# **ACADEMIC HISTORY**

Name Dr Benjamin James Dyson

Date of Birth 3rd July 1976

**Citizenship** UK

Current Posts Associate Professor, University of Alberta, Canada

Adjunct Professor, Ryerson University, Canada Adjunct Professor, University of Sussex, UK

Previous Posts 2017 – 2018 Senior Lecturer in Psychology, University of Sussex, UK

2015 – 2017
2011 – 2014
2008 – 2011
2005 – 2008
Lecturer in Psychology, University of Sussex, UK
Associate Professor, Ryerson University, Canada
Assistant Professor, Ryerson University, Canada
Lecturer in Psychology, University of Sussex, UK

2003 - 2004 Postdoctoral Fellow, Rotman Research Institute, Canada

Qualifications 2005 – 2007 PGCert (Teaching & Learning), University of Sussex, UK

1999 – 2002 PhD (Psychology), University of York, UK1998 – 1999 MSc (Psychology) Distinction, Lancaster University, UK

1994 – 1997 BSc (Psychology), Leeds University, UK

## **PUBLICATIONS**

#### Peer Reviewed Articles

- Dahal, R., MacLellan, K., Vavrek, D. & **Dyson, B. J.** (in review). Behavioural profiles as a function of competitive outcome: Draws are simultaneously positive and negative, rather than neutral. *Science of Learning.*
- Sundvall, J. & **Dyson, B. J.** (in revision). Breaking the bonds of reinforcement: Effects of trial outcome, rule consistency and rule complexity against exploitable and unexploitable opponents. *PLoS One.*
- **Dyson, B. J.** & Asad, A. (2021). A micro-genesis account of longer-form reinforcement learning under structured and unstructured environments. *Science of Learning*. *6*: 19.
- Ward, J., Baykova, R., **Dyson, B. J.,** Chew, J., Schreiter, M-L, Sherman, M. (2021). A distinct electrophysiological signature for synaesthesia that is independent of individual differences in sensory sensitivity. *Cortex*, 139, 249-266.
- **Dyson, B. J.** (2021). Variability in competitive decision-making speed and quality against exploiting and exploitable opponents. *Scientific Reports*, *11*: 2859.
- Yang, L., Gallant, S. N., Wilkins, L. K., & **Dyson, B.** (2020). Cognitive and psychosocial outcomes of self-guided executive function training and low-intensity aerobic exercise in healthy older adults. *Frontiers in Aging Neuroscience*. 12: 576744.
- Srihaput, V., Craplewe, K. & **Dyson, B. J.** (2020). Switching competitors reduces win-stay but not lose-shift behaviour: The role of outcome-action association strength on reinforcement learning. *Games*, *11*: 25
- **Dyson, B. J.,** Musgrave, C. Rowe, C. & Sandhur, R. (2020). Behavioural and neural interactions between objective and subjective performance in a Matching Pennies game. *International Journal of Psychophysiology, 147*, 128-136.

- **Dyson, B. J.**, Steward, B. A., Meneghetti, T. & Forder, L. (2020). Behavioural and neural limits in competitive decision making: The roles of outcome, opponency and observation. *Biological Psychology*, *149*: 107778.
- **Dyson, B. J.** (2019). Behavioural isomorphism, cognitive economy and recursive thought in non-transitive game strategy. *Games, 10:* 32.
- **Dyson, B. J.** (2018). Turning play into research: The accidental study of competitive decision-making. *The Cognitive Psychology Bulletin*, 3, 10.
- **Dyson, B. J.,** Sundvall, J., Forder, L. & Douglas, S. (2018). Failure generates impulsivity only when outcomes cannot be controlled. *Journal of Experimental Psychology: Human Perception and Performance*, 44, 1483-1487.
- **Dyson, B. J.,** Forder, L. & Sundvall, J. (2018). Does the brain's reward response occur even without actual reward? A response to Fielding, Fu & Franz (2017). *Journal of Gambling Studies, 34*, 953-861.
- Williams, R. S., Kudus, F., **Dyson, B. J.** & Spaniol, J. (2018). Transient and sustained incentive effects on electrophysiological indices of cognitive control in younger and older adults. *Cognitive and Affective Behavioral Neuroscience*, 18, 313-330.
- Wilbiks, J. M. P. & **Dyson, B. J.** (2018). The contribution of perceptual factors and training on varying audio-visual integration capacity. *Journal of Experimental Psychology: Human Perception and Performance*, 44, 871-884.
- **Dyson, B. J.** (2017). Serial dependence in audition: Fast, free and featureless? *Trends in Cognitive Science*, *21*, 819-820.
- Gallant, S., **Dyson, B. J.** & Yang, L. (2017). Local context effects during emotional item directed forgetting in younger and older adults. *Memory, 25,* 1129-1138.
- Williams, R. S., Biel, A. L., **Dyson, B. J.** & Spaniol, J. (2017). Age differences in gain- and loss-motivated attention. *Brain and Cognition*, *111*, 171-181.
- Wilbiks, J. M. P. & **Dyson, B. J.** (2016). The dynamics and neural correlates of audio-visual integration capacity as determined by temporal unpredictability, proactive interference, and SOA. *PLoS One, 11*: e0168304.
- Forder, L. & **Dyson, B. J.** (2016). Behavioural and neural modulation of win-stay but not lose-shift strategies as a function of outcome value in Rock, Paper, Scissors. *Scientific Reports*, *6*: 33809.
- **Dyson, B. J.,** Wilbiks, J. M. P., Sandhu, R., Papanicolaou, G. & Lintag, J. (2016). Negative outcomes evoke cyclic irrational decisions in Rock, Paper, Scissors. *Scientific Reports*, *6*: 20479.
- Gallant, S. & **Dyson, B. J.** (2016). Neural modulation of item directed forgetting by valence and arousal: An event-related potential study. *Brain Research*, *1648*, 306-316.
- Sandhu, R & **Dyson, B. J.** (2016). Cross-modal perceptual load: the impact of modality and individual differences. *Experimental Brain Research*, 234, 1279-1291.
- Williams, R. S., Biel, A. L., Wegier, P., Lapp, L. K., Dyson, B. J. & Spaniol, J. (2016). Age differences in the Attention Network Test: Evidence from behavior and event-related potentials. *Brain and Cognition*, 102, 65-79.
- Chan, Z. & **Dyson**, **B. J.** (2015). The effects of association strength and cross-modal correspondence on the development of multimodal stimuli. *Attention, Perception and Psychophysics*, 77, 560-570.

- **Dyson, B. J.** (2015). Using published trial schematics to assess a brief (spatial) history of time: Questioning the graphical depiction of experimental procedures. *Timing and Time Perception*, 3, 317-322.
- **Dyson, B. J.** Vickers, K. Cowan, S., Tassone, A. & Turtle, J. (2015). Evaluating the use of Facebook to increase student engagement and understanding in lecture-based classes. *Higher Education*, *69*, 303-313.
- McLean, C., Want, S. & **Dyson, B. J.** (2015). The role of similarity, sound and awareness in the appreciation of visual artwork via motor simulation. *Cognition*, *137*, 174-181.
- Edell, M. & **Dyson**, **B. J.** (2014). The influence of personality factors on short-term mood repair with drawing production. *Canadian Art Therapy Association Journal*, *27*, *1-8*.
- Sandhu, R., & Dyson, B. J. (2013). Modality and task switching interactions using bi-modal and bivalent stimuli. *Brain and Cognition*, *82*, 90-99.
- Ugland, C., **Dyson, B. J.** & Field, A. (2013). An ERP study of the interaction between verbal information and conditioning pathways to fear. *Biological Psychology*, *92*, 69-81.
- Wilbiks, J. M. & Dyson, B. J. (2013b). The influence of previous environmental history on audiovisual binding occurs during visual-weighted but not auditory-weighted environments. *Multisensory Processes*, *26*, 561-568.
- Wilbiks, J. M. & Dyson, B. J. (2013a). Effects of temporal asynchrony and stimulus magnitude on competitive audio—visual binding. *Attention, Perception and Psychophysics*, 75, 1883-1891.
- Wilkinson, A. J., Yang, L. & **Dyson, B. J.** (2013). Modulating younger and older adults' performance in ignoring pictorial information during a word matching task. *Brain and Cognition*, 83, 351-359.
- **Dyson, B. J.** & Alain, C. (2012). Task, time and context as potential mediators of repetition priming effects. *Cognitive Neuroscience*, 3, 248-249.
- Sandhu, R. & **Dyson**, **B. J.** (2012). Reevaluating visual and auditory dominance through task switching costs and congruency analyses. *Acta Psychologica*, *140*, 111-118.
- **Dyson, B. J.** (2011). The advantage of ambiguity? Early neural responses to multi-stable percepts correlate with the degree of perceived instability. *Frontiers in Human Neuroscience*, *5*, 73, 1-12.
- **Dyson, B. J.** (2010a). Trial after trial: Processing consequences as a function of repetition and change in multi-dimensional sound. *Quarterly Journal of Experimental Psychology, 63,* 1770-1788.
- **Dyson, B. J.** (2010b). "She's a waterfall": Motion after-effect and perceptual design in video games involving virtual musicianship. *Perception*, *39*, 131-132.
- **Dyson, B. J.** & Cohen, R. (2010). Translations: Effects of viewpoint, feature, naming and context on identifying repeatedly copied drawings. *Perception*, *39*, 157-172.
- **Dyson, B. J.**, Dunn, A. & Alain, C. (2010). Ventral and dorsal streams as modality-independent phenomena. *Cognitive Neuroscience*, *1*, 64-65.
- **Dyson, B. J.** & Quinlan, P. T. (2010). Decomposing the Garner interference paradigm: Evidence for dissociations between macro- and micro-level performance. *Attention, Perception & Psychophysics*, 72, 1676-1691.
- Parkinson, J. M., **Dyson, B. J.** & Khurana, B. (2010). One line at a time: The neural correlates of temporal stroke order. *Experimental Brain Research*, 201, 575-586.
- Ross, B., Snyder, J., Aalto, M., McDonald, K. L., **Dyson, B. J.,** Schneider, B. & Alain, C. (2009). Effects of tonal duration on neuromagnetic brain activity revisited. *NeuroImage*, *47*, 678-687.

