

VITA

Summer 2024

Name JANICE JOHNSON
E-mail janicej@yorku.ca
Office Address Psychology Department
 4700 Keele Street
 Toronto, Ontario, Canada M3J 1P3

DEGREES:

1982 PhD York University, Toronto, Ontario. Area: Experimental Psychology
 1975 MA York University, Toronto, Ontario. Area: Social Psychology
 1969 BA Long Island University, Greenvale, New York. Major: Psychology; Graduated magna cum laude

PROFESSIONAL EXPERIENCE:

07/14-present **Associate Professor Emeritus and Senior Scholar**, Co-Director of Developmental Processes Laboratory, Department of Psychology, York University
 07/92 – 06/14 **Associate Professor**, Psychology Department, York University
 12/10 – 12/12 **Member of Scientific Board**, *Giornale di Psicologia dello Sviluppo / Journal of Developmental Psychology*
 07/94 – 07/97 and 07/00 – 07/01 **Director of Undergraduate Studies**, Psychology Department, York University
 01/94 – 05/94 **Visiting Associate Professor**, Psychology Department, Carnegie Mellon University, Pittsburgh
 07/85 – 06/92 **Assistant Professor**, Psychology Department, York University (Sessional 07/85-06/88)
 01/85 – 05/85 **Course Director**, Department of Applied Psychology, Ontario Institute for Studies in Education
 10/84 – 07/85 **Postdoctoral Fellow**, Development of Bilingual Proficiency Project, Modern Language Centre, Ontario Institute for Studies in Education, University of Toronto
 10/82 – 09/84 **Postdoctoral Fellow**, Institute of Cognitive Studies, University of California, Berkeley

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

Association for Psychological Science; American Psychological Association; Jean Piaget Society; Society for Research in Child Development; Psychonomic Society Fellow.

RESEARCH INTERESTS:

My general interests are in cognitive development, individual differences, and cognitive process analysis. Current research projects focus on culture-fair assessment of cognitive capacity in mainstream and special developmental samples (e.g., deaf, gifted, ESL, language delayed); children's intuitive reasoning in mathematics; measurement of executive functions in children and adults; longitudinal study of the development of mental-attentional capacity.

RESEARCH FUNDING (Recent):

- | | |
|-----------|---|
| 2018 | Conference Travel Grant, \$1,000, Faculty of Health (Jean Piaget Society, Amsterdam, NL). |
| 2016 | “Organismic Brain Arousal Mediation Used to Reduce Mind Wandering”; \$3,000, Minor Research Grant, Faculty of Health, York University. |
| 2014 | “Measurement of developmental intelligence via mental attention: Longitudinal analysis”; \$3,000, Minor Research Grant, Faculty of Health, York University. |
| 2014 | Conference Travel Grant, \$1,000, Faculty of Health (Association for Psychological Science & Jean Piaget Society, San Francisco, CA). |
| 2010-2013 | “Measurement of developmental intelligence via mental attention: Comparison with other approaches, task-analytical modelling, and longitudinal testing”; \$113,064; Social Sciences and Humanities Research Council of Canada (SSHRC) Standard Research Grant; with J. Pascual-Leone (PI) |
| 2006-2009 | “Executive processes and mental attention in cognitively gifted and mainstream children”; \$94,649; SSHRC Standard Research Grant; with J. Pascual-Leone (PI) |
| 2008 | York Ad Hoc Fund, Conference travel Grant, \$312 (18th Advanced Course of the Archives Jean Piaget, Geneva, Switzerland). |
| 2007 | SSHRC Conference Travel Grant, \$750 (Jean Piaget Society, Amsterdam). |
| 2006 | SSHRC Conference Travel Grant, \$700 (EWOMS, Genoa, Italy). |
| 2006-2007 | “The role of age and circadian arousal on complex task solution”; \$2,000; York University Faculty of Arts Research Grant. |
| 2001-05 | “Mental capacity assessment in school children: Construct validity, task instructions, and detection of latent giftedness”; \$100,000; Social Sciences and Humanities Research Council of Canada (SSHRC) Standard Research Grant; with J. Pascual-Leone (PI). |
| 2005-2006 | “Development of mathematical reasoning: The role of mental attention and executive functions”; \$3,000; York University Faculty of Arts Research Grant. |
| 2005-2006 | “Cross-cultural study of attentional-capacity, giftedness, and math disability in children”; \$7,165; Sabbatical Leave Fellowship Fund; York University. |
| 2004 | SSHRC Conference Travel Grant, \$850 (ISSBD, Ghent, Belgium). |
| 2001-02 | “Executive processes and mental attention in children with language impairment”; \$2,500; York University Faculty of Arts Research Grant. |
| 1999-2000 | “Mental attentional measurement in exceptional and mainstream populations”; \$120,000; SSHRC Standard Research Grant; with J. Pascual-Leone (PI). |

PUBLICATIONS:**Book:**

Pascual-Leone, J., & Johnson, J. M. (2021). *The working mind: Meaning and mental attention in human development*. Cambridge, MA: MIT Press.

