Toomey and Dr Emma Norris were invited to join the editorial board of the EHPS journal *Health Psychology and Behavioral Medicine* to support the introduction of Registered Reports and Data Notes as new paper formats. You can find more information on what differentiates Registered Reports and Data Notes from other paper formats in our associated paper: *Demystifying Open Science in health psychology and behavioral medicine: a practical guide to Registered Reports and Data Notes* (Norris et al., 2024). Working with the journal's Co-Editors Professor Efrat Neter (Ruppin Academic Centre, Israel) and Professor Karen Morgan (Royal College of Surgeons, Malaysia), we have also launched an ongoing Article Collection hosting Registered Reports and Data Notes within the journal. Please contact Elaine or Emma with any queries or submission ideas.

Spurred on by this move from a key EHPS journal towards more Open Science practices, we ran our first-ever Hackathon at EHPS 2024. This event aimed to evaluate the extent to which health psychology and behavioural medicine journals currently implement Open Science principles within their policies. Led by Dr Elaine Toomey, our day-long Hackathon took place as a pre-conference

event: with a team of nine attempting to code the practices of nineteen health psychology and behavioural medicine journals. Journals were assessed according to the Transparency and Openness Promotion (TOP) guidelines (Center for Open Science, 2024; Nosek et al., 2016) which provides recommendations for journal policies regarding standards of Data Citation, Data, Materials and Code Transparency, Study Design and Analysis, Preregistration, Replication and Open Science badges. Previous evaluations have been conducted in related disciplines such as pain research (Cashin et al., 2021) and sport science (Hansford et al., 2022). The preregistration for this study is available here. We are currently analysing the results of this study and look forward to reporting these soon and to working with EHPS journals to explore our findings and how to feasibly incorporate Open Science practices going forwards. Our Co-Chair Dr Elaine Toomey has also joined the TOP Advisory Board and has contributed towards the upcoming update of TOP guidelines (Grant et al., 2023), which will be a beneficial collaboration for our SIG going forwards.

Future activities...what's next?

We are exceptionally proud of what we have achieved in the last five years. In 2021, our work was recognised by the Young European Research Universities Network (YERUN) who awarded us their Open Science Initiative award worth €5000 which we are using to further support our training and research activities (YERUN, 2022).

We have lots of training, advocacy and research plans in the pipeline to extend our work even further in the next five years. We have big ambitions for meta-science research into Open Science inspired by our training in behavioural science related fields. In Spring 2024, we submitted an application to the Einstein Foundation Award for Promoting Quality in Research – Early Career Research Award (led by Dr Elaine Toomey). This

€100,000 would fund a large study assessing the extent that behavioural science is implemented within Open Science interventions globally. We await the outcome of this in Winter 2024. Meta-science research funding is still relatively scarce, so we are keen to give these opportunities a go when they arise!

We are also particularly keen to grow our membership and to involve our members more. With this in mind we plan to hold open online meetings going forward, in addition to our committee meetings, for all to attend and help shape the future of our SIG. We also want to hear from you - please get in touch if you have ideas for how we can involve you more! In particular, helping us think about ways we could do more collaborative research together would be very welcome. We are keen to extend our advocacy work to further support journals in health psychology areas. For example, health psychology does not currently have a journal represented within Peer Community In (PCI) Registered Reports (PCI Registered Reports, 2024): a non-profit, non-commercial platform that receives, reviews and recommends Registered Reports. Following the completion of peer review, authors of Registered Reports (RRs) that are positively recommended have the option to publish their articles in the growing list of PCI RR-friendly journals that have committed to accepting PCI RR recommendations without further peer review. Journals in other related fields such as addiction (Pennington & Heim, 2022) have signed up to this innovative scheme to facilitate Registered Reports, however the representation of health psychology is currently absent. We intend to continue to work closely with EHPS journal editors to support open science practices within their policies. We also intend to increase our collaborations with other related organisations.

Thank you to the EHPS for being such supporters of the Open Science SIG in our first five years. As always, we are keen that the training and

support area of our work is guided by the EHPS community. If you have areas of Open Science that you would like us to cover in webinars, writing or any other methods, please get in touch. We are always OPEN to suggestions!

By Emma Norris, Tugce Varol, Rory Coyne, Aoife O'Mahony, James A. Green, Jo Brooks & Elaine Toomey

On behalf of the SIG Committee: Alex Dima, James Reynolds, Keegan Knittle, Krishna Talsania, Matti Heino, Sean P. Grant & Sian Calvert. Also thanks to our Advisory Group: Professor Daryl O'Connor, Dr Gjalt-Jorn Peters, Professor Martin Hagger, Professor Nelli Hankonen & Professor Susan Michie.

Contact us: @EHPS_OS_SIG on Twitter / X or open-science-sig@ehps.net.

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Emma Norris

Department of Health Sciences,
Brunel University London, UK
emma.norris@brunel.ac.uk



Tuğçe Varol

Department of Health Promotion,
Maastricht University, Netherlands
t.varol@maastrichtuniversity.nl



Rory Coyne

School of Psychology, University of
Galway, Ireland
r.coyne7@universityofgalway.ie



Aoife O'Mahony

School of Public Health, University
College Cork, Ireland
aoifeomahony@ucc.ie



James Green

School of Allied Health, University of
Limerick, Ireland
james.green@ul.ie



Jo Brooks

School of Health Sciences, University
of Manchester, UK

joanna.brooks@manchester.ac.uk



Elaine Toomey

School of Medicine, Nursing &
Midwifery, University of Galway,
Ireland

elaine.toomey@universityofgalway.ie