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**Open Science Framework:** [osf.io/mpnxu](https://osf.io/mpnxu)

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## Joseph Barnby

### SCIENTIFIC & CLINICAL POSITIONS

2021 – present	<b>Post-Doctoral Fellow (Cognitive Neuroscience)</b> <i>Understanding the role of white matter tracts in social interaction &amp; cognition</i>	Queensland Brain Institute Brisbane, AU
2017 – 2021	<b>Medical Research Council Doctoral Training Fellow</b> Thesis: <i>The Neurocognitive mechanisms of paranoia</i> Supervisors: Prof Mitul Mehta, Dr Vaughan Bell, Dr Quinton Deeley	Kings College London London, UK
2020 – 2021	<b>Visiting Doctoral Fellow</b>	University of Western Australia Perth, Australia
2016 - 2021	<b>Psychologist &amp; Research Scientist</b> <i>Clinical assessment, support, science communication, CBT</i>	Thrive Therapeutic Software London, UK
2016 - 2017	<b>Research Assistant</b> , Division of Psychiatry Social Cognition & Psychosis Group of Dr Vaughan Bell	University College London London, UK
2016	<b>Research Assistant</b> , Division of Psychiatry HEE CRHTT 2016 National Survey of Mental Health Services	University College London London, UK
2016	<b>Assistant Psychologist</b> , Royal London Hospital, Integrated into the Emergency Psychological Medicine Team	The Royal London Hospital London, UK
2014 - 2015	<b>Research Assistant</b> , MAPrc Neural correlates of mindfulness practice	Monash University Melbourne, AU
2013 - 2014	<b>Associate Research Fellow</b> , Dynamic Memory and Cognition Lab of Prof Eddy Davelaar	Birkbeck London, UK
2012	<b>Health Care Assistant</b> Internal, General, Surgical Medicine	Kamla Nagar Hospital Jodhpur, India

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### EDUCATION

2017 – 2021	<b>PhD Cognitive Neuroscience &amp; Psychopharmacology</b> Thesis: <i>The Neurocognitive mechanisms of paranoia</i> Supervisors: Prof Mitul Mehta, Dr Vaughan Bell, Dr Quinton Deeley	Kings College London London, UK
2015 - 2016	<b>MSc Clinical Mental Health Science (Distinction)</b> <i>Clinical assessment, theory, and aetiology</i>	University College London London, UK
2008 - 2011	<b>BSc (Hons) Psychology with Neuroscience (2:1)</b> <i>Cognitive psychology, molecular, cellular and systems neuroscience</i>	University of Leicester Leicester, UK

## TEACHING & SUPERVISION EXPERIENCE

2017 – present	<b>Graduate Teaching Position</b> , MSc Neuroscience	King's College London London, UK
2018 – 2019	<b>Leyla Bolton</b> , MSc Thesis	King's College London London, UK
2017 – 2018	<b>Small Group Tutor</b> , MSc Clinical Mental Health	King's College London London, UK

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## TECHNICAL SKILLS

<b>R</b>	Expert
<b>Stan</b>	Competent
<b>Julia</b>	Competent
<b>Markdown</b>	Competent
<b>Github/Git</b>	Competent
<b>Python</b>	Competent
<b>Java</b>	Beginner
<b>Adobe Suite &amp; GIMP</b>	Competent
<b>Crowdsourcing</b> (e.g. Prolific.ac, Mturk)	Expert
<b>Game theory experimental design</b>	Expert
<b>Online experimental deployment</b> (e.g. Psychopy, Gorilla.sc)	Expert
<b>Lab experimental deployment</b> (e.g. psychopharmacology)	Expert

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## PUBLIC ENGAGEMENT PROJECTS

2016 – present	<b>Senscapes</b> ( <a href="http://www.senscapes.com">www.senscapes.com</a> ) Turning brain data from altered states into immersive experiences.	London, UK
2018 – 2018	<b>Experimental Espresso's</b> Conducting a large public, double-blind control study on caffeine use and cognition.	Science Gallery London, UK
2018 – 2018	<b>King's Experience Award – A Beautiful Mind: Art, Science, and Mental Health</b>	London, UK