Book Chapters:

- Pascual-Leone, J. Escobar, E. M. R., & Johnson, J. (2017). Logic: Development of logical operations. In *Reference Module in Neuroscience and Biobehavioral Psychology*. Amsterdam: Elsevier.
- Pascual-Leone, J., & Johnson, J. (2017). Organismic causal models “from within” clarify developmental change and stages. In N. Budwig, E. Turiel, & P. Zelazo (Eds.), *New perspectives on human development* (pp. 67-87). Cambridge: Cambridge University Press.
- Pascual-Leone, J., Romero Escobar, E.M., & Johnson, J. (2012). Logic: Development of logical operations. In W. Hirstein (Ed.), *Encyclopedia of human behavior* (2nd ed., pp. 538-549). New York: Elsevier.
- Pascual-Leone, J., & Johnson, J. (2011). A developmental theory of mental attention: Its applications to measurement and task analysis. In P. Barrouillet & V. Gaillard (Eds.), *Cognitive development and working memory: A dialogue between neo-Piagetian and cognitive approaches* (pp. 13-46). New York: Psychology Press.
- Pascual-Leone, J., Johnson, J., & Agostino, A. (2010). Mental attention, multiplicative structures, and the causal problem of cognitive development. In M. Ferrari & L. Vuletic (Eds.), *Developmental interplay between mind, brain and education: Essays in honor of Robbie Case* (pp. 49-82). New York: Springer.
- Pascual-Leone, J., & Johnson, J. (2005). A dialectical constructivist view of developmental intelligence. In O. Wilhelm & R. Engle (Eds.), *Handbook of understanding and measuring intelligence* (pp. 177-201). Thousand Oaks, CA: Sage.
- Pascual-Leone, J., & Johnson, J. (2004). Affect, self-motivation, and cognitive development: A dialectical constructivist view. In D. Dai & R.S. Sternberg (Eds.), *Motivation, emotion, and cognition: Perspectives on intellectual development and functioning* (pp. 197-235). Mahwah, NJ: Erlbaum.
- Roncadin, C., Rich, J.B., Johnson, J., & Barnes, M. (2003). Contribution to section on normative data for supplementary verbal fluency measures. In I.S. Baron (Ed.), *Neurological evaluation of the child* (pp. 172-174). New York: Oxford University Press.
- Pascual-Leone, J., Johnson, J., Baskind, D., Dworsky, S., & Severtston, E. (2000). Culture-fair assessment and the processes of mental attention. In A. Kozulin & Y. Rand (Eds.), *Experience of mediated learning: An impact of Feuerstein's theory in education and psychology* (pp 191-214). New York: Pergamon Press.
- Pascual-Leone, J., & Johnson, J. (1999). A dialectical constructivist view of representation: Role of mental attention, executives, and symbols. In I. Sigel (Ed.), *Development of mental representation: Theories and applications* (pp. 169-200). Mahwah, NJ: Erlbaum.
- Johnson, J. (1991). Constructive processes in bilingualism and their cognitive growth effects. In E. Bialystok (Ed.), *Language processing in bilingual children* (pp. 193-221). New York: Cambridge University Press.
- Morra, S., Pascual-Leone, J., Johnson, J., & Baillargeon, R. (1991). Understanding spatial descriptions: Test of a mental-capacity model. In R.H. Logie & M. Denis (Eds.), *Mental images in human cognition* (pp. 241-254). New York: Elsevier.
- Pascual-Leone, J., & Johnson, J. (1991). The psychological unit and its role in task analysis: A

reinterpretation of object permanence. In M. Chandler & M. Chapman (Eds.), *Criteria for competence: Controversies in the conceptualization and assessment of children's abilities* (pp. 153-187). Hillsdale, NJ: Erlbaum.