- **Dyson, B. J.** (2008). Assessing small-scale interventions in large-scale teaching: A general methodology and preliminary data. *Active Learning in Higher Education*, 9, 265-282.
- **Dyson, B. J.** & Alain, C. (2008a). Is a change as good as a rest? Effects of inter-trial contingency and task on concurrent sound segregation. *Brain Research*, 1189, 135-144.
- **Dyson, B. J.** & Alain, C. (2008b). It all sounds the same to me: Behavioural and ERP correlates of repeating and changing complex acoustic stimuli. *Cognitive, Affective and Behavioral Neuroscience*, 8, 329-343.
- **Dyson, B. J.** & Ishfaq, F. (2008). Auditory memory can be object-based. *Psychonomic Bulletin and Review, 15,* 409-412.
- **Dyson, B. J.,** Alain, C. & He. Y. (2005a). Effect of visual attentional load on auditory scene analysis. *Cognitive, Affective and Behavioral Neuroscience*, *5*, 319-338.
- **Dyson, B. J.,** Alain, C. & He, Y. (2005b). I've heard it all before: Perceptual invariance represented by early cortical auditory evoked responses. *Cognitive Brain Research*, 23, 457-460.
- **Dyson, B. J.** & Quinlan, P. T. (2004). Stimulus processing constraints in audition. *Journal of Experimental Psychology: Human Perception and Performance, 30,* 1117-1131.
- **Dyson, B. J.** & Alain, C. (2004). Representation of concurrent auditory objects in human auditory cortex. *Journal of the Acoustical Society of America*, *115*, 280-289.
- **Dyson, B. J.** & Quinlan, P. T. (2003). Feature and conjunction processing in the auditory modality. *Perception and Psychophysics*, *65*, 254-272.
- **Dyson, B. J.** & Quinlan, P. T. (2002). Within- and between-dimensional processing in the auditory modality. *Journal of Experimental Psychology: Human Perception and Performance*, 28, 1483-1498.

#### Books

Quinlan, P. T. & Dyson, B. J. (2008). Cognitive Psychology. Pearson: UK.

### **Book Contributions**

- **Dyson, B. J.** (2014). Practice, expertise, and aging. In S. K. Whitbourne (Ed.) *The Wiley-Blackwell Handbook of Adulthood and Aging*. Wiley: New York.
- Alain, C., Arnott, S. R. & **Dyson, B. J.** (2014). Varieties of auditory attention. In K. Ochsner and S. Kosslyn (Eds.) *The Oxford Handbook of Cognitive Neuroscience*. Oxford University Press.
- **Dyson, B. J.** (2010c). Auditory organisation. In C. Plack (Ed.) *The Oxford Handbook of Auditory Science: Hearing*. Oxford University Press: Oxford.
- **Dyson, B. J.** (2009). Aesthetic appreciation of pictures. In B. Goldstein (Ed.) *Encyclopedia of Perception*. Sage: UK.
- Alain, C., Dyson, B. J. & Snyder, J. (2006). Aging and the perceptual organisation of sounds: a change of scene? In P. M. Conn (Ed.) Handbook of Models for Human Aging (pages 759-769). Elsevier: CA.

### Other Publications

- **Dyson, B. J.** (2018). Turning play into research: The accidental study of competitive decision-making. *The Cognitive Psychology Bulletin*, 3, 10.
- **Dyson, B. J.** (2013). Verbal exchange. *The Wire, 349,* 5.

### **RESEARCH FUNDING**

- **Dyson, B. J. (PI)** (2019 2024). Behavioural and neural dynamics during competitive decision-making. *NSERC Discovery Grant* CAN \$178,150.
- **Dyson, B. J. (PI)** (2019 2020). What you see and what you get: Incomplete and cumulative information as determinants of competitive decision-making quality. *Alberta Gambling Research Institute* CAN \$9,996.
- **Dyson, B. J. (PI)** (2016). Open Access Publication Costs. *School Research Fund, University of Sussex* GBP £990.
- Dyson, B. J. (PI) & Forster, S. (2015-2016). Wandering in the mind's eye (or ear): The role of mindwandering modality on neural responses to sights and sounds. *The British Academy* – GBP £10,000.
- **Dyson, B. J. (PI)** (2015-2016). Brain states underlying emotional decision making in adversarial game environments. *Research Development Fund, University of Sussex* –GBP £20,332.
- **Dyson, B. J. (PI)** (2009-2014). Cognition throughout the lifespan: Examining the aging and expert brain. *Ontario Ministry of Research and Innovation Early Researcher Award* CAD \$140,000 (approx. GBP £75,653).
- Turtle, J., Vickers, K., **Dyson, B. J. (CI)** & Ma, L. (2011). Using social media to increase student engagement in introductory psychology. *Ryerson Learning and Teaching Enhancement Fund* CAD \$8,887 (approx. GBP £4,802)
- **Dyson, B. J. (PI)** (2009). Electrophysiological responses to sound across the lifespan. *Ryerson Internal Equipment Program* CAD \$29,786 (approx. GBP £16,985)
- **Dyson, B. J. (PI)** & Cohen, R. (2007). Chinese whispers: An art-as-psychology and psychology-as-art collaboration. *The British Academy* GBP £7,493.
- **Dyson, B. J. (PI)** (2007). An on-going international collaboration into auditory scene analysis and the elderly. *Defeating Deafness Travel Grant* GBP £714.
- Alain, C., **Dyson, B. J. (CI)** & Synder, J. (2006). Neuro-anatomical correlates of age-related changes in central auditory processing. *Hearing Foundation of Canada Research Grant* CAD \$25,000 (approx. GBP £13,509)
- **Dyson, B. J. (PI)** (2005). The neuroelectric diagnosis of central acoustic deficit. *Royal National Institute of the Deaf (RNID) Knowledge Transfer Grant* GBP £1,000.
- Alain, C. & **Dyson, B. J. (CI)** (2005). Age-related changes in primary auditory cortex: Implications for temporal acuity and speech perception. *Hearing Foundation of Canada Research Grant* CAD \$24,600 (approx. GBP £13,293)
- **Dyson, B. J. (PI)** (2004). The effects of repetition on processing pitch and harmonicity. *Jack & Rita Catherall Award* CAD \$1,000 (approx. GBP £540)
- **Dyson, B. J. (PI)** (2000). Grindley Grant for Conference Travel. *Experimental Psychology Society, UK* GBP £300.
- **Dyson, B. J. (PI)** (1999-2002). Processing and representation in auditory cognition. *Biotechnology* and *Biological Sciences Research Council Doctoral Committee Award Studentship* GBP £24,000.

### **CONFERENCE PRESENTATIONS**

- **Dyson, B. J.** & Asad, A. (2021). A micro-genesis account of longer-form reinforcement learning (gain-calmness, loss-restlessness) in structured and unstructured environments. Oral presentation at the Society for NeuroEconomics Conference, XXXX
- **Dyson, B. J.** & Asad, A. (2021). A micro-level account of longer-form reinforcement learning in structured and unstructured environments. Oral presentation at the 31st Annual Canadian Society for Brain, Behaviour and Cognitive Science Meeting, 17-18th June, Montreal, Canada.
- Dahal, R., MacLellan, K., Vavrek, D. & **Dyson, B. J.** (2021). Behavioural profiles following feedback: Assessing the characteristics of positive, negative and neutral outcomes. Poster presentation at the 31st Annual Canadian Society for Brain, Behaviour and Cognitive Science Meeting, 17-18th June, Montreal, Canada.
- **Dyson, B. J.** (2021). Remote experiential learning via the replication of empirical findings in Cognitive Psychology using mobile apps. Poster presentation at the Festival of Teaching and Learning, 7-9th June, University of Alberta, Canada.
- Asis, C. & **Dyson, B. J.** (2021). Effects of losing on decision-making: An inquiry into zero sum games. Poster presentation at the Royce-Harder Conference, 15-16th April, University of Alberta, Canada.
- Denga, V-S. & **Dyson, B. J.** (2021). Great expectations: Can prediction errors improve how we learn from negative feedback? Poster presentation at the Royce-Harder Conference, 15-16th April, University of Alberta, Canada.
- Huynh, T. K. T. & **Dyson, B. J.** (2021). The effect of feedback on individual performance in Matching Pennies. Poster presentation at the Royce-Harder Conference, 15-16th April, University of Alberta, Canada.
- Kim, H. & **Dyson, B. J.** (2021). Making rational decisions: the effect of types of opponent on the speed and quality of decision-making. Poster presentation at the Royce-Harder Conference, 15-16th April, University of Alberta, Canada.
- **Mitchell, N.** & Dyson, B. J. (2021). Climbing the board: Leaderboard effects and their impact on competitive decision-making. Poster presentation at the Royce-Harder Conference, 15-16th April, University of Alberta, Canada.
- Vavrek, D. & Dyson, B. J. (2021). Time-outs & Impulsivity in the Zero-Sum Game Rock Paper Scissors. Poster presentation at the Royce-Harder Conference, 15-16th April, University of Alberta, Canada.
- Wiebe, J. & **Dyson**, **B. J.** (2021). Does context matter? The effects of prior opponent type on the default behaviour seen against unexploitable opponents in RPS. Poster presentation at the Royce-Harder Conference, 15-16th April, University of Alberta, Canada.
- Anjum, S. & **Dyson, B. J.** (2020) Variations in decision-making speed and performance attributions in a Matching Pennies game. Paper presentation at the Royce-Harder Conference, 9<sup>th</sup> April, University of Alberta, Canada.
- Huynh, T. K. T. & **Dyson, B. J.** (2020). Can feedback stop the irrational win-stay / lose-shift behavior: behavior in playing Rock, Paper, Scissors Game? Paper presentation at the Royce-Harder Conference, 9<sup>th</sup> April, University of Alberta, Canada.
- Ryjenkova, A., Cutumisu, M., Nash, K. & **Dyson, B. J.** (2020). Stimulus building using feedback. Paper presentation at the Royce-Harder Conference, 9<sup>th</sup> April, University of Alberta, Canada.