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## AWARDS AND HONOURS

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2019	BAP Junior Science Communication Award
2019	KCL Neuroscience Communication Award
2018	MRC Science Communication Award
2018	King's Experience Award – A Beautiful Mind: Art, Science, and Mental Health
2017	Team lead of winning team 'Senscapes', winner of 'Best Hack' at HackTheBrain, Dublin 2017 (Horizon 2020)
2017	Funding awarded to attend Mind & Life ESRI Conference
2016	Voted No.1 for student innovation for "Re(Mind)" app, UCL, UK

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## AWARDED GRANTS

2018	Wellcome Trust/ King's College London – Public Engagement Grant – to develop an immersive installation on meditation, £750
2018	Science Gallery London & King's College London – Public engagement grant to develop an immersive and public event, £2000
2017	Horizon 2020: HackTheBrain funding for our team 'Senscapes' to develop our project
2017	MRC Doctoral Training Partnership at King's College London (£84,000 Inc Salary)
2016	UCL Changemakers – app development, £500

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## INVITED TALKS AND PRESENTATIONS

2018	Personalisation Across Disciplines (Durham University; Panellist) Spirits, shadows, and a sense of presence.
2018	EVE "Talking about mental health"
2017	Mind & Life ESRI 2017 Conference Spirits, shadows, and a sense of presence.
2017	BPS Annual Conference Spirits, shadows, and a sense of presence.
2016	Neuropsychopharmacology lab, Imperial College, UK Spirits, shadows, and a sense of presence: validation of the Sensed Presence Questionnaire (SenPQ).
2016	Barclays (with InFocus Training) "Wellbeing and the workplace."

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## PEER REVIEWED PUBLICATIONS AND PREPRINTS

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- Waters, F., **Barnby, J.M.**, Blom, J.D. (2021) Hallucination, imagery, dreaming: Towards an integrated model of stimulus-independent perception based on Parish's classic continuum hypothesis. *Royal Society Philosophical Transactions B*. DOI:10.1098/rstb.2019.0701
- Barnby, J.M.**, Deeley, Q., Bell, V., Mehta., M.A., (2020) Dopamine manipulations modulate paranoid social inferences. *Translational Psychiatry*, 10(214). <https://doi.org/10.1038/s41398-020-00912-4>
- Barnby, J.M.**, Bell, V., Mehta., M.A., Moutoussis, M. (2020) Reduction in social learning and increased policy uncertainty about harmful intent is associated with pre-existing paranoid beliefs: evidence from modelling a modified serial dictator game. *PLOS Computational Biology*. DOI: 10.31234/osf.io/jvx5y
- Hampshire, A., Trender, W., Chamberlain, S., Jolly, A., Grant, J. E., Patrick, F., ... **Barnby, J.**, Hellyer, P., & Mehta, M. A. (2020). Cognitive deficits in people who have recovered from COVID-19 relative to controls: An N= 84,285 online study. *medRxiv*. DOI: <https://doi.org/10.1101/2020.10.20.20215863>
- Hertz, U., Bell, V., **Barnby, J.M.**, McQuillin, A., Bahrami, B. (2020) The communication of metacognition for social strategy in psychosis: an exploratory study. *Schizophrenia Bulletin Open Science*, 1(1). DOI: 10.1093/schizbullopen/sgaa058
- Barnby, J.M.**, Bell, V., Deeley, Q., Robinson, O., Raihani, N., Mehta, M. (2020) Paranoia, sensitisation and social inference: findings from two large-scale, multi-round behavioural experiments. *Royal Society Open Science*, 7(3).
- Barnby, J.M.**, Bell, V., Sheridan-Rains, L., Mehta, M., Deeley, Q. (2019) Beliefs are multidimensional and vary in stability over time – psychometric properties of the Beliefs and Values Inventory (BVI). *PeerJ*, 7: e6819
- Ribanszki, R., **Barnby, J.M.**, Osmani, F., Almasi, S., Tsakanikos, E., Fonseca, JA. (*In Submission*) Preferences for user experiences in digital smartphone mental health applications: implications for design in adolescents. *JMIR mHealth & uHealth*.
- Davelaar, E., **Barnby J.M.**, Almasi, S., Eatough, V. (2018) Differential subjective experiences in learners and non-learners in EEG neurofeedback: piloting a mixed-method approach. *Frontiers in Human Neuroscience*.
- Lloyd-Evans, B., Lamb, D., **Barnby, J.M.**, Eskinazi, M., Turner, A., Johnson, S. (2018) A National Survey of Crisis Resolution Teams in England, *Psychiatric Bulletin*. 1-6
- Barnby, J.M.** & Mehta, M. (2018) Psilocybin and Mental Health – Don't Lose Control, *Frontiers in Psychiatry*, 9, 293.
- Barnby, J.M.** & Fonesca, A. (2017) Digital blind-spots: the role of symptom severity and user experience in digital intervention adherence, *JMIR MHealth UHealth*, Letters <https://t.co/mU8hr2fWnE>
- Barnby, J.M.** & Bell, V (2017) The Sensed Presence Questionnaire (SenPQ): Initial Psychometric Validation of a Measure of the "Sensed Presence" Experience. *PeerJ*, 5: e3149 <https://doi.org/10.7717/peerj.3149>

