

# Brian Butterworth

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1533620/publications.pdf>

Version: 2024-02-01

69  
papers

6,716  
citations

126907

33  
h-index

106344

65  
g-index

72  
all docs

72  
docs citations

72  
times ranked

3561  
citing authors

| #  | ARTICLE                                                                                                                                                                           | IF  | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1  | Numerical activities of daily living: a short version. <i>Neurological Sciences</i> , 2022, 43, 967-978.                                                                          | 1.9 | 5         |
| 2  | Characterizing ontogeny of quantity discrimination in zebrafish. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2022, 289, 20212544.                            | 2.6 | 9         |
| 3  | Arithmetic learning modifies the functional connectivity of the fronto-parietal network. <i>Cortex</i> , 2019, 111, 51-62.                                                        | 2.4 | 11        |
| 4  | Low Numeracy: From Brain to Education. <i>New ICMI Study Series</i> , 2018, , 477-488.                                                                                            | 1.0 | 1         |
| 5  | Introduction: The origins of numerical abilities. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2018, 373, 20160507.                            | 4.0 | 25        |
| 6  | The implications for education of an innate numerosity-processing mechanism. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2018, 373, 20170118. | 4.0 | 14        |
| 7  | Special Needs in Research and Instruction in Whole Number Arithmetic. <i>New ICMI Study Series</i> , 2018, , 375-397.                                                             | 1.0 | 3         |
| 8  | The influence of memory updating and number sense on junior high school math attainment. <i>Learning and Individual Differences</i> , 2017, 54, 30-40.                            | 2.7 | 5         |
| 9  | Numerical Activities and Information Learned at Home Link to the Exact Numeracy Skills in 5-6 Years-Old Children. <i>Frontiers in Psychology</i> , 2016, 7, 94.                   | 2.1 | 43        |
| 10 | The principles and practices of educational neuroscience: Comment on Bowers (2016).. <i>Psychological Review</i> , 2016, 123, 620-627.                                            | 3.8 | 110       |
| 11 | Zero in the brain: A voxel-based lesion-symptom mapping study in right hemisphere damaged patients. <i>Cortex</i> , 2016, 77, 38-53.                                              | 2.4 | 18        |
| 12 | A Visit with Oscar and Clara Marin. <i>Cognitive and Behavioral Neurology</i> , 2015, 28, 138-139.                                                                                | 0.9 | 0         |
| 13 | Longitudinal changes in young children's 0-100 to 0-1000 number-line error signatures. <i>Frontiers in Psychology</i> , 2015, 6, 647.                                             | 2.1 | 16        |
| 14 | Ratio dependence in small number discrimination is affected by the experimental procedure. <i>Frontiers in Psychology</i> , 2015, 6, 1649.                                        | 2.1 | 12        |
| 15 | Anatomical substrates and neurocognitive predictors of daily numerical abilities in mild cognitive impairment. <i>Cortex</i> , 2015, 71, 58-67.                                   | 2.4 | 28        |
| 16 | A new clinical tool for assessing numerical abilities in neurological diseases: numerical activities of daily living. <i>Frontiers in Aging Neuroscience</i> , 2014, 6, 112.      | 3.4 | 34        |
| 17 | Commonalities for Numerical and Continuous Quantity Skills at Temporo-parietal Junction. <i>Journal of Cognitive Neuroscience</i> , 2014, 26, 986-999.                            | 2.3 | 26        |
| 18 | Impaired Numerical Ability Affects Supra-Second Time Estimation. <i>Timing and Time Perception</i> , 2014, 2, 169-187.                                                            | 0.6 | 11        |