- **Dyson, B. J.** (2020). Using game spaces to understand the dynamics of competitive decision-making. Cog Sem, 13<sup>th</sup> March, University of Alberta, Canada.
- Lunn, L., **Dyson, B. J.,** Ward, J. & Forster, S. (2018). Multisensory integration during multisensory load. Paper presentation at Early Career Researcher Neuroimaging Day, 6<sup>th</sup> June, Brighton, UK.
- Sundvall, J. & **Dyson, B. J.** (2018). Am I actually winning? Post-error slowing as a marker of understanding the exploitability of a game. Poster presentation at BPS Cognitive Section Conference, 28th September, Liverpool, UK.
- Sundvall, J. & **Dyson, B. J.** (2018). Feedback-related negativity and ambiguous outcomes. Paper presentation at Early Career Researcher Neuroimaging Day, 6th June, Brighton, UK.
- **Dyson, B. J.** (2017). Game performance as an index of bounded rationality under competition. Paper presentation at Play/Make/Research Symposium, 16<sup>th</sup> June, Brighton, UK.
- Forder, L. & **Dyson, B. J.** (2017). Neural and behavioral distinctions between System 1 and System 2 revealed by game performance. Poster presentation at 3<sup>rd</sup> Multidisciplinary Conference on Reinforcement Learning and Decision Making, 11-14<sup>th</sup> June, Ann Arbor, Michigan, USA.
- Yang, L., Gallant, S., Wilkinson, A., Wilkins, L. & **Dyson, B. J.** (2017). Training the aging brain: Mental vs. physical exercise. Paper presentation at Canadian Psychological Association, 8-10<sup>th</sup> June, Toronto, Canada.
- Wilbiks, J. M. P., Rioux, D. & **Dyson, B. J.** (2017). Audio-visual integration modulates quantitatively with presentation speed and the use of illusory polygons. Poster presentation at International Multimodal Research Forum, 19-22nd May, Nashville, USA.
- **Dyson, B. J.,** Wilbiks, J., Sandhu, R., Papanicolaou, G., Lintag, J. & Forder, L. (2017). Bounded rationality revealed through games. Poster presentation at the British Psychological Society Annual Conference, 3-5th May, Brighton, UK.
- Forster, S., Kemp, C., Poerio, G. & **Dyson, B. J** (2017). Dissociations between neural responses to external visual and auditory stimuli as a result of internal visual and auditory mind-wandering. Poster presentation at the 24th Annual Meeting of the Cognitive Neuroscience Society, 25-28<sup>th</sup> March, San Francisco, USA.
- Kudas, F., Williams, R. S., **Dyson, B. J.** & Spaniol, J. (2017). Incentive effects on cognitive control in younger and older adults: Behavioral and ERP evidence. Poster presentation at the 24th Annual Meeting of the Cognitive Neuroscience Society, 25-28th March, San Francisco, USA.
- Forder, L. & **Dyson, B. J.** (2017). Behavioural and neural adaptation of *win-stay* but not *lose-shift* strategies as a function of outcome value. Paper presentation at The Society for Applied Research in Memory and Cognition, 3-6th January, Sydney, Australia.
- Forder, L. & **Dyson**, **B. J.** (2017). Let's play: How simple game spaces inform the emotional experience of others' success and failures. Poster presentation at The Society for Applied Research in Memory and Cognition, 3-6th January, Sydney, Australia.
- Williams, R. S., Spaniol, J. & **Dyson, B. J.** (2016). Mechanisms of motivational modulation of attention in younger and older adults. Symposium presentation at Annual Meeting of the Psychonomic Society, 17-20th November, Boston, Massachusetts, USA.
- Yang, L., Gallant, S., Wilkinson, A., Wilkins, L., Patel, K. & **Dyson, B.J.** (2016). Training the aging brain with mental and physical exercise. Poster presentation at the Cognitive Aging Conference, 14th-17th April, Atlanta, Georgia, USA.
- Gallant, S., **Dyson, B.J.** & Yang, L. (2016). Aging and local context effects during item directed forgetting of emotional words. Poster presentation at the Cognitive Aging Conference, 14th-17th April, Atlanta, Georgia, USA.

- **Dyson, B. J.,** McLean, C. & Want, S. (2015). Appreciating art through action? Evaluating the contribution of visuo-motor similarity, sound and expertise. Paper presentation at Off The Lip: Transdisciplinary Approaches to Cognitive Innovation, 7-11th September, Plymouth, UK.
- **Dyson, B. J.,** McLean, C. & Want, S. (2015). Stippled stroking / Stroked stippling. Artwork exhibit at Off The Lip: Transdisciplinary Approaches to Cognitive Innovation, 7-11th September, Plymouth, UK
- Spaniol, J., Williams, R. S., Biel, A. L., Wegier, P., Lapp, L. K., Lyons, K., & **Dyson, B. J.** (2015). Age differences in the Attention Network Test: Evidence from Behavior and ERPs. Poster presentation at the 22nd Annual Meeting of the Cognitive Neuroscience Society, March 28-31st, San Francisco, USA.
- Sandhu, R. & Dyson, B. J. (2015). Sensory Degradation, but Not Perceptual Load, Impacts Cross-modal Selective Attention. Poster accepted for presentation at the 16th Annual International Multisensory Research Forum meeting, 13-16th June, Pisa, Italy.
- Sandhu, R. & **Dyson**, **B. J.** (2015). Differing effects of sensory degradation on cross-modal auditory and visual distractor processing. Poster presentation at the Annual Meeting of the Canadian Society for Brain, Behaviour, and Cognitive Science, 5-7th June, Ottawa, Canada.
- Wilbiks, J. M. P. & **Dyson, B. J.** (2015). The dynamics of audio-visual integration capacity as determined by temporal unpredictability, proactive interference, and SOA. Poster presentation at the Annual Meeting of the Canadian Society for Brain, Behaviour, and Cognitive Science, 5-7th June, Ottawa, Canada.
- Gallant, S. & **Dyson, B.J.** (2014). Neural correlates of emotional directed forgetting: The role of valence and arousal. Poster presentation at the Annual Meeting of the Psychonomic Society, 20-23rd November, Long Beach, California.
- Spaniol, J., Biel, A. L., Wegier, P., Lapp, L. K., **Dyson, B. J.,** Williams, R. S., & Lyons, K. (2014). Effects of monetary incentives on attentional networks in younger and older adults. Poster presentation at the Annual Meeting of the Psychonomic Society, 20-23rd November, Long Beach, California.
- **Dyson, B. J.,** McLean, C. & Want, S. (2014). Appreciating art through action? Evaluating the contribution of visuo-motor similarity, sound and expertise. Poster presentation at the 24<sup>th</sup> Annual Canadian Society for Brain, Behaviour and Cognitive Science Meeting, 3-5th July, Toronto, Canada.
- **Dyson, B. J.** & Wilbiks, J. M. P. (2014). The capacity of audio-visual integration need not be limited to one item. Poster presentation at the 24<sup>th</sup> Annual Canadian Society for Brain, Behaviour and Cognitive Science Meeting, 3-5th July, Toronto, Canada.
- Elshiekh, A., **Dyson, B. J.,** Moulson, M., Kusec, A. & Koerner, N. (2014). Brain responses to semantic ambiguity in worry: An event-related potential (ERP) investigation. Poster presentation at the 24th Annual Canadian Society for Brain, Behaviour and Cognitive Science Meeting, 3-5th July, Toronto, Canada.
- Wilbiks, J. M. P. & **Dyson, B. J.** (2014). Electrophysiological predictors of the dynamic capacity of audio-visual integration. Paper presentation at International Multimodal Research Forum, 11-14th June, Amsterdam, Netherlands.
- Sandhu, R. & **Dyson, B. J.** (2014). Crossmodal perceptual load. Poster presentation at International Multimodal Research Forum, 11-14th June, Amsterdam, Netherlands.
- Sugden, N., Wei, L., Sandhu, R., **Dyson, B.J.** & Moulson, M. (2014). Hey, hey, we're the monkeys? Is ability and N170 response to human- and monkey-like faces graded? Poster presentation at the 21st Annual Meeting of the Cognitive Neuroscience Society, 5th-8th April, Boston, Massachusetts, USA.

