

CURRICULUM VITAE

Summer 2017

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DEGREES:

1969 Ph.D. Psychology (University of Geneva, Professor J. Piaget)
1964 M.A. (Licence) in Psychology (University of Geneva)
1963 Diploma in Experimental Child Psychology (Institut J.J. Rousseau, University of Geneva, Switzerland)
1960 Specialty Diploma in Psychiatry and Neurology (C.S. Valdecilla, University of Valladolid, Spain)
1957 M.D. (Faculty of Medicine, University of Valencia)
1950 B.A. (Baccalaureate, University of Valencia, Spain)

EMPLOYMENT HISTORY & PROFESSIONAL EXPERIENCE:

2001-present Professor Emeritus and Senior Scholar, Co-Director of Developmental Processes Laboratory, Department of Psychology, York University.
1974-2006 Visiting professorships: University of California, Berkeley; Van Leer Jerusalem Foundation, Jerusalem, Israel; Universite de Paris V, Renee Descartes; Universite de Geneve, Switzerland; University of Natal, Durban, South Africa; University of Venezuela, Caracas; Universidad Javeriana, Bogota, Columbia; Universidad de Valle, Cali, Columbia; Universidad Autonoma de Madrid, Spain; Universidad de Manizales, Colombia; University of Belgrano, Buenos Aires, Argentina; Universidad Nacional de San Luis, Argentina; University of Huelva, Spain; University of Cadiz, Spain; Pontifical Catholic University of Chile; University of Genoa, Italy.
1972-01 Professor, Department of Psychology, York University, Toronto.
1968-72 Associate Professor, Department of Psychology, York University, Toronto.
1965-68 Assistant Professor in Psychology, University of British Columbia.
1958-60 Specialist-resident in Psychiatry and Neurology, Medical Institute C.S. Valdecilla, University Valladolid.
1957-58 Assistant M.D. in Clinical Psychiatry, "Padre Joffre" Institute, County Psychiatric Hospital, Valencia.
1957-58 Assistant Medical Officer in Psychosomatic and Internal Medicine, Air Force Central Clinic, Valencia.
1955-57 Internship in Clinical Pathology, Faculty of Medicine, University of Valencia.

ACADEMIC HONOURS:

- 2008 Fellow, Calumet College, York University.
 2006 **Doctor Honoris Causa in Psychology, University of Cyprus.**
 1993-94 International Honorary Member, Venezuelan Society of School Psychology
 1979 Fellow Scholar of the Van Leer Jerusalem Foundation
 1975 Fellow of the Canadian Psychological Association
 1964-65 Post-doctoral Fellowship, Foundations' Fund for Research in Psychiatry (New Haven, Connecticut, U.S.A.).
 1963-64 Exchange Fellowship, University of Geneva, Switzerland.
 1962-63 Fellowship, University of Geneva, Switzerland.
 1961-64 Fellowship, Fundacion Juan March (Madrid) for advanced studies abroad.

CONSULTING AND PROFESSIONAL COMMITTEES:

- 1993-94 Member of Premier's Council on Economic Renewal: Working Group on Setting Standards and Measuring Progress, Government of Ontario.
 1987-92 Consultant to and co-investigator with Dr. A. de Ribaupierre (University Of Geneva). Project: Etude longitudinale de la capacite mentale chez l'enfant de 4 a 10 ans: Une investigation neo-Piagetienne. Funded by Fond National Suisse de la Recherche Scientifique.
 1986 Member of Consultative Committee on Assessment and Placement of (Minority) Students for Educational Equity, Ministry of Education, Government of Ontario.
 1985 Consultant to researchers and administrators at University of Witwatersrand, Johannesburg, S. Africa, regarding assessment of culturally deprived students.
 1981-84 Consultant to Drs. A. de Ribaupierre and L. Rieben, Professors of Education and Psychology, University of Geneva, on project to clarify individual differences found in performance on Piagetian tasks.
 1975-76 Consultant on Multilingual Assessment Project of the Stockton Unified School District and U.S. Office of Education (Title VII) - with the Northwest Regional Educational Laboratory and Westinghouse Corporation as subcontractors.
 1974-1977 Member of International Advisory Board, Jean Piaget Society.
 1974 Member of Special Task-force on Reading Skills and Eye Movement Technology, National Institute of Education, U.S.A. (Chairman, S. Gibbon).
 1972-74 Member of Advisory Board on Children's Educational Television, Bilingual Children's Television, Inc., Oakland, California.