Articles in Refereed Journals and Proceedings:

- Greenberg, L., Pascual-Leone, J., & Johnson, J. (2024). Schematic processing and emotional change: Implications for treatment. *New Ideas in Psychology*, 73, 101075.
<https://doi.org/10.1016/j.newideapsych.2024.101075>
- Johnson, J., Howard, S.J., & Pascual-Leone, J. (2024). Two attentional processes subserving working memory differentiate gifted and mainstream students. *Journal of Cognition*, 7(1): 47, pp. 1–14. doi: <https://doi.org/10.5334/joc.370>
- Arsalidou M., Pascual-Leone, J., Johnson, J., & Kotova, T. (2019). [The constructive operators of the working mind: A developmental account of mental-attentional capacity](#). *The Russian Journal of Cognitive Science*, 6(2), 44-55 (English version) 56-70 (Russian version).
- Kim, T.H.M., Pascual-Leone, J., Johnson, J., & Tamim, H. (2016). [The mental-attention Tai Chi effect with older adults](#). *BMC Psychology*, 4:29.
- Im-Bolter, N., Johnson, J., Ling, D., & Pascual-Leone, J. (2015). Inhibition: Mental control process or mental resource? *Journal of Cognition and Development*, 16, 666-681.
- Howard, S.J., Johnson, J., & Pascual-Leone, J. (2014). Clarifying inhibitory control: Diversity and development of attentional inhibition. *Cognitive Development*, 31, 1-21.
- Arsalidou, M., Pascual-Leone, J., Johnson, J., Morris, D., & Taylor, M. J. (2013). [A balancing act of the brain: Activations and deactivations driven by cognitive load](#). *Brain and Behavior*. doi: 10.1002/brb3.128
- Howard, S. J., Johnson, J., & Pascual-Leone, J. (2013). Measurement of mental attention: Assessing a cognitive component underlying performance on standardized intelligence tests. *Psychological Assessment and Test Modeling*, 55(3), 250-272.
- Balioussis, C., Johnson, J., & Pascual-Leone, J. (2012) Fluency and complexity in children's writing: The role of mental attention and executive function. *Rivista di Psicolinguistica Applicata / Journal of Applied Psycholinguistics*, 12, 33-45.
- Agostino, A., Johnson, J., & Pascual-Leone, J. (2010). Executive functions underlying multiplicative reasoning: Problem type matters. *Journal of Experimental Child Psychology*, 105, 286-305.
- Arsalidou, M., Pascual-Leone, J., & Johnson, J. (2010). Misleading cues improve developmental assessment of attentional capacity: The colour matching task. *Cognitive Development*, 25, 262-277.
- Im-Bolter, N., Johnson, J., & Pascual-Leone, J. (2006). Processing limitation in children with specific language impairment: The role of executive function. *Child Development*, 77, 1822-1841.
- Johnson, J., Im-Bolter, N., & Pascual-Leone, J. (2003). Development of mental attention in gifted and mainstream children: The role of mental capacity, inhibition, and speed of processing. *Child Development*, 74, 1594-1614.
- Johnson, J., Prior, S., & Artuso, M. (2000). Field dependence as a factor in second language communicative production. *Language Learning*, 50, 529-567.
- Johnson, J. (1996). Metaphor interpretations by second language learners: Children and adults. *Canadian Modern Language Review*, 53, 217-239.
- Johnson, J., & Rosano, T. (1993). Relation of cognitive style to metaphor interpretation and second language proficiency. *Applied Psycholinguistics*, 14, 159-175.
- Johnson, J., & Kane, K. (1992). Developmental and task factors in Logo programming. *Journal of Educational Computing Research*, 8, 229-253.

- Johnson, J. (1991). Developmental versus language-based factors in metaphor interpretation. *Journal of Educational Psychology*, 83, 470-483.
- Morra, S., Pascual-Leone, J., Johnson, J., & Baillargeon, R. (1990). Understanding spatial descriptions: Experimental test of a model based on the theory of constructive operators. In R. Logie (Ed.), *Images in cognition: Proceedings of the Third European Workshop on Imagery and Cognition* (pp. 95-99). Aberdeen, Scotland: University of Aberdeen.
- Johnson, J. (1989). Factors related to cross-language transfer and metaphor interpretation in bilingual children. *Applied Psycholinguistics*, 10, 157-177.
- Johnson, J., Fabian, V., & Pascual-Leone, J. (1989). Quantitative hardware-stages that constrain language development. *Human Development*, 32, 245-271.
- Johnson, J., & Pascual-Leone, J. (1989). Developmental levels of processing in metaphor interpretation. *Journal of Experimental Child Psychology*, 48, 1-31.
- Johnson, J., & Pascual-Leone, J. (1989). Quantitative hardware-stages that constrain language development: Reply to A. Karmiloff-Smith. *Human Development*, 32, 276-278.
- Johnson, J. (1984). Levels of processing in metaphor comprehension. In *Proceedings of the Sixth Annual Conference of the Cognitive Science Society* (pp. 193-197). Mahwah, NJ: Erlbaum.
- Pascual-Leone, J., Johnson, J., Goodman, D., Hameluck, D., & Theodor, L. (1981). I-interruption effects in backward pattern masking: The neglected role of fixation stimuli. In *Proceedings of the Third Annual Conference of the Cognitive Science Society* (pp. 320-322). Mahwah, NJ: Erlbaum.