- Yang, L., Wilkinson, A., Gallant, S., Wilkins, L. Dyson, B.J. & Patel, K. (2014). The effects of self-guided mental and physical exercise on the aging brain: A pilot study. Poster presentation at the Cognitive Aging Conference, 3-6<sup>th</sup> April, Atlanta, Georgia, USA.
- Chan, Z. & **Dyson, B.J.** (2013). Assessing stimulus dependencies and congruency as contributions to the development of multi-modal objects. Poster presentation at the Annual Meeting of the Psychonomic Society, 14-17<sup>th</sup> November, Toronto, Canada.
- **Dyson, B.J.** & Harley, A. (2013). Separating stimulus, goal and response switching during a fast-paced sustained attention task. Poster presentation at the Annual Meeting of the Psychonomic Society, 14-17<sup>th</sup> November, Toronto, Canada.
- Cowan, S., Tassone, A., Vickers, K. **Dyson, B.J.** & Turtle, J. (2013). "Meeting students where they are?" A pilot study evaluating the use of social media for distributing supplementary course content. Poster presentation at Ryerson University Faculty Conference, 16th May, Toronto, Canada.
- **Dyson, B. J.** & El-Sibaey, S. (2013). Curating creativity: Bringing art and science closer together through self-expression assignments. Poster presentation at Ryerson University Faculty Conference, 16th May, Toronto, Canada.
- **Dyson, B.** (2013). Can you tell what it is yet? Perceptual and semantic processes in resolving ambiguous images. Poster presentation at the 20th Annual Meeting of the Cognitive Neuroscience Society, 13st-16th April, San Francisco, USA.
- Sandhu, R., Schutz, M. & **Dyson, B. J.** (2013). An ERP investigation of duration estimations of flat and percussive tones. Poster presentation at the 20th Annual Meeting of the Cognitive Neuroscience Society, 13st-16th April, San Francisco, USA.
- Wilkinson, A., Yang, L., & **Dyson, B. J.** (2013). Modulating younger and older adults' performance in ignoring pictorial information during a word matching task. Poster presentation at the 20th Annual Meeting of the Cognitive Neuroscience Society, 13st-16th April, San Francisco, USA.
- Wilbiks, J. M. P. & **Dyson, B. J.** (2012). Effects of within-modal congruency, cross-modal congruency and temporal asynchrony on the perception of perceived audio-visual distance. Poster presentation at International Multimodal Research Forum, 19-22nd June, Oxford, UK.
- Sandhu, R. & **Dyson, B. J.** (2012). Investigating task and modality switching costs using bimodal stimuli. Poster presentation at International Multimodal Research Forum , 19-22nd June, Oxford, UK.
- Sandhu, R. & **Dyson, B. J.** (2012). Examining modality dominance through modality switching costs and congruency analyses in an audio-visual task. Poster presentation at Attention Symposium, 25-27th May, Halifax, Canada.
- **Dyson, B. J.** Vickers, K. & Turtle, J. (2012). Psychological aspects of teaching and learning: Lessons from the past, present and future. Paper presentation at Ryerson University Faculty Conference, 21st May, Toronto, Canada.
- Wilkinson, A., Yang, L., & **Dyson, B. J.** (2012). Age differences in ignoring distracting pictures: An event-related potential (ERP) study. Poster presentation at the Cognitive Aging Conference, 19th-22nd April, Atlanta, USA.
- **Dyson, B. J.** & Sandhu, R. (2011). The effects of identity and location on on-line temporal bisection in the auditory domain. Poster presentation at the 72nd Annual Meeting of the Canadian Psychological Association, 2-4 June, Toronto, Canada.
- **Dyson, B. J.** & Wilbiks, J. M. P. (2011). When selective attention fails: The costs and benefits of audio-visual integration as a function of musical expertise. Poster presentation at the 72nd Annual Meeting of the Canadian Psychological Association, 2-4 June, Toronto, Canada.

- **Dyson, B.** (2011). Little things we can do during big teaching. Poster presentation at Ryerson University Faculty Conference, 17th May, Toronto, Canada.
- Kaelin, V., Homayouni, S., Johnson, A. & **Dyson, B.** (2011). Interdisciplinary efforts to foster the hidden but critical faculty of mental rotation. Paper presentation at the Ryerson University Faculty Conference, 17th May, Toronto, Canada.
- Wilbiks, J. M. P. & **Dyson, B. J.** (2011). When selective attention fails: The costs and benefits of audio-visual integration as a function of musical expertise. Poster presentation at the 30th Meeting of the Banff Annual Seminar in Cognitive Science, 13-14 May, Banff, Canada.
- **Dyson, B. J.** (2011). Let's go round again: The effect of intention on neural responses to multi-stable visual percepts. Poster presentation at the 18th Annual Meeting of the Cognitive Neuroscience Society, 2nd-5th April, San Francisco, USA.
- **Dyson, B. J.** & Sandhu, R. (2010). The effects of identity and location on on-line temporal bisection in the auditory domain. Poster presentation at the 9th Auditory Perception, Cognition and Action Meeting, 18th November, St. Louis, USA.
- **Dyson, B. J.** (2010). The influences of task load and preparation on encoding and retrieval following complex auditory scenes. Poster presentation at the 17th Annual Meeting of the Cognitive Neuroscience Society, 17th-20th April, Montréal, Canada.
- Ugland, C., **Dyson, B. J.** & Field, A. (2009). Resistance to extinction is independent of fear relevance: Evidence from evaluative and classical conditioning. Poster presentation at the 39th EABCT Annual Congress, 16-19th September, Dubrovnik, Croatia.
- **Dyson, B. J.** (2009). Object-based auditory memory: Effects of space, preparation and time. Paper presentation at the 19th Canadian Society for Brain, Behavioural and Cognitive Sciences, 8-10th July, York, UK.
- **Dyson, B. J.** (2008). Object-based memory for sound: Effects of preparation, space and time. Paper presentation at North Carolina Cognitive Conference, North Carolina State University, 16th February, North Carolina, USA.
- Ugland, C., **Dyson, B. J.** & Field, A. (2007). Neuroelectric indices of fear relevance in an associative conditioning paradigm. Poster presentation at the British Association of Cognitive Neuroscience, 29th-31st August, University of Dundee, UK.
- Parkinson, J., **Dyson, B. J.,** & Khurana, B. (2007). Line by line: Neuroelectric evidence for a perception-action link in letter recognition. Poster presentation at the Perception, Action And Consciousness: Sensorimotor Dynamics And Dual Vision Conference, 1st-3rd July, University of Bristol, UK.
- **Dyson, B. J.** & Alain, C. (2007). Complex sounds in the brain: Neuroelectric correlates representing pitch and harmonicity information. Poster presentation at the 14th Annual Meeting of the Cognitive Neuroscience Society, 5th-8th May, New York, USA.
- **Dyson, B. J.** (2006). The ups and downs of acoustic research: Relevant and irrelevant information resource allocation. Poster presentation at the 5th Auditory Perception, Cognition and Action Meeting, 16th November, Houston, USA.
- **Dyson, B. J.** & Alain, C. (2005). Tales of the unexpected (frequency): What harmonicity can tell us about acoustic processing. Paper presentation at the 4th Auditory Perception, Cognition and Action Meeting, 10th November, Toronto, Canada.
- **Dyson, B. J.** & Quinlan, P. T. (2005). The risk of repeating one's self: Repetition effects for auditory what and where responding. Poster presentation at the 46th Annual Psychonomic Society Meeting, 10th-13th November, Toronto, Canada.

- **Dyson, B. J.** & Alain, C. (2004a). Effect of visual attentional load on low-level auditory scene analysis. Poster presentation at the 11th Annual Meeting of the Cognitive Neuroscience Society, 18th-20th April, San Francisco, USA.
- **Dyson, B. J.** & Alain, C. (2004b). Global and local context mediate the perception of concurrent auditory objects. Poster presentation at the 3rd Auditory Perception, Cognition and Action Meeting, 18th November, Minnesota, USA.
- **Dyson, B. J.** & Quinlan, P. T. (2003). Higher-order processing constraints in audition. Paper presentation at the 2nd Auditory Perception, Cognition and Action Meeting, 6th November, Vancouver, Canada.
- Dyson, B. J. & Alain, C. (2003). Representation of concurrent auditory objects as revealed by middle latency auditory evoked responses to inharmonicity. Poster presentation at the 43rd Annual Meeting of the Society for Psychophysiological Research, 29th October-2nd November 2003, Chicago, USA.
- **Dyson, B. J.** & Quinlan, P. T. (2002). Stimulus representations in an auditory same/different task. Paper presentation at the EPS Meeting, 10th-12th July, Cambridge, UK.
- **Dyson, B. J.** & Quinlan, P. T. (2001). Within- and between- dimension processing in the auditory modality. Poster presentation at the 39th Annual Psychonomic Society Meeting, 15th-18th November, Florida, USA.