| #  | ARTICLE                                                                                                                                                                               | IF   | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 19 | Collective enhancement of numerical acuity by meritocratic leadership in fish. <i>Scientific Reports</i> , 2014, 4, 4560.                                                             | 3.3  | 21        |
| 20 | Sensitivity to numerosity is not a unique visuospatial psychophysical predictor of mathematical ability. <i>Vision Research</i> , 2013, 89, 1-9.                                      | 1.4  | 41        |
| 21 | Developmental trajectories of grey and white matter in dyscalculia. <i>Trends in Neuroscience and Education</i> , 2013, 2, 56-64.                                                     | 3.1  | 39        |
| 22 | Understanding Neurocognitive Developmental Disorders Can Improve Education for All. <i>Science</i> , 2013, 340, 300-305.                                                              | 12.6 | 136       |
| 23 | Collective enumeration.. <i>Journal of Experimental Psychology: Human Perception and Performance</i> , 2013, 39, 338-347.                                                             | 0.9  | 13        |
| 24 | Stability and change in markers of core numerical competencies.. <i>Journal of Experimental Psychology: General</i> , 2012, 141, 649-666.                                             | 2.1  | 94        |
| 25 | Basic numerical capacities and prevalence of developmental dyscalculia: The Havana Survey.. <i>Developmental Psychology</i> , 2012, 48, 123-135.                                      | 1.6  | 131       |
| 26 | Numeracy skills in patients with degenerative disorders and focal brain lesions: A neuropsychological investigation.. <i>Neuropsychology</i> , 2012, 26, 1-19.                        | 1.3  | 43        |
| 27 | Commentary on "How Can Syntax Support Number Word Acquisition?" by Kristen Syrett, Julien Musolino, and Rochel Gelman. <i>Language Learning and Development</i> , 2012, 8, 186-189.   | 1.4  | 1         |
| 28 | The role of numerosity in processing nonsymbolic proportions. <i>Quarterly Journal of Experimental Psychology</i> , 2012, 65, 2435-2446.                                              | 1.1  | 19        |
| 29 | Evidence for Two Numerical Systems That Are Similar in Humans and Guppies. <i>PLoS ONE</i> , 2012, 7, e31923.                                                                         | 2.5  | 157       |
| 30 | Dyscalculia: From Brain to Education. <i>Science</i> , 2011, 332, 1049-1053.                                                                                                          | 12.6 | 549       |
| 31 | Contribution of frontal cortex to the spatial representation of number. <i>Cortex</i> , 2011, 47, 2-13.                                                                               | 2.4  | 48        |
| 32 | Updating Working Memory and arithmetical attainment in school. <i>Learning and Individual Differences</i> , 2011, 21, 655-661.                                                        | 2.7  | 34        |
| 33 | Specialization in the Human Brain: The Case of Numbers. <i>Frontiers in Human Neuroscience</i> , 2011, 5, 62.                                                                         | 2.0  | 51        |
| 34 | Foundational Numerical Capacities and the Origins of Dyscalculia. , 2011, , 249-265.                                                                                                  |      | 20        |
| 35 | Neural basis of mathematical cognition. <i>Current Biology</i> , 2011, 21, R618-R621.                                                                                                 | 3.9  | 54        |
| 36 | A Candidate for the Attentional Bottleneck: Set-size Specific Modulation of the Right TPJ during Attentive Enumeration. <i>Journal of Cognitive Neuroscience</i> , 2011, 23, 728-736. | 2.3  | 61        |

| #  | ARTICLE                                                                                                                                                                                                  | IF  | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Using Mental Representations of Space When Words Are Unavailable: Studies of Enumeration and Arithmetic in Indigenous Australia. <i>Journal of Cross-Cultural Psychology</i> , 2011, 42, 630-638.        | 1.6 | 36        |
| 38 | Low numeracy and dyscalculia: identification and intervention. <i>ZDM - International Journal on Mathematics Education</i> , 2010, 42, 527-539.                                                          | 2.2 | 80        |
| 39 | Foundational numerical capacities and the origins of dyscalculia. <i>Trends in Cognitive Sciences</i> , 2010, 14, 534-541.                                                                               | 7.8 | 294       |
| 40 | Core information processing deficits in developmental dyscalculia and low numeracy. <i>Developmental Science</i> , 2008, 11, 669-680.                                                                    | 2.4 | 203       |
| 41 | Numerosity Perception: How Many Speckles on the Hen?. <i>Current Biology</i> , 2008, 18, R388-R389.                                                                                                      | 3.9 | 13        |
| 42 | Verbal Counting and Spatial Strategies in Numerical Tasks: Evidence from Indigenous Australia. <i>Philosophical Psychology</i> , 2008, 21, 443-457.                                                      | 0.9 | 23        |
| 43 | Numerical thought with and without words: Evidence from indigenous Australian children. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 13179-13184. | 7.1 | 113       |
| 44 | Modulating Attentional Load Affects Numerosity Estimation: Evidence against a Pre-Attentive Subitizing Mechanism. <i>PLoS ONE</i> , 2008, 3, e3269.                                                      | 2.5 | 93        |
| 45 | Why frequencies are natural. <i>Behavioral and Brain Sciences</i> , 2007, 30, 259-260.                                                                                                                   | 0.7 | 7         |
| 46 | Mathematical Expertise. , 2006, , 553-568.                                                                                                                                                               |     | 20        |
| 47 | Exact and approximate judgements of visual and auditory numerosity: An fMRI study. <i>Brain Research</i> , 2006, 1106, 177-188.                                                                          | 2.2 | 248       |
| 48 | The Understanding of Quantifiers in Semantic Dementia: A Single-Case Study. <i>Neurocase</i> , 2006, 12, 136-145.                                                                                        | 0.6 | 28        |
| 49 | Discrete and analogue quantity processing in the parietal lobe: A functional MRI study. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 4693-4698.   | 7.1 | 268       |
| 50 | æ°ã  èf1/2ãŠ>ã@ç™ºé”ãf»æ™è,2ãf»é€2ãCE—. The Proceedings of the Annual Convention of the Japanese Psychological Association, 2006, S20-S20.                                                               | 0.0 | 0         |
| 51 | The development of arithmetical abilities. <i>Journal of Child Psychology and Psychiatry and Allied Disciplines</i> , 2005, 46, 3-18.                                                                    | 5.2 | 515       |
| 52 | Dexterity with numbers: rTMS over left angular gyrus disrupts finger gnosis and number processing. <i>Neuropsychologia</i> , 2005, 43, 1609-1624.                                                        | 1.6 | 221       |
| 53 | Dissociations in numerical abilities revealed by progressive cognitive decline in a patient with semantic dementia. <i>Cognitive Neuropsychology</i> , 2005, 22, 771-793.                                | 1.1 | 51        |
| 54 | Number and language: how are they related?. <i>Trends in Cognitive Sciences</i> , 2005, 9, 6-10.                                                                                                         | 7.8 | 330       |