Invited Addresses and Colloquia:

- Pascual-Leone, J., & Johnson, J. (2023, June). *Esquemas y operadores: Una explicación posible de la mente/Schemes and operators: A possible explication of the mind*. Invited address CIPE 2023, 11th International Conference on Psychology and Education, Valencia, Spain.
- Johnson, J., Agostino, A., & Pascual-Leone, J. (2007, October). Mental attention and executive processes in children's mathematical problem solving. In S. Morra & M. Passolunghi (Convenors), *Memoria e apprendimento matematico*, invited symposium Associazione Italiano per la Ricerca e l'Intervento nella Psicopatologia dell'Apprendimento (AIRIPA), Belluno, Italy.
- Johnson, J. (2007, February). *Mental capacity constraints on children's mathematical reasoning*. Colloquium, Developmental and Cognitive Processes series, Psychology Department, York University.
- Johnson, J. (2006, April). *Solving multiplication word problems: The role of mental attention*. Colloquium, Psychology Department, University of Trieste, Trieste, Italy.
- Johnson, J. (2001, August). *Solving multiplication problems: The role of mental attention*. Colloquium, School of Psychology, Pontificia Universidad Catolica de Chile, Santiago, Chile.
- Johnson, J. (2001, August). *Mental-attentional measurement of Deaf children: Can executive training be used as a control in assessment?* Colloquium, School of Psychology, Pontificia Universidad Catolica de Chile, Santiago, Chile.
- Johnson, J. (2000, May). *Central inhibitory processes in children and adults: Are they one or many?* Colloquium, Department of Developmental Psychology, University of Amsterdam, the Netherlands.
- Johnson, J. (April, 1999). *Testing theories of development in gifted children: Speed of processing, inhibition, and mental attention*. Colloquium, Cognitive Science group, Psychology Department, McMaster University, Hamilton, Ontario.

- Pascual-Leone, J., & Johnson, J. (1999, June). Process-organismic factors in developmental task analysis: A demonstration by contrasted experimental models. Paper presented in J. Johnson (Chair), *Developmental task analysis: New methods and results*, invited symposium presented at the meetings of the Jean Piaget Society, Mexico City, Mexico.
- Pascual-Leone, J., & Johnson, J. (1998). Cognition, intelligence, and the nature of giftedness. Paper given in invited symposium *Cognition and intelligence*. Congresso Internacional Sobre Superdotacao (International Congress on Giftedness), Brasilia, Brazil.
- Johnson, J. (1994, March). *The development of multiplicative reasoning*. Colloquium, Cognitive Development Research Group, Carnegie Mellon University, Pittsburgh.
- Johnson, J. (1994, April). *Field dependence as a factor in second-language communicative production*. Colloquium. Second Language Acquisition Group, Carnegie Mellon University, Pittsburgh.
- Johnson, J. (1994, October). *Connectionist modeling of first and second language processing*. Colloquium, Developmental Seminar series, Psychology Department, York University.
- Johnson, J. (1993, November). *Developmental- and individual differences in metaphor comprehension*. Colloquium, Pediatric Neuropsychiatry Unit, University of Rome, Italy.
- Johnson, J. (1986, April). *The development of metaphor interpretation in majority- and minority-language children*. Colloquium, Modern Language Centre, Ontario Institute for Studies in Education, University of Toronto.
- Johnson, J. (1986, November). *Development of metaphor comprehension in children's first and second languages*. Colloquium, Cognitive Science Group, York University.
- Johnson, J. (1985, March). *Developmental levels of processing in metaphor comprehension*. Colloquium, Modern Language Centre, Ontario Institute for Studies in Education, University of Toronto.
- Johnson, J. (1984, January). *Developmental levels of processing in metaphor comprehension*. Colloquium, Centre for Applied Cognitive Science and the Department of Applied Psychology, Ontario Institute for Studies in Education, University of Toronto.
- Johnson, J. (1983, April). *Level of processing and mental-attentional demand in metaphor comprehension: Their measurement and developmental validation*. Colloquium, Cognitive Science Program, University of California, Berkeley.