## **INVITED PRESENTATIONS**

- **Dyson, B. J.** (2020). Behavioural and neural limits in competitive decision making: The roles of outcome, opponency and observation. Decision Neuroscience, 20<sup>th</sup> Nov, Ryerson University, Canada.
- **Dyson, B. J.** (2019). Using Mentimeter for student engagement. Faculty of Science Teaching Brown Bag, 12<sup>th</sup> April, University of Alberta, Canada.
- **Dyson, B. J.** (2018). The use of game spaces in understanding competitive decision-making. Invited talk at Ryerson University, 9th December, Ontario, Canada.
- **Dyson, B. J.** (2017). The use of game spaces in understanding competitive decision-making. Invited talk at University of Alberta, 29th May, Alberta, Canada.
- **Dyson, B. J.** (2014). Some dynamics of audio-visual processing revealed by event-related potentials. Invited talk at McMaster University, 14th November, Hamilton, Canada.
- **Dyson, B. J.** (2013). The psychology of art. Invited talk for Ryerson OPSEU Local 596 Series, 21st November, Toronto, Canada.
- Turtle, J. Vickers, K. & **Dyson, B.** (2013). Some psychological perspectives on teaching and learning: Memory, personality and research challenges. Learning and Teaching Office Workshop presentation at Ryerson University, 11th March, Toronto, Canada.
- **Dyson, B. J.** (2012). Insight in sight: How the brain changes its mind about what it experiences. Invited talk at Rotman Research Institute, 14th May, Toronto, Canada.
- **Dyson, B. J.** (2010). With or without you: Passive and active neural contributions in auditory and visual processing. Invited talk at Department of Speech-Language Pathology, University of Toronto, 3rd November, Toronto, Canada.
- **Dyson, B. J.** (2009). With or without you: Passive and active neural contributions in acoustic processing. Invited talk for Ryerson Music Series, 25th November, Toronto, Canada.

- **Dyson, B. J.** (2009). Perception and art. Invited talk for Ryerson Lunch 'n' Learn Series, 5th November, Toronto, Canada.
- **Dyson, B. J.** (2009). Something or nothing? Electrophysiological variations in encoding and retrieval during the processing of complex auditory scenes. Invited talk at Auditory Scene Analysis symposium, Annual Meeting of the Canadian Acoustic Society, 14th-16th October, Niagara-On-The-Lake, Canada.
- **Dyson, B. J.** (2008). Organising by object: How memory can be structured under complex auditory scenes. Invited talk at Auditory Scene Analysis symposium, Annual Meeting of the Canadian Acoustic Society, 6th-8th October, Vancouver, Canada.
- **Dyson, B. J.** (2008). A sound assessment? Towards the representation of auditory objects in the brain. Invited talk at Cognitive Lunchbox, Duke University, 15th February, North Carolina, USA.
- **Dyson, B. J.** & Cohen, R. (2007). Art meets Psychology: Empirical observations from copying and recognising drawings. Invited talk at Phoenix Gallery, 14th October, Brighton, UK.
- **Dyson, B. J.** (2006). We are sitting in a room. Invited talk at Memory Forum: The Influence of the Forgotten on Memory. Sussex Art Club, 1st November, Brighton, UK.
- **Dyson, B. J.** (2006). The risk of repeating one's self: Behavioural and neuroelectric measures of acoustic invariance. Invited talk at MRC Institute of Hearing Research, University of Nottingham, 30th May, Nottingham, UK.
- **Dyson, B. J.** (2006). It sounds all the same to me: Active and passive contributions to perceptual invariance in audition. Invited talk at Glasgow Caledonian University, 28th April, Glasgow, UK.
- **Dyson, B. J.** (2006). Something you haven't heard before? Temporal constraints in auditory attention. Invited talk at Nottingham Trent University, 22nd March, Nottingham, UK.
- **Dyson, B. J.** & Alain, C. (2004). Constraints on the development and maintenance of harmonic templates. Poster presentation at the Hanse Conference on Auditory Grouping and Speech Perception, 22nd-24th August 2004, Delmenhorst, Germany.
- **Dyson, B. J.** & Quinlan, P. T. (2003). Processing and representation in auditory cognition. Ebbinghaus Empire Meeting, 10th February 2003, University of Toronto, Canada.

### **TEACHING EXPERIENCE**

### University of Alberta, Canada

2019 –	Basic Psychological Processes	Convenor, Teaching
2018 –	Cognitive Psychology	Convenor, Teaching

### University of Sussex, UK

2017 – 2018	Art as Psychology	Teaching
2017 - 2018	Advanced Research Methods (MSc)	Teaching
2016 - 2018	Intro to Cognitive & Biological Psychology	Convenor, Teaching
2015 - 2018	Topics In Cognitive Neuroscience (MSc)	Teaching
2015 - 2016	Cognition in Clinical Contexts	Convenor, Teaching

### Ryerson University, Canada

2013 - 2014	Psychology of Art and Creativity	Convenor, Teaching
2013 - 2014	Advanced Cognition Seminar	Convenor, Teaching
2009 - 2014	Cognitive Psychology	Convenor, Teaching
2010 - 2014	Psychology of Thinking	Convenor, Teaching

2009 - 2014 2009 - 2010 2008 - 2009	Introduction to Psychology I Advanced Seminar in Perception (MSc) Sensory & Perceptual Processes	Convenor, Teaching Convenor, Teaching Convenor, Teaching
University of Sussex, UK		
2007 - 2008 2006 - 2008 2006 - 2008 2006 - 2008 2005 - 2008 2005 - 2008 2005 - 2006	Research Skills in Psychology Conceptual & Pragmatic Issues Art as Psychology Data Collection & Presentation Perception and Attention Research Methods I Professional Skills	Convenor, Teaching Convenor, Teaching Convenor, Teaching Seminars, Labs Lectures Seminars Convenor, Teaching

# University of York, UK

**2000 – 2002** Cognition *Tutorials* 

**1999 – 2002** Experimental Design & Stats *Teaching assistant* 

# SERVICE EXPERIENCE

### **Youth Science Canada**

**2020 –** Canada-Wide Science Fair Judge (cancelled due to COVID-19)

# Natural Sciences and Engineering Research Council of Canada (NSERC)

**2019 –** Discovery Grants (Biological Systems and Functions) Evaluation Group

# University of Alberta, Canada

2021–	Faculty of Arts Committee member on Equity, Diversity, and Inclusion (CEDI)
2020-	Chair of Communications and Outreach Committee
2020-	Member of Arts Pedagogy Committee and subcommittee
2019 –	Member of Undergraduate Curriculum Committee
2018 –	Twitter account for @Psych_UAlberta

## University of Sussex, UK

2016 – 2018 2015 – 2018	Visiting & Exchange student coordinator Local Psychology Brighton Science Festival organizer
2015 - 2018	Cognitive Brown Bag organizer
2015 - 2018	Space and Resources Coordinator

# Ontario Ministry of Research and Innovation, Canada

**2014 – 2015** Member of Early Researcher Award granting panel

# Canadian Society for Brain, Behaviour and Cognitive Science, Canada

2013 - 2014 CSBBCS 2014 Conference organizer

# Ryerson University, Canada

2013 - 2014	Member of Departmental Hiring Committee (DHC)
2013 - 2014	Member of Departmental Evaluation Committee (DEC)
2013 - 2014	Local Psychology Science Rendezvous organizer
2012 - 2013	Member of Research Ethics Committee
2011 - 2014	Brain, Perception and Cognition meeting organizer

2011 - 2014	Member of PsychPool (Sona) Committee
2011 - 2012	Member of Liberal Studies Council
2010 - 2012	Member of Undergraduate Program Committee
2013 - 2014	PSY102 / 202 course coordinator
2010 - 2012	PSY102 / 202 course coordinator
2010 - 2011	Member of Stress Institute Governance Committee
2009 - 2010	Member of Research Ethics Committee
2008 - 2014	Member of Psychological Science Program Committee
2008 - 2009	Member of Lab Space and Equipment Committee

## MENTORING EXPERIENCE

# University of Alberta, Canada

2021 –	2 G students, 4 UG honours, 4 UG independent study, 1 student volunteer
2020 - 2021	5 UG honours, 8 UG independent study, 1 student volunteer
2019 - 2020	5 UG honours, 5 UG independent study, 1 summer student
2018 - 2019	6 lab volunteers

## University of Sussex, UK

2018 – 2019	1 PhD Student
2017 - 2018	1 PhD Student, 3 MSc Students, 6 Undergraduate projects
2016 – 2017	1 PhD Student, 3 MSc Students, 7 Undergraduate projects
2015 – 2016	1 Post-doctoral Fellow, 2 Research Assistants, 6 Undergraduate projects

# Ryerson University, Canada

2015 - 2016	2 Graduate Students
2014 - 2015	3 Graduate Students, 1 Research Assistant
2013 - 2014	3 Graduate Students, 1 Research Assistant, 1 Undergraduate projects
2012 - 2013	3 Graduate Students, 1 Research Assistant, 3 Undergraduate projects
2011 – 2012	3 Graduate Students, 1 Research Assistant, 3 Undergraduate projects
2010 – 2011	2 Graduate Students, 1 Research Assistant, 1 Undergraduate project
2009 – 2010	1 Graduate Student, 1 Research Assistant
2008 - 2009	1 Research Assistant

### University of Sussex, UK

2007 – 2008	7 Undergraduate Projects, 1 Summer Student
2006 - 2007	2 PhDs co-supervisor, 3 Undergraduate Projects, 1 Summer Student
2005 – 2006	1 PhDs co-supervisor, 2 Undergraduate Projects

# **AWARDS AND NOMINATIONS**

- 2015 Deans' Service Award. Ryerson University, Canada.
- 2013 Deans' Teaching Award. Ryerson University, Canada.
- **2012** Nomination for Dean of Arts Award for Excellence in First-Year Teaching. Ryerson University, Canada.
- **2010** George Davey Howells Prize for the most distinguished published contribution to the advancement of Otalaryngology awarded to *The Oxford Handbook of Auditory Science* (3 vols; chapter by BD)
- **2010** Nomination for CSBBCS (Canadian Society for Brain, Behaviour and Cognitive Science) Early Career Award.
- 2009 Nomination for 2010 Best Lecturer Competition. TV Ontario.
- 2004 Kathleen Stott Memorial Prize for excellence in scientific research. York University, UK.