MEMBERSHIP ON EDITORIAL BOARDS:

- 2004-present *Journal of Cognitive Education and Psychology*
 1996-1999 *Infancia y Aprendizaje* (Barcelona, Spain)
 1994-present *Journal of Adult Development*
 1994-2003 *Revista Argentina de Psicoterapia* (Buenos Aires)
 1991-1999 *Substratum: Revista Internacional de Psicologia y Educacion* (Madrid, Spain)

1987-99 *Interamerican Journal of Psychology*
 1980-88 *Developmental Review*

RESEARCH INTERESTS:

Developmental and learning processes throughout the life-span. Logical methods of process and task analysis. Constructive epistemology. Cognitive processes and their neuropsychological foundations. Endogenous Brain Evoked Potentials and fMRI. Human differences in intelligence, cognition, learning, affect, motivation, and self development. Methods of human change (e.g., educational psychology, meditation techniques, psychotherapy, behaviour modification).

RECENT RESEARCH FUNDING:

2014-2019 “Developmental involvement of prefrontal cortex and working memory in mathematical problem solving”; \$125,000; National Science & Engineering Research Council of Canada; Co-investigator (PI: Marie Arsalidou).

2010-2013 “Measurement of developmental intelligence via mental attention: Comparison with other approaches, task-analytical modelling, and longitudinal testing”; \$113,064; Social Sciences & Humanities Research Council of Canada (SSHRC).

2006-2009 “Executive Processes and Mental Attention in Cognitively Gifted and Mainstream Children”; \$94,649; SSHRC.

2001-05 “Mental capacity assessment in school children: Construct validity, task instructions, and detection of latent giftedness”; \$100,000; SSHRC.

1997-2001 "Mental Capacity Measurement in Exceptional and Mainstream Populations: A Study of Moderator Variables"; \$120,000; SSHRC.

1994-1997 "Mental Capacity Measurement in Exceptional Populations: Problems and their Developmental Investigation"; \$120,000; SSHRC.

1991-1994 "Standardization and Validation of Culture-Fair Mental Capacity Tests"; \$86,400; SSHRC.

1988-1991 "Standardization and Computer Implementation of Mental Capacity Testing"; \$55,500; SSHRC.

1989...2000 Social Sciences and Humanities Research Council; Travel and Small Grants.

1985 Equipment grant (\$100,000) from Cadwell Laboratories, Inc., Kennewick, WA, in the form of a Cadwell 8400 Brain-Evoked-Potentials Analyzer.

1981...1985 National Sciences & Engineering Research Council of Canada Operating Grants.

1981...1990 Grants from President's NSERC Fund; York University

1981...1987 York University Faculty of Arts Research Grants.

PUBLICATIONS:**Books (2):**

- 1976 DeAvila, E.A., Havassy, B., with Pascual-Leone, J. *Mexican-American school children: A neo-Piagetian approach*. Washington, DC: Georgetown University Press.
- 1989 Samuda, R., Kong, S., Cummins, J., Pascual-Leone, J., & Lewis, J. *Assessment and placement of minority students*. Toronto: Hogrefe International.