Refereed conference papers (career total 81):

- Johnson, J., Kristen, I., Giuliano, M., & Pascual-Leone, J. (2024, June). Language factors in measurement of working memory capacity. In S. Morra (Organizer), *Working memory and executive function assessment: Theoretical and methodological problems*, Symposium presented at the meetings of the Jean Piaget Society, Toronto, ON.
- Giuliano, M., Johnson, J., & Pascual-Leone, J. (2018, May). *Organismic brain arousal meditation used to improve cognitive performance*. Poster presented at Development 2018: A Canadian Conference on Developmental Psychology, Brock University, St. Catharines, ON.
- Pascual-Leone, J., & Johnson, J. (2018, May). Fundamental measurement of mental-attentional capacity. In J. Johnson (Organizer), *Mental capacity constraints on cognition: Studies from the Theory of Constructive Operators*, Symposium presented at Development 2018: A Canadian Conference on Developmental Psychology, Brock University, St. Catharines, ON.
- Pascual-Leone, J., Lee, C., & Johnson, J. (2018, May). Mental attention as a developmental factor in fraction problem solving. In S. Morra, M. Arsalidou, & J. Johnson (Organizers), *Task complexity and task analysis: Neo-Piagetian perspectives in cognitive modeling*. Symposium presented at the meetings of the Jean Piaget Society, Amsterdam, NL

- Romero Escobar, M., Johnson, J. & Pascual-Leone, J. (2018, July). *IRT parameters and developmental cognitive capacity: A vignette in multi-source data and item analysis in R*. Paper presented at the 11th Conference of The International Test Commission, Montreal, Canada.
- Agostino, A., Johnson, J., Im-Bolter, N., Walker, E., & Pascual-Leone, J. (2017, May). *Multiplication reasoning abilities and the role of mental attention*. Poster presented at the meetings of the Association for Psychological Science, Boston, MA.
- Arsalidou, M., Pascual-Leone, J., & Johnson, J. (2016, Jan.). *Quantifying cognitive limitations behaviourally and with neuroimaging*. Poster presented at the Budapest CEU Conference on Cognitive Development, Budapest, Hungary.
- Johnson, J., Pascual-Leone, J., Giuliano, M., Kumar, G., Barker, R., & Labrish, C. (2016, June). *Longitudinal growth of mental-attentional capacity*. Poster presented at the meetings of the Jean Piaget Society, Chicago, IL.
- Arsalidou, M., Pascual-Leone, J., & Johnson, J. (2015, June). *Developmental and neuroimaging evidence on attentional capacity across domains*. Poster presented at the meetings of the Jean Piaget Society, Toronto, ON.
- Pascual-Leone, J., & Johnson, J. (2015, June). Scale invariance in the measurement of mental-attentional capacity. In J. Johnson & J. Pascual-Leone (Organizers), *Mental-attentional (M-) capacity: Improving measurement of executive attention and working memory*. Symposium presented at the meetings of the Jean Piaget Society, Toronto, ON.
- Arsalidou, M., Pascual-Leone, J., Johnson, J., (2014, Dec.). Quantitative assessment of working memory capacity across development. Poster presented at workshop on Cognitive Control, Communication and Perception (CCCP), Moscow, Russia.
- Giuliano, M., Johnson J., & Pascual-Leone, J. (2015, June). *Does Spanish word order enhance performance on a direction following task?* Poster presented at the meetings of the Jean Piaget Society, Toronto, ON.
- Giuliano, M., Lee, C., Johnson J., & Pascual-Leone, J. (2014, May). *Cognitive predictors of performance in fractions*. Poster presented at Development 2014: A Canadian Conference on Developmental Psychology, Ottawa, ON.
- Giuliano, M., Lee, C., Johnson J., & Pascual-Leone, J. (2014, May). *M-Capacity and math fluency uniquely predict adults' understanding of fraction problems*. Poster presented at the meetings of the Association for Psychological Science, San Francisco, CA.
- Johnson, J., Kristen, I.T., & Pascual-Leone, J. (2014, May). *Language factors in measurement of working memory capacity*. Poster presented at the meetings of the Jean Piaget Society, San Francisco, CA.
- Howard, S.J., Johnson, J. & Pascual-Leone, J. (2013, April). *Clarifying inhibitory control: Investigating the structure and development of inhibition*. Poster presented at the meetings of the Society for Research in Child Development, Seattle, WA.