15

### **SELECTED JOURNAL REVIEWING**

Attention Perception and Psychophysics, Cerebral Cortex, Cognition, Cortex, Ear and Hearing, Frontiers in Auditory Cognitive Neuroscience, Higher Education, Human Brain Mapping, International Journal of Psychophysiology, Journal of Cognitive Neuroscience, Journal of Experimental Psychology: Human Perception and Performance, Memory and Cognition, Neuropsychologica, PLoS One, Psychophysiology, Psychonomic Bulletin and Review, Visual Cognition.

## **SELECTED MEDIA APPEARANCES**

## The Science of Simple Games

### Educational Engagement

25<sup>th</sup> May 2021. U School Program grade 8 group from St Jerome School in Edmonton. 14<sup>th</sup> April 2021. Skype-A-Scientist, Guilford eLearning University Prep, Greensboro, NC 26<sup>th</sup> Nov 2020. U School Program grade 8 group from St Mark's in Edmonton.

#### **Public**

<sup>1</sup> July 2020. The Science of Rock, Paper, Scissors (or, what we can learn about human decision-making from simple games). Faculty of Science Webinar, University of Alberta.
 <sup>1</sup> September 2019. The Science of Rock, Paper, Scissors. Nerd Night Edmonton, Canada.
 <sup>1</sup> January 2017. The Science of Rock, Paper, Scissors. Nerd Night Brighton, UK.

#### TV

17th March 2016. Daily Planet. Discovery Channel Canada.

#### Radio

17th March 2016. upworthy.com interview.

17th March 2016. BBC 5 Live interview.

18th March 2016. BBC Scotland interview.

18th March 2016. BBC Hereford & Worcester interview.

25th March 2016. Esquire magazine.

#### **Art and Science**

#### **Public**

15<sup>th</sup> January 2018. Seeing Art Through Science. An Introduction of David Lynch's The Art Life. The Old Market, Brighton, UK.

## **RESULTS OF TEACHING SURVEYS**

### University of Alberta, Canada

## Winter 2021

### Cognitive Psychology (n = 44; marks out of 5; 5 = maximum)

Well organized Enthusiasm for material Clear Explanations Quality of course 4.6 4.3 4.2

"I really enjoyed PSYCO 258 with Dr. Dyson. He was well organized and you can tell he put a lot of time, effort, and thought into his lesson plans. I really liked the blended model of having pre-recorded videos with a weekly interactive session. Also, I LOVED how Dr.Dyson would provide an anonymous question forum at the end of the interactive session and then he would answer the questions in the "Week End" video. This is an excellent idea!!! I strongly recommend continuing this practice with in-person classes as well since alot of students are afraid/nervous to ask questions. Great course overall!"

- "I was quite intimidated by this course when it first began. However, the instructor made it an excellent experience for me. I learnt many more valuable things than I expected to."
- "I was hesitant to take this course and considered dropping it because I am not a psychology major so I thought it might be hard to understand some concepts. However, I am so glad that I stuck with it. Dr. Dyson makes this class very interesting and fun and because of him I will continue to take more cognitive psychology classes. Thank you so much!"
- "Very good instructor! I liked how he had TA's manage chat, I find other professors stop instruction and answer chat mid presentation and it is distracting so good job! Very well organized course and well paced lectures. You can tell the professor is well versed on subject and well versed in teaching."

#### Fall 2020

## Cognitive Psychology (n = 146; marks out of 5; 5 = maximum)

Well organized Enthusiasm for material Clear Explanations Quality of course 4.4 4.3 4.2 4.3

- "Dr. Dyson was a really great professor and made the best of the situation in handling a huge class online. He explained concepts very well and you could tell he really cares for his students. The assignments and tests were very fair and he made the content much moreenjoyable. Thank you for such a wonderful semester:)"
- "Dr. Dyson is one of the best profs I've ever had. He is so kind and understanding, and explains things very clearly. The Flex Labs were socool and helpful to understanding material in this course, as it gave a practical approach, not just a theoretical one. It was a pleasure to have Dr. Dyson for this course, and I hope to have him again in the future!"
- "I really enjoyed the way this course was structured, I feel as though Dr Dyson n put a lot of thought into how to make this an online course that would be enjoyable and easy to learn. I really enjoyed the short videos split into different sections as I felt a sense of completion after a video and more motivated to keep focused and keep learning."
- "Dr. Dyson is the best prof I ever had at U of A."

### Basic Psychological Processes (n = 142; marks out of 5; 5 = maximum)

Well organized Enthusiasm for material Clear Explanations Quality of course 4.5 4.2 4.3 4.3

- "Professor Ben Dyson is an amazing professor and his teaching were so clear and helpful. His assignments were also very fun to complete."
- "Dr Dyson provides extremely clear and useful lecture videos and zoom lectures at the end of the week...Very good course, professors should take notes on Dr Dyson's teaching style."
- "Dr. Ben Dyson was an exceptional professor. By having videos (which we can do on our own time) and 1 interactive session a week(which we were able to ask questions and get a better explanation of the topic) was the best way to teach during this pandemic...When questions were asked he did not just repeat it the same way he said it before, he thought of new ways to explain the content which is helpful. The interactive Menti sessions were a great way to incorporate the content and us participating in it. One of the best professors I've has so far!!!"
- "Fantastic course, I learned a lot and felt Dr. Dyson made the course very enjoyable and informative."
- "Everything was very organized and clear. Delivery was great and quizzes were structured well. Overall, I thoroughly enjoyed this course!"
- "Dr. Dyson was excellent, especially considering the circumstances he was forced to teach within. I loved how he modifed the course structure to be online, more specifcally the quizzes, they grew progresssively harder throughout the course which I thought was appropriate and they pushed me to review material consistently and effectively. When I had concerns with an assignment he got back to me promptly and reviewed my concerns fairly."

## Winter 2020 (Teaching Release due to NSERC Discovery Grant Panel secondment)

### Fall 2019

### Cognitive Psychology (n = 43; marks out of 5; 5 = maximum)

Well organized Enthusiasm for material Clear Explanations Quality of course

4.8 4.9 4.6 4.8

- "Professor Dyson somehow managed to make a Thursday night class one of the most interesting and engaging classes of my semester. He is enthusiastic about the subject, uses varied and interesting resources and teaching styles during class, and his lecture slides were engaging and easy to follow when studying outside of class. He responded quickly to emails and was very helpful and friendly. I hope to have him as a teacher again!"
- "I just wanted to say that despite this class being 3 hours long and being so late, I appreciate that Professor Dyson still made it an enjoyable class. Would recommend this class 10/10 especially if Professor Dyson is teaching it!"
- "My instructor was very engaging and made me want to come to class, even though it was a 3 hour night class, time still flew by."

# Basic Psychological Processes (n = 92; marks out of 5; 5 = maximum)

Well organized Enthusiasm for material Clear Explanations Quality of course 4.5 4.3 4.2 4.3

- "Dyson is a phenomenal, very intelligent prof. He explained things very well, and I would definitely take one of his courses again!"
- "Ben Dyson is extremely knowledgeable in this course and taught enthusiastically, which really helped on the days that students were tired and didn't want to learn. I appreciated this course and the instructor that taught it."
- "The instructor was very well knowledgeable in the subject area. Professor Ben Dyson evidently took the time to present analogies to the contents of the course. He provided ample time for our projects and quizzes. He is a very kind person who is happy to help his students."

### Winter 2019

## Basic Psychological Processes (n = 292; marks out of 5; 5 = maximum)

Well organized Enthusiasm for material Clear Explanations Quality of course 4.2 4.5 4.2 4.0

- "Ben was an AMAZING professor. I really appreciated how well organized he was, how materials for the next chapter were always posted ahead of time. When class was cancelled he recorded the notes before and taught the lecture remotely, you can see how hardworking and dedicated he is to his work and it is so very appreciated by your students!"
- "Professor Ben Dyson was incredible. His sense of humour and passion for this course makes it very enjoyable. Studying for this course was fun and entertaining, making memory easier to connect too. I would full on recommend this course and this exact professor to anyone interested in Psychology 104!"
- "Ben Dyson is hands down one of the best profs I've ever had! Very engaging, gives great examples and is so enthusiastic about the topics."