| #  | ARTICLE                                                                                                                                                                                     | IF   | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 55 | Developmental dyscalculia and basic numerical capacities: a study of 8-9-year-old students. <i>Cognition</i> , 2004, 93, 99-125.                                                            | 2.2  | 750       |
| 56 | Why semantic dementia drives you to the dogs (but not to the horses): A theoretical account. <i>Cognitive Neuropsychology</i> , 2002, 19, 483-503.                                          | 1.1  | 28        |
| 57 | Are Subitizing and Counting Implemented as Separate or Functionally Overlapping Processes?. <i>NeuroImage</i> , 2002, 15, 435-446.                                                          | 4.2  | 293       |
| 58 | What makes a prodigy?. <i>Nature Neuroscience</i> , 2001, 4, 11-12.                                                                                                                         | 14.8 | 18        |
| 59 | Category specificity in reading and writing: the case of number words. <i>Nature Neuroscience</i> , 2001, 4, 784-786.                                                                       | 14.8 | 62        |
| 60 | Spared numerical abilities in a case of semantic dementia. <i>Neuropsychologia</i> , 2001, 39, 1224-1239.                                                                                   | 1.6  | 166       |
| 61 | Storage and retrieval of addition facts: The role of number comparison. <i>Quarterly Journal of Experimental Psychology Section A: Human Experimental Psychology</i> , 2001, 54, 1005-1029. | 2.3  | 80        |
| 62 | Storage and retrieval of addition facts: The role of number comparison. <i>Quarterly Journal of Experimental Psychology Section A: Human Experimental Psychology</i> , 2001, 54, 1005-1029. | 2.3  | 25        |
| 63 | Statistics: What Seems Natural?. <i>Science</i> , 2001, 292, 853c-855.                                                                                                                      | 12.6 | 10        |
| 64 | Two routes or one in reading aloud? A connectionist dual-process model.. <i>Journal of Experimental Psychology: Human Perception and Performance</i> , 1998, 24, 1131-1161.                 | 0.9  | 353       |
| 65 | Short term Memory Impairment and Arithmetical Ability. <i>Quarterly Journal of Experimental Psychology Section A: Human Experimental Psychology</i> , 1996, 49, 251-262.                    | 2.3  | 44        |
| 66 | Short term Memory Impairment and Arithmetical Ability. <i>Quarterly Journal of Experimental Psychology Section A: Human Experimental Psychology</i> , 1996, 49, 251-262.                    | 2.3  | 19        |
| 67 | Toward a multiroute model of number processing: Impaired number transcoding with preserved calculation skills.. <i>Journal of Experimental Psychology: General</i> , 1995, 124, 375-390.    | 2.1  | 193       |
| 68 | A SPECIFIC DEFICIT FOR NUMBERS IN A CASE OF DENSE ACALCULIA. <i>Brain</i> , 1991, 114, 2619-2637.                                                                                           | 7.6  | 242       |
| 69 | Mathematical Expertise. , 0, , 616-633.                                                                                                                                                     |      | 2         |