- Howard, S. J., Johnson, J., & Pascual-Leone, J. (2013, April). *Factors underlying cognitive giftedness: Mental versus perceptual attention*. Roundtable session presented at the meetings of the American Educational Research Association, San Francisco, CA.
- Kim, T., Tamim, H., Johnson, J., & Pascual-Leone, J. (2013, June). Tai Chi for older adults: Improving cognitive performance. Poster presented at the meetings of the Canadian Society for Epidemiology and Biostatistics, St. John's, NL.
- Pascual-Leone, J., & Johnson, J. (2013, June). Organismic determinants of mental/executive attention explain the existence of stages. In H. Mueller (Organizer), *How should we think about developmental stages?* Symposium presented at meetings of the Jean Piaget Society, Chicago, IL.
- Hitzig, S., Johnson, J., & Pascual-Leone, J. (2013, October). The effects of age and time of day on mental-attentional capacity and executive function. Paper presented at the meetings of the Canadian Association on Gerontology, Halifax, NS.
- Lee, C., & Johnson, J. (2012, June). *Fraction problem solving: Mental attention and executive functions as developmental factors*. Poster presented at the meetings of the Jean Piaget Society, Toronto, ON.
- Pascual-Leone, J., & Johnson, J. (2012, February). *Scale invariance in the measurement of mental-attentional capacity*. Poster presented at SRCD Themed Meeting: Developmental Methodology, Tampa, FL.
- Johnson, J., Ko, W., & Pascual-Leone, J. (2011, March). *Assessing reliability and validity of attentional capacity and executive function tasks, over a three-year longitudinal span*. Poster presented at the meetings of the Society for Research in Child Development, Montreal, PQ.
- Howard, S.J., Johnson, J., & Pascual-Leone, J. (2010, May). *Attentional processes subserving working memory: Mental versus perceptual attention*. Poster presented at Development 2010: A Canadian Conference on Developmental Psychology, Ottawa, ON.
- Johnson, J., Ko, W., & Pascual-Leone, J. (2010, May). *Longitudinal stability of capacity and executive function scores*. Poster presented at Development 2010: A Canadian Conference on Developmental Psychology, Ottawa, ON.
- Johnson, J., Lee, C., Hagan, C., & Pascual-Leone, J. (May 2010). *Mental attention predicts standardized ability scores at two time points*. Poster presented at Development 2010: A Canadian Conference on Developmental Psychology, Ottawa, ON.
- Romero Escobar, E.M., Johnson, J., & Pascual-Leone, J. (2010, May). *Latent variable modeling of the relationship between contextual variables and cognitive developmental tasks in a culturally diverse child sample*. Poster presented at Development 2010: A Canadian Conference on Developmental Psychology, Ottawa, ON.
- Hitzig, S., Johnson, J., & Pascual-Leone, J. (August, 2009). *Is executive functioning in adults subject to the synchrony effect?* Poster presented at the meetings of the American Psychological Association, Toronto, ON.
- Johnson, J., Howard, S., & Pascual-Leone, J. (April, 2009). *Factors underlying cognitive giftedness: Mental vs. perceptual attention*. Poster presented at the meetings of the Society for Research in Child Development, Denver, CO.
- Johnson, J., Lee, C., & Pascual-Leone, J. (August, 2009). *Mental attention predicts psychometric intelligence in a culture-fair manner*. Poster presented at the meetings of the American Psychological Association, Toronto, ON.
- Arsalidou, M., Pascual-Leone, J., Johnson, J., & Taylor, M.J. (2008, June). *Neural responses to a visuospatial task with six levels of mental demand*. Poster presented at the 18th annual meeting of the Canadian Society for Brain Behaviour and Cognitive Science, London, ON, Canada.

- Arsalidou, M., Pascual-Leone, J., & Johnson, J. (2008, April). *Measuring age-bound changes in mental capacity: The role of misleading cues*. Poster presented at meetings of the Cognitive Neuroscience Society, San Francisco, CA.
- Balioussis, C., J. Pascual-Leone, J., & Johnson, J. (2008, November). *Playground injuries: Accounting for cognitive developmental factors*. Poster presented at the Ontario Injury Prevention Conference, Toronto, ON.
- Johnson, J., Lee, C., Pascual-Leone, J. (2008, July). *Is mental attention a causal mechanism different from executive processes?* Poster presented at the Jean Piaget Archives Advanced Course, Geneva, Switzerland.
- Johnson, J., Romero Escobar, E.M., & Pascual-Leone, J. (2008, November). *Exploring culture-fair assessment of cognitive abilities of immigrant children and children of immigrant parents*. Poster presented at On New Shores: International Forum on Issues of Immigrant and Refugee Children, Youth, and Families Across the World. University of Guelph, Guelph, ON.
- Agostino, A., Johnson, J., & Pascual-Leone, J. (2007, March). *Development of mathematical reasoning: Role of mental-attentional capacity and executive processes*. Poster presented at meetings of the Society for Research in Child Development, Boston, MA.
- Agostino, A., Johnson, J., & Pascual-Leone, J. (2007, March). *Development of reading comprehension: Role of mental-attentional capacity and executive processes*. Poster presented at meetings of the Society for Research in Child Development, Boston, MA.
- Arsalidou, M., Pascual-Leone, J., & Johnson, J. (2007, October). *The color matching task: A new paradigm to assess mental-attention*. Poster presented at the 5th biennial meeting of the Cognitive Development Society, Santa Fe, New Mexico.
- Balioussis, C., Pascual-Leone, J., & Johnson, J. (2007, March). *Rethinking injury: A cognitive developmental approach to creating strategies*. Lifesavers: National Conference on Highway Safety Priorities, Chicago, IL.
- Balioussis, C., Pascual-Leone, J., & Johnson, J. (2007, June). *Reducing road injuries: A cognitive developmental approach*. Ontario Injury Prevention Conference, Thunder Bay, ON.
- Hitzig, S.L., Johnson, J., Pascual-Leone, J., & Calvo, A. (2007, November). *Time of day and age effects on executive functioning: Inhibition, updating, and switching*. Poster presented at the Canadian Association on Gerontology (CAG) 36th Annual Scientific and Educational Meeting, Calgary, AB.
- Pascual-Leone, J., Johnson, J., & Romero Escobar, E.M. (2007, June). *Fundamental measurement using organismic theories: Developmental quantitative models of mental attention*. In J. Boom (Organizer), *Modeling development of higher cognitive tasks*, Symposium, Jean Piaget Society: Developmental Social Cognitive Neuroscience, Amsterdam.
- Agostino, A., Johnson, J., & Pascual-Leone, J. (2006, August). *The role of M-capacity and executive processes in mathematical cognition*. Cogito, Montreal, PQ.
- Johnson, J., Pascual-Leone, J., & Romero Escobar, E.M. (2006, June). *Theory-based quantitative models of capacity constraints in a mental attention memory task*. Third European Working Memory Symposium, Genoa, Italy.
- Pascual-Leone, J., Romero Escobar, E.M., Johnson, J., & Morra, S. (2006, June). *Mathematical modeling of free recall in the mental attention memory task*. Psychometric Society, Montreal, PQ.
- Agostino, A., Im-Bolter, N., Johnson, J., & Pascual-Leone, J. (2005, April). *Strategic thinking: The development of children's multiplication strategy use*. Society for Research in Child Development, Atlanta, GA.