# Fall 2018

# Cognitive Psychology (n = 95; marks out of 5; 5 = maximum)

Well organized Enthusiasm for material Clear Explanations Quality of course 4.6 4.9 4.3 4.3

- "Thank you for a great night class! I genuinely enjoyed going to class because Ben was such a wonderful instructor. You can tell he truly cares about his students, and he is very engaged in the material which makes it more interesting!
- "I absolutely loved this course. You're an amazing teacher Dr. Dyson. Thank you for getting everyone involved and making your class so interactive. I would take another course from you in a heartbeat."
- "Ben Dyson is a really phenomenal professor who is extremely knowledgable, engaging, and speaks very clearly. He presents the material in an interesting and unique manner. He manages to make a 3 hour night class go by fast and feel like nothing!"

#### University of Sussex, UK

### Spring 2018

# Advance Research Methods (marks out of 5; 5 = maximum)

Well organized Enthusiasm for material Clear Explanations Valuable experience 4.9 4.9 4.9

#### Fall 2017

## Introduction to Biological and Cognitive Psychology (marks out of 5; 5 = maximum)

Well organized Enthusiasm for material Clear Explanations Valuable experience 4.9 4.6 4.8

## Topics In Cognition Neuroscience (marks out of 5; 5 = maximum)

Well organized	Enthusiasm for material	Clear Explanations	Valuable experience
4.7	5.0	4.4	4.8

<sup>&</sup>quot;Very engaging and interesting, good format / style of lecture with good enthusiasm"

### Spring 2017

## Advance Research Methods (marks out of 5; 5 = maximum)

Well organized	Enthusiasm for material	Clear Explanations	Valuable experience
4.9	5.0	4.9	4.9

<sup>&</sup>quot;Having a hands-on session and seeing not only the theoretical / processing side but also generally how an EEG study is run was interesting and useful"

## Fall 2016

### Introduction to Biological and Cognitive Psychology (marks out of 5; 5 = maximum)

Well organized	Enthusiasm for material	Clear Explanations	Valuable experience
5.0	5.0	4.9	4.8

<sup>&</sup>quot;Class experiments are fun!"

### Winter 2015

# Topics In Cognitive Neuroscience (MSc) (marks out of 5; 5 = maximum)

<sup>&</sup>quot;This was the best ARM workshop and my best ERP learning experience thus far. Thanks a lot!"

<sup>&</sup>quot;Very dynamic lecturer...really enjoyed the practical experience"

<sup>&</sup>quot;Engaging, friendly and organized. Thanks!"

<sup>&</sup>quot;Amazing lecture slides and lectures which are taught passionately with real world examples. Best lecturers I have had by a long way!"

<sup>&</sup>quot;Really well taught, enthusiastic lecturer who is obviously passionate about his subject and makes for enjoyable lectures. Really happy with the module"

<sup>&</sup>quot;Without a doubt favourite most interesting and engaging lecture. Thanks."

<sup>&</sup>quot;Very well done regarding explanation of concepts and use of examples"

<sup>&</sup>quot;I enjoyed the interactive questions and use of (ERP) cards. Thank you!"

<sup>&</sup>quot;The genuine interest / passion shows in your teaching and that help with us learning!"

<sup>&</sup>quot;I really enjoyed the practical session where we were able to see how it was set up and run. Then the theory next day was very helpful. Very clear to understand"

<sup>&</sup>quot;I liked how practical it was"

<sup>&</sup>quot;Love the video examples"

<sup>&</sup>quot;Great lecture"

<sup>&</sup>quot;I found the teaching standard and the structure of the course extremely high"

Well organized Enthusiasm for material Module Quality Learning Resources

"Some of the talks were incredibly useful in terms of either carrying out research or understanding neuroscientific techniques (in particular, Ben Dyson pitched the level of his lecture perfectly; incredibly informative but not overly advanced)."

# Cognition in Clinical Contexts (marks out of 5; 5 = maximum)

Well organized Enthusiasm for material Module Quality Learning Resources 4.6 4.4 4.5 4.4

### Ryerson University, Canada

#### Winter 2014

### Psychology of Art and Creativity (marks out of 5; 1 = maximum)

Well organized	Enthusiasm for material	Student respect	Valuable experience
1.1	1.1	1.0	1.5

- "Ben is an amazing professor and one of the best ones I've had at Ryerson. His lessons are engaging, his exams are fair, and he truly wants to see his students succeed. I am always very interested in the way he teaches and he is overall a very genuine and effective professor. I have no complaints about him or the course, it was my favourite course taken this semester."
- "Amazing professor and course. I love the "gallery opening" at the end of the semester. The content was informative and interesting. I enjoyed everything about the course."
- "Professor Dyson is a great professor who is clearly passionate about his work and this subject area. He encouraged my interest in this subject and did a great job at dividing the course due dates up equally and fairly."

## Cognitive Psychology (marks out of 5; 1 = maximum)

Well organized	Enthusiasm for material	Student respect	Valuable experience
1.6	1.1	1.1	1.5

- "Professor Dyson is a brilliant professor. He goes out of his way to help his students. He incorporated theories from the textbook with studies in an application method that allows his students to grasp the material more fully."
- "Professor Dyson is extremely knowledgeable, approachable, and he is extremely fair. I can only hope I have him for other classes at Ryerson. We are lucky to have him."
- "Professor Dyson makes the material very engaging and I thoroughly enjoyed his class and assignments. His use of videos, interactive examples and humor made it one of my favourite classes."
- "Ben Dyson is a very good professor, I never felt immense pressure in the workload/class setting because assignments were very well explained and he was very enthusiastic about the course material. I am always thoroughly interested in the content of his lectures, they are well structured."

# Fall 2013

### Introduction To Psychology (marks out of 5: 1 = maximum)

Well organized	Enthusiasm for mate	erial Student	respect	Valuable experience
1.1	1.4	1.1	1.4	•

- "I absolutely love attending this class. Benjamin Dyson is an amazing professor who makes every element of Psychology (even the boring stuff) interesting and fun to learn...this professor (and course) are amazing. I would take any class that this professor teaches because the way he instructs is perfect."
- "I really enjoy attending this class on a weekly basis. It is a good environment to learn in and the instructor is always enthusiastic and presents the material with complete understanding. The course is well laid out and follows the syllabus perfectly."
- "Intro to Psychology is my favorite course this semester. I always look forward to seeing what we're going to learn and Professor Dyson makes the whole learning experience very enjoyable. I especially like the videos he shows in class, because they make it even easier to understand concepts we learn, and the discussions he leads are always very interesting."

#### **Winter 2013**

### Psychology of Art and Creativity (marks out of 5; 1 = maximum)

Well organized	Enthusiasm for material	Student respect	Valuable experience
1.1	1.0	1.0	1.3

- "I wish Dr. Dyson would teach more courses. He is an amazing instructor who goes to far lengths to help a student with the course material as well as in other spheres of the student's life. He is a valuable resource for students throughout and he is a teacher, friend and guide in the true sense. He is very understanding, extremely helpful and respectful and his classes definitely are insightful where learning really happens, and not just academic but in life in totality."
- "This is the best prof I have had in my University career. This is my 5th year of University and I find that Professor Dyson keeps my attention through a lecture on a subject that is honestly kind of dry. He's funny, engaging, and gets the class to participate in a way that makes everyone feel as though they have contributed."
- "Psychology of Art/Creativity is one of the most enjoyable psychology classes I've ever taken in University. I was very excited to finally see something visual arts-related in psychology, and Professor Dyson did not fail to meet those expectations. He is extremely helpful, and is always willing to sit down with you to talk about course material and other related issues. He is also extremely accommodating...His lectures are thoughtful and engaging. I am extremely grateful to have had a chance to take his class, and would HIGHLY recommend him as a professor and this course in particular to other Ryerson students."

### Advanced Cognition Seminar (marks out of 5; 1 = maximum)

Well organized	Enthusiasm for material	Student respect	Valuable experience
1.4	1.5	1.5	1.8

"This course is my favourite one yet, mainly because Dr. Dyson is an amazing teacher! The in-class demos and use of multi-media really facilitate a fun and engaging learning environment, and Dr. Dyson goes the extra mile to make sure we're all up to speed and enjoying the course material."

"I really enjoyed the fact that we were able to come up with our own experiment ideas and run them in class."

#### Fall 2012

## Psychology of Thinking (marks out of 5; 1 = maximum)

Well organized	Enthusiasm for material	Student respect	Valuable experience
1.1	1.1	1.0	1.3

- "Prof Dyson is remarkable in his teachings. This is one of the few classes I am always enthusiastic in going to every morning as he is both informative and entertaining. This has exceeded my expectations in every way. Promote this man!"
- "Professor Dyson is an excellent professor who enthusiastically presents course material and is very knowledgeable and very helpful and accommodating to students who require extra help or feedback. I thoroughly enjoy his class."
- "This is my first semester of university. I am a student in RTA which I am so thankful for, however Ben is my favourite teacher and Psychology of Thinking is my favourite course so far due to the material but mainly his teaching and enthusiasm for the course."

## Winter 2012

# Cognitive Psychology (marks out of 5; 1 = maximum)

Well organized	Enthusiasm for material	Student respect	Valuable experience
1 1	1 2	1 1	1 4

- "Amazing course! Very good use of powerpoint slides, textbook, video clips. There is not one bad thing I can say about this course. Great enthusiasm from professor!"
- "This course was made excellent by both the professor and TA. Both were very helpful! I enjoyed my time taking this course and believe they are assets to Ryerson creating an advantageous learning environment."