Book Chapters (44):

- 1966 Pascual-Leone, J. L'anticipation de l'ordre dans un mouvement cyclique. Reported in J. Piaget & B. Inhelder, *L'image mentale chez l'enfant* (pp. 402-407). Paris: P.U.F.
- 1966 Pascual-Leone, J. La reproduction gestuelle de trajets lumineux paralleles a une droite. Reported in J. Piaget & B. Inhelder, *L'image mentale chez l'enfant* (pp. 45-47). Paris: P.U.F.
- 1966 Pascual Leone, J. L'anticipation des positions de cinq elements sur un disque en rotation. Reported in J. Piaget & B. Inhelder, *L'image mentale chez l'enfant* (pp. 178-181). Paris: P.U.F.
- 1976 Pascual-Leone, J. A view of cognition from a formalist's perspective. In K.F. Riegel & J. Meacham (Eds.), *The developing individual in a changing world* (pp. 89-100). The Hague: Mouton.
- 1978 Pascual-Leone, J., Goodman, D.R., Ammon, P., & Subelman, I. Piagetian theory and neoPiagetian analysis as psychological guides in education. In J.M. Gallagher & J. Easley (Eds.), *Knowledge and development (Vol. 2): Piaget and education* (pp. 243-289). NY: Plenum.
- 1978 Pascual-Leone, J. La teoria de los operators constructivos. In J. Delval (Ed.), *Lecturas de Psicologia del niño (Vol. 1)* (pp. 208-227). Madrid: Alianza Editorial.
- 1979 de Ribaupierre, A., & Pascual-Leone, J. Formal operations and *M* power: A neo-Piagetian investigation. In D. Kuhn (Ed.), *Intellectual development beyond childhood* (pp. 1-43). San Francisco: Jossey-Bass.
- 1980 Pascual-Leone, J. Constructive problems for constructive theories: The current relevance of Piaget's work and a critique of information-processing simulation psychology. In R. Kluwe & H. Spada (Eds.), *Developmental models of thinking* (pp. 263-296). NY: Academic Press.
- 1981 Pascual-Leone, J. Probleme und theorien des konstruktiven denkens: Die heutige bedeutung Piagets und eine kritik der simulationstheorien der information sverarbeitung. In R.H. Kluwe & H. Spada (Eds.), *Studien zur denkentwicklung*. Bern, Switzerland: Verlag Hans Huber.
- 1983 Pascual-Leone, J. Growing into human maturity: Toward a metasubjective theory of adulthood stages. In P.B. Baltes & O.G. Brim (Eds.), *Life-span development and behavior* (Vol. 5) (pp. 117-156). NY: Academic Press.
- 1984 Pascual-Leone, J. Attention, dialectic, and mental effort: Towards an organismic theory of life stages. In M.L. Commons, F.A. Richards, & G. Armon (Eds.) *Beyond formal operations: Late adolescence and adult cognitive development* (pp. 182-215). NY: Praeger.