- Im-Bolter, N., Johnson, J., & Pascual-Leone, J. (2005, April). *Inhibition: mental control process or mental resource?* Society for Research in Child Development, Atlanta, GA.
- Johnson, J., Pascual-Leone, J., & Balioussis, C. (2005, April). *Effect of instructions on developmental patterns in motor task performance.* Society for Research in Child Development, Atlanta, GA.
- Pascual-Leone, J., Johnson, J., Calvo, A., & Verrilli, E. (2005, August). *Can latent giftedness be indexed by mental-attentional capacity?* 16th Biennial World Conference of the World Council for Gifted and Talented Children, New Orleans, LA.
- Pascual-Leone, J., Johnson, J., Verrilli, E., & Calvo, A. (2005, April). *In search of latent giftedness: Do M-capacity measures detect it?* Society for Research in Child Development, Atlanta, GA.
- Cunning, S., Johnson, J., & Pascual-Leone, J. (2004, July). *Following directions: Another route to processing limits in language.* In S. Morra & J. Johnson (Conveners), *Verbal working memory and cognitive development.* Symposium, International Society for the Study of Behavioral Development, Ghent, Belgium.
- Im-Bolter, N., Johnson, J., & Pascual-Leone, J. (2004, June). *Mental attention and executive function in children with language impairment.* Symposium in Research in Child Language Disorders, Madison, WI.
- Johnson, J., Pascual-Leone, J., Im-Bolter, N., & Verrilli, E. (2004, July). *Executive functions and mental attention in cognitively gifted children.* International Society for the Study of Behavioral Development, Ghent, Belgium.
- Pascual-Leone, J., Johnson, J., & Calvo, A. (2004, June). *Can mental attentional capacity predict the Canadian Cognitive Abilities score of school children?* Jean Piaget Society, Toronto, Ontario.
- Pascual-Leone, J., Johnson, J., Bauer, S., & Agostino, A. (2002, August). *How much does arithmetic proficiency in the school years owe to mental attentional capacity?* International Society for the Study of Behavioral Development, Ottawa, Ontario.
- Cunning, S., Johnson, J., & Pascual-Leone, J. (2001, June). *Direction-following in linguistically diverse groups: A means for assessing mental-attentional capacity.* American Psychological Society, Toronto.
- Johnson, J., Pascual-Leone, J., & Agostino, A. (2001, April). *Solving multiplication problems: The role of mental attention.* Society for Research in Child Development, Minneapolis, MN.
- Pascual-Leone, J., Johnson, J., Bauer, S., & Cunning, S. (2000, July). *Mental attention measurement in Deaf children: Can executive training be used as a control in assessment?* International Society for the Study of Behavioral Development, Beijing, China.
- Cunning, S., Johnson, J., Pascual-Leone, J., & Polak, E. (2000, May). *Ability to follow directions: Assessing mental capacity in the linguistic domain.* Development 2000: A Conference on Developmental psychology, University of Waterloo, Waterloo, Ontario.
- Johnson, J., Pascual-Leone, J., & Im, N. (1999, April). *Testing theories of development in gifted children: Speed of processing, inhibition, and mental attention.* Society for Research in Child Development, Albuquerque, NM.
- Pascual-Leone, J., Johnson, J., Baskind, S., & Dworsky, S. (1998, August). *Misleading situations, active inhibition, and the fair assessment of mental capacity.* Canadian Society for Brain, Behaviour, and Cognitive Science, Ottawa, Ontario.
- Pascual-Leone, J., Johnson, J., Baskind, S., & Dworsky, S. (1997, April). *Individual differences on measures of mental-attentional capacity.* Society for Research in Child Development, Washington, D.C.