"Professor Dyson is great! Knowledgeable, funny, and I really love the class demos. His tests are extremely fair as well as grading for assignments. Hope to have him again some day in the future!"

#### Fall 2011

## Introduction To Psychology (marks out of 5; 1 = maximum)

Well organized Enthusiasm for material Student respect Valuable experience 1.4 1.3 1.0 1.3

- "I thoroughly enjoy this class and view it as the highlight of my week. Dyson is an excellent professorengaging and entertaining, with a great sense of humour. I have no trouble staying focused, and his explanations and examples make understanding the course material simple. I hope to have him as a professor again in the future!"
- "I really enjoyed listening and attending to all the lectures of this particular class. Even though some terms may be difficult to understand and interpret, the prof did an excellent job explaining the material. The lectures were always interesting, interactive, and I always left lectures thinking about what I had learnt that day."
- "Apart from the informative lecture sessions; I have found the posted slides for each lecture session to very helpful and informative. The condensed format of the slides not only assist in getting the information across during lecture sessions, but I have found them extremely helpful when reviewing for exams."

### Psychology of Thinking (marks out of 5; 1 = maximum)

Well organized Enthusiasm for material Student respect Valuable experience 2.2 1.8 1.6 2.4

"This course was one of the best taught classes I have ever taken, it was fair and organized and it was taught in such an interesting way that I was engaged and did not get sick of going to that class like with many others. Thank you for an incredible learning experience!"

#### Winter 2011

### Cognitive Psychology (marks out of 5; 1 = maximum)

Well organized Enthusiasm for material Student respect Valuable experience 1.0 1.0 1.0

- "Dear professor, This course is one of the best and interesting courses I have ever had. The way you teach is wonderful. Thank you!
- "Overall, great class to be in. The structure of the class is very good where nothing weighs too much and it's all spread out. Great sense of humor. I think your ability to relate to students makes them more engaging and more willing to participate. Experiments are very fun to do." "Excellent professor."

## Introduction To Psychology (marks out of 5; 1 = maximum)

Well organized Enthusiasm for material Student respect Valuable experience 1.1 1.0 1.5

- "Great professor! Always willing to answer questions, went over assignments thoroughly and enough times so everyone (students) understood what was expected of them, and responded to emails quickly even over the weekends. His effort at making the class interesting, and his enthusiasm, were duly noted by myself and a lot of the other students in the class."
- "Prof. Dyson is a wonderful psychology professor. He is engaging and he is very enthusiastic."
- "Professor teaches content of the course in a very interesting way that helps me to understand and retain content for tests and exams. I never needed or requested office hours from him but I emailed him a lot for test and assignment help and he always provided me with help within a decent amount of time and was very helpful. Very fair test and prepares you well."

# Fall 2010

## Psychology of Thinking (marks out of 5; 1 = maximum)

Well organized Enthusiasm for material Student respect Valuable experience 1.1 1.3 1.0 1.3

"Mr. Dyson is a great professor, and how he conducts his course is brilliant and is a cornerstone for what every professor in Ryerson should adhere by"

"Professor Dyson is an interesting lecturer and I feel like I take in a lot of information each class. He is always available to answer questions and he explains things very well."

# Introduction To Psychology (marks out of 5; 1 = maximum)

Well organized Enthusiasm for material Student respect Valuable experience 1.1 1.1 1.4

- "Benjamin is a great Professor, he has great power points, that help the understanding of course content easier. And his methods of teaching are fantastic."
- "Ben, always interacts and gets the class involved within his lecture and I like that cause I find I learn better that way."
- "The way in which the course is taught is interesting and engaging. The concepts are presented in a clear, descriptive manner that makes understanding the material very easy. Overall, I really enjoyed the class and teaching methods used."

### Winter 2010

# Cognitive Psychology (marks out of 5; 1 = maximum)

Well organized Enthusiasm for material Student respect Valuable experience 1.0 1.0 1.3

- "Dr. Dyson is a fantastic teacher. He has made what could be a dry and boring subject come to life.

  Also, he is very responsive to emails and provides thought-provoking responses to questions. I am grateful he taught this course."
- "Professor Ben Dyson is really an amazing professor. I wish all professors were like him, his teaching techniques really keep me awake during our 8 a.m class."
- "Dr. Dyson was a very effective faculty member; I look forward to taking his courses in the future!"

### Introduction To Psychology (marks out of 5; 1 = maximum)

	, ,		,
Well organized	Enthusiasm for material	Student respect	Valuable experience
1 1	1 1	1 1	1.3

"Dr. Dyson encourages higher learning with the comfort and familiarity of new media. Furthermore, he excels in his respect, tone, and excitement for teaching and for the material presented. I was very impressed with this course and how it was organized. Thank you for the experience."

"Ben Dyson is an excellent prof, one of the better ones I've had in University."

### Fall 2009

### Advanced Seminar in Perception (marks out of 5; 1 = maximum)

Well organized	Enthusiasm for material	Student respect	Valuable experience
1.0	1.0	1.0	1.3

- "This professor went out of his way to provide authentic learning opportunities. He spent many hours outside of the classroom to prepare learning experiences for the class. Great and very enthusiastic professor!"
- "Ben Dyson did a very good job of presenting the material in a manner that grabbed my interest. A lot of thought and creativity went into each lecture and I really enjoyed this course."

## Introduction To Psychology (marks out of 5; 1 = maximum)

Well organized	Enthusiasm for material	Student respect	Valuable experience
1.3	1.3	1.2	1.5

- "Ben Dyson was an exceptional teacher when it came to PSY 102, and i believe no one can teach psychology better than him."
- "One of the best professors I have had. Enjoyed the learning experience and wish to be enrolled in his future classes."
- "Your enthusiasm radiates in each class"

<sup>&</sup>quot;Great course to be in. Great teaching techniques used."

<sup>&</sup>quot;Definitely going to recommend this prof. to my friends. One of my favourite classes this semester!"

### Winter 2009

### Introduction To Psychology (marks out of 5; 1 = maximum)

Well organized Enthusiasm for material Student respect Valuable experience 1.2 1.0 1.1 2.0

## Cognitive Psychology (marks out of 5; 1 = maximum)

Well organized Enthusiasm for material Student respect Valuable experience 1.2 1.0 1.4 1.6

"Lecture was very interactive and enjoyable...has a real good teaching style...all in all great professor.

One of my favourites!"

"Lecture style is awesome- very engaging and interactive- would love to see more lectures like this...course evaluation is very well planned and fair."

#### Fall 2008

### Sensory and Perceptual Processes (marks out of 5; 1 = maximum)

Well organized Enthusiasm for material Student respect Valuable experience 1.1 1.2 1.5

"You have the best PowerPoint presentations, you teach the material very well, and you test exactly what you teach."

## University of Sussex, UK

### 2008

### Art as Psychology (marks out of 5; shared teaching; 5 = maximum)

Lecturer Explanation Lecture Interest Course Satisfaction Course Organisation 4.44 4.32 4.32 4.60

## Research Skills (marks out of 5; shared teaching; 5 = maximum)

Lecturer Explanation Lecture Interest Course Satisfaction Course Organisation 3.98 3.51 3.94 3.96

### 2007

## Conceptual and Pragmatic Research Issues (out of 7; 7 = maximum)

Course Interest Course Satisfaction Teaching Interest Teaching Satisfaction 5.5 5.5 5.7

#### Art as Psychology (out of 6; shared teaching; 6 = maximum)

Tutor Enthusiasm	Lecturer Explanation	Lecture Interest	Course Organisation
4.9	4.7	4.7	4.6

<sup>&</sup>quot;Keep Ben Dyson lecturing, he's very good"

#### 2006

<sup>&</sup>quot;There is no other class where I actually pay attention for 3 hours."

<sup>&</sup>quot;You're an awesome professor!"

<sup>&</sup>quot;The interactive nature of the course is appreciated (and rare in most lectures I've been in)."

<sup>&</sup>quot;Continue seminar style- really good discussions"

<sup>&</sup>quot;Lots of helpful examples of art of different sorts"

<sup>&</sup>quot;Continue play-doh seminars!"

<sup>&</sup>quot;Ben's lectures were fantastic"

<sup>&</sup>quot;Carry on just as you are! Doing an amazing job so far!"

<sup>&</sup>quot;Continue doing the progress overview at the start of lectures and practicals"

<sup>&</sup>quot;Seminars with Ben Dyson were very good."

<sup>&</sup>quot;The seminars I particularly enjoyed. Ben is a good seminar tutor and encourages you to really think about the topics under discussion."

<sup>&</sup>quot;Seminars were good especially Ben Dyson's as they were structured and stimulated discussion."

# Professional Skills (out of 7; 7 = maximum)

Course Interest Course Satisfaction Seminar Interest Seminar Satisfaction 6.2 5.9 6.0

# 2005

# Professional Skills (out of 7; 7 = maximum)

Course Interest Course Satisfaction Seminar Interest Seminar Satisfaction 5.2 6.4 6.1 6.3

<sup>&</sup>quot;Ben is very approachable and so making contributions to discussions is not nerve-racking."

<sup>&</sup>quot;I always enjoyed the sessions and looked forward to each one. Not something I can say easily about many courses. Cheers Ben!"

<sup>&</sup>quot;Ben is a really great teacher who made new knowledge accessible."

<sup>&</sup>quot;Ben Dyson was really good at giving the classes."