- 1984 Pascual-Leone, J. Problemas constructivos para teorías constructivas: La relevancia actual de la obra de Piaget y una crítica a la psicología basada en la simulación del procesamiento de información. In M. Carretero & J. García Madruga (Eds.), *Lecturas de psicología del pensamiento* (pp. 366-391). Madrid: Alianza Editorial.
- 1987 Pascual-Leone, J. Organismic processes for neo-Piagetian theories: A dialectical causal account of cognitive development. In A. Demetriou (Ed.), *The neo-Piagetian theories of cognitive development: Towards an integration* (pp. 531-569). Amsterdam: North-Holland.
- 1989 Pascual-Leone, J. An organismic process model of Witkin's field-dependence-independence. In T. Globerson & T. Zelniker (Eds.), *Cognitive style and cognitive development* (pp. 36-70). Norwood, NJ: Ablex.
- 1989 Pascual-Leone, J., & Ijaz, H. Mental capacity testing as a form of intellectual-developmental assessment. In R. Samuda, S. Kong, J. Cummins, J. Pascual-Leone, & J. Lewis. *Assessment and placement of minority students* (pp. 143-171). Toronto: Hogrefe International.
- 1990 Pascual-Leone, J. Reflections on life-span intelligence, consciousness and ego development. In C. Alexander & E. Langer (Eds.), *Higher stages of human development: Perspectives on adult growth* (pp. 258-285). New York: Oxford University Press.
- 1990 Pascual-Leone, J. An essay on wisdom: Toward organismic processes that make it possible. In R.J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 244-278). New York: Cambridge University Press.
- 1990 Morra, S., Pascual-Leone, J., Johnson, J., & Baillargeon, R. Understanding spatial descriptions: Experimental test of a model based on the theory of constructive operators. In R.H. Logie & M. Denis (Eds.), *Images in human cognition* (pp. 95-99). Amsterdam: Elsevier.
- 1991 Pascual-Leone, J. Emotions, development and psychotherapy: A dialectical constructivist perspective. In J. Safran & L. Greenberg (Eds.), *Emotion, psychotherapy and change* (pp. 302-335). New York: Guilford.
- 1991 Pascual-Leone, J., & Johnson, J. 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 assessment of children's abilities* (pp. 153-187). Hillsdale, NJ: Erlbaum.
- 1995 Pascual-Leone, J. Prologo. In F. Gonzalez Rey *Comunicacion personalidad y desarrollo*. Habana, Cuba: Editorial Pueblo y Educacion
- 1995 Greenberg, L., & Pascual-Leone, J. A dialectical constructivist approach to experiential change. In R. Neimeyer & M. Mahoney (Eds.), *Constructivism in psychotherapy* (pp. 169-191). Washington, DC: APA Press.
- 1997 Pascual-Leone, J. Metasubjective processes: The missing "lingua franca" of cognitive science. In D. Johnson & C. Erneling (Eds.), *The future of the cognitive revolution* (pp. 75-101). New York: Oxford University Press.
- 1997 Greenberg, L., & Pascual-Leone, J. Emotion in the creation of personal meaning. In M. Power & C. Brewin (Eds.), *The transformation of meaning in psychological therapies* (pp. 157-173). London: John Wiley.