- Khan, I., Pascual-Leone, J., & Johnson, J. (1996, June). *Temporal conceptual structures in children and adults*. International Congress of Psychology, Montreal, PQ.
- Severtson, E., Johnson, J., & Pascual-Leone, J. (1995, April). *(Mis)conceptions of area in children and field dependent adults*. Society for Research in Child Development, Indianapolis, IN.
- Johnson, J., & Artuso, M. (1993, March). *Understanding of place-value in mathematics: A cognitive-developmental view*. Society for Research in Child Development, New Orleans, LA.
- Pascual-Leone, J., Johnson, J., Artuso, M., & Severtson, E. (1993, July). Intuitive reasoning in elementary school arithmetics: A process analysis of number as measurement in children and field dependent adults. In H. Reese & M. Bullock (Chairs), *Reasoning and problem solving: Results from five research approaches*. International Society for the Study of Behavioral Development, Recife, Brazil.
- Johnson, J., Prior, S., & Artuso, M. (1992, June). *Metaphor interpretation and cognitive style in adult second language learners*. Canadian Psychological Association, Quebec City, PQ.
- Arnold, C., & Johnson, J. (1991, April). *Cognitive and developmental factors in learning Logo graphics programming*. Society for Research in Child Development, Seattle, WA.
- Johnson, J., & Prior, S. (1991, April). *Interactive patterns in verbal imitation*. Society for Research in Child Development, Seattle, WA.
- Prior, S., & Johnson, J. (1991, June). *A longitudinal study of verbal imitation, MLU, and speech style*. Canadian Psychological Association, Calgary, Alberta.
- Johnson, J., & Arnold, C. (1990, May). *Cognitive constraints on children's understanding of the turn component of LOGO graphics programming*. Canadian Psychological Association, Ottawa, Ontario.
- Morra, S., Pascual-Leone, J., Johnson, J., & Baillargeon, R. (1990, August). *Understanding spatial descriptions: Test of a mental-capacity model*. Third European Workshop on Imagery and Cognition, Aberdeen, Scotland.
- Johnson, J., & Kane, K. (1989, April). *Developmental and task factors in computer problem solving*. Society for Research in Child Development, Kansas City, MO.
- Johnson, J., & Arnold, C. (1989, June). *Task effects in assessment of children's metaphor comprehension*. Canadian Psychological Association, Halifax, Nova Scotia.
- Pascual-Leone, J., Johnson, J., & Benson, N. (1989, July). Mental-capacity constraints on symbolic processing: The onset of human language. In J. Johnson (Chair), *Mental capacity constraints on cognition: Studies from the Theory of Constructive Operators*. Symposium, International Society for the Study of Behavioural Development, Jyväskylä, Finland.
- Johnson, J. (1986, May). *The development of metaphor comprehension in first- and second-language learners*. University of Waterloo Conference on Child Development, Waterloo, Ontario.
- Johnson, J. (1986, October). *The developmental growth of metaphor comprehension in children's first and second language*. Boston University Conference on Language Development, Boston, MA.
- Johnson, J. (1983, August). A process-structuralist analysis of the development of metaphor comprehension. In R.R. Hoffman (Chair), *Metaphor: Recent directions in research*. Symposium, American Psychological Association, Anaheim, CA.
- Johnson, J., & Pascual-Leone, J. (1982, May). *A combinatorial analysis of the development of metaphor comprehension*. University of Waterloo Conference on Child Development, Waterloo, Ontario.
- Johnson, J., & Pascual-Leone, J. (1981, August). Metaphoric processing in children and adults:

A combinatorial analysis. In H.R. Pollio (Chair), *Metaphor: Recent directions in research*. Symposium, American Psychological Association, Los Angeles, CA.
Johnson, J., & Pascual-Leone, J. (1980, September). *Combinatorial analysis of metaphoric processing in children*. American Psychological Association, Montreal, PQ.

GRADUATE SUPERVISION:

Completed MA supervisees: 12

Completed PhD supervisees: 7