**Barnby, JM**, Bailey, NW, Chambers, R., & Fitzgerald, P.B., (2015). How similar are the changes in neural activity resulting from mindfulness practice in contrast to spiritual practice? *Consciousness and Cognition*, 36, 219-232.

#### **PUBLISHED ARTICLES FOR A GENERAL AUDIENCE**

2020.

2017-2019 Blog written for Thrive on topics of interest in mental health ([www.thrive.uk.com/blogs](http://www.thrive.uk.com/blogs))  
2018 Beyond My Control: Demonstrating Epilepsy as More Than a Diagnosis. (2018) *The Psychologist*

#### **CONFERENCE SUBMISSIONS**

**Barnby, JM** & Bell, V (2017) Spirits, shadows, and a sense of presence. *Poster Presentation: Mind & Life – European Summer Research Institute 2017, Chiemsee, Germany.*

**Barnby, JM** & Bell, V (2017) Spirits, shadows, and a sense of presence: validation of the Sensed Presence Questionnaire (SenPQ). *Oral Presentation: BPS Annual Conference 2017, Brighton, UK*

**Barnby, JM** (2016) To what extent has smoking cannabis been established as an aetiological factor in psychosis? *Poster Presentation: UCL Psychosis Research Assessment, London, UK.*

Davelaar EJ, **Barnby JM**, Almasi S and Eatough V (2016). Neurophenomenology and neurofeedback: a pilot study. *Front. Hum. Neurosci. Conference Abstract: SAN2016 Meeting.*

Davelaar. EJ, Eatough V, Almasi S, **Barnby JM**, Hickson E, Kevat N and Ramtale C (2016). Neurofeedback training and cognitive performance: a pilot study using an integrated cognitive and phenomenological approach. *Front. Hum. Neurosci. Conference Abstract: SAN2016 Meeting.*

#### **PROFESSIONAL MEMBERSHIPS**

As of 2016 Member of the British Psychological Society  
No. 392013

As of 2017 Member of the British Neuroscience Association  
No. 29896090

As of 2018 Member of the British Association for Psychopharmacology

#### **LIFE SCIENCE CONSULTANCY**

2021	iYarn	Scientific Strategy Advice
2020	<b>Refinitiv</b>	Mental health and the workplace
2019	<b>Record Union</b>	Mental health and music
2019 - present	<b>Thrive</b>	Mental health in the community
2018	<b>Metacell</b>	Brainwaves and music
2015 – 2018	<b>InFocus Training</b>	Mental health and the workplace