- 1997 Pascual-Leone, J. Aprendizaje y desarrollo como factores dialecticos en el crecimiento cognitivo. In H.F. Ospina Serna & L. Lopez Moreno (Eds.), *Pedagogias constructivistas, pedagogias activas y desarrollo humano* (pp. 11-27). Bogota, Colombia: Cooperativa Editorial Magisterio.
- 1997 Pascual-Leone, J. Constructivismo dialectico como fundament epistemologico de la ciencia humana. In H.F. Ospina Serna & L. Lopez Moreno (Eds.), *Pedagogias constructivistas, pedagogias activas y desarrollo humano* (pp. 29-56). Bogota, Colombia: Cooperativa Editorial Magisterio.
- 1997 Pascual-Leone, J. Piaget, Vygotski, y la funcion del simbolo. In H.F. Ospina Serna & L. Lopez Moreno (Eds.), *Pedagogias constructivistas, pedagogias activas y desarrollo humano* (pp. 59-89). Bogota, Colombia: Cooperativa Editorial Magisterio.
- 1998 Pascual-Leone, J., & Irwin, R.R. Abstraction, the will, the self, and modes of learning in adulthood. In M.C. Smith & T. Pourchot (Eds.), *Adult learning and development: Perspectives from educational psychology* (pp. 35-66). Hillsdale, NJ: Erlbaum.
- 1998 Greenberg, L., & Pascual-Leone, J. Un enfoque constructivista dialectico del cambio vivencial. In R.A. Neimeyer & M.J. Mahoney (Comps.), *Constructivismo en psicoterapia*. Barcelona, Spain: Paidos.
- 1998 Esterelles, R., Pascual-Leone, A., Pascual-Leone, J., Tormos, J.M., Catro, J., & Prieto, J. La atencion desde una perspectiva neoPiagetiana. In J. Botella & V. Ponsoda (Eds.), *La atencion: Un enfoque multidisciplinario*. Valencia, Spain: Promolibro.
- 1999 Pascual-Leone, J., & Johnson, J. A dialectical constructivist view of representation: Role of mental attention, executives, and symbols. In I. E. Sigel (Ed.), *Development of mental representation: Theories and applications* (pp. 169-200). Mahwah, NJ: Erlbaum.
- 2000 Pascual-Leone, J., Johnson, J., Baskind, S., Dworsky, S., & Severtston, E. 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.
- 2004 Pascual-Leone, J., & Johnson, J. Affect, self-motivation, and cognitive development: A dialectical constructivist view. In D.Y. Dai & R.S. Sternberg (Eds.), *Motivation, emotion, and cognition: Integrative perspectives on intellectual functioning and development* (pp. 197-235). Mahwah, NJ: Erlbaum.
- 2005 Pascual-Leone, J., & Johnson, J. 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.
- 2010 Pascual-Leone, J., Johnson, J., & Agostino, A. 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.
- 2011 Pascual-Leone, J., Piaget as a pioneer of dialectical constructivism: Seeking dynamic processes for human science. In E. Marti & C. Rodriguez (Eds.), *After Piaget*. Edison, NJ: Transaction Publishers.
- 2011 Pascual-Leone, J., & Johnson, J. 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.
- 2012 Pascual-Leone, J. What is the *M*-capacity demand of car driving? A small essay on constructivist process/task analysis. In J. A. García Madruga, R. Kohen, C. del Barrio, I. Enesco, & J. Linaza, J. (Eds.), *Construyendo mentes. Ensayos en homenaje a Juan Delval (Constructing minds. Essays in honour of Juan Delval)*. Madrid: UNED.
- 2012 Pascual-Leone, J., Romero Escobar, E.M., & Johnson, J. Logic: Development of logical operations. In W. Hirstein (Ed.), *Encyclopedia of human behavior* (2nd ed.). New York: Elsevier.
- 2014 Pascual-Leone J. Dialectics. In T.Teo (Ed.), *Encyclopedia of critical psychology* (pp. 421-428). New York: SpringerReference.
- 2014 Pascual-Leone, A., Greenberg, L. S., & Pascual-Leone, J. (2014). Task analysis: New developments for programmatic research on the process of change. In W. Lutz & S. Knox (Eds.), *Quantitative and qualitative methods in psychotherapy research* (pp. 249-273). New York: Routledge.
- 2015 Pascual-Leone, J. Prólogo: Principios de constructivismo psicogenético. In L. M. Rodríguez-Salazar & Z. M. Nasr (Eds.), *Psicología para epistemólogos* (pp. xi-xv). Mexico City, Mexico: Corinter.
- 2017 Pascual-Leone, J. Escobar, E. M. R., & Johnson, J. Logic: Development of logical operations. In *Reference Module in Neuroscience and Biobehavioral Psychology*. Amsterdam: Elsevier.
- 2017 Pascual-Leone, J., & Johnson, J. Organismic causal models “from within” clarify developmental change and stages. In N. Budwig, E. Turiel, & P. Zelazo (Eds.), *New perspectives on human development*. Cambridge: Cambridge University Press.

Papers and Reviews in Refereed Journals and Proceedings (82):

- 1963 Pascual-Leone, J. Las relaciones entre afectividad e inteligencia segun J. Piaget. *Revista de Psicología General y Aplicada*, XVII(70), 1107-1127. (Madrid)
- 1966 Pascual-Leone, J., & Bovet, M.G. L'apprentissage de la quantification de l'inclusion et al theorie operatoire. *Acta Psychologica*, 25, 334-365.
- 1967 Pascual-Leone, J., & Bovet, M.G. L'apprentissage de la quantification de l'inclusion et la theorie operatoire. Partie II: Quelques resultats experimentaux. *Acta Psychologica*, 26, 64-74.
- 1969 Pascual-Leone, J., & Smith, J. The encoding and decoding of symbols by children: A new experimental paradigm and a neo-Piagetian model. *Journal of Experimental Child Psychology*, 8, 328-355.
- 1970 Pascual-Leone, J. A mathematical model for the transition rule in Piaget's developmental stages. *Acta Psychologica*, 32, 301-345.
- 1975 Case, R., & Pascual-Leone, J. Failure of conservation training of disadvantaged black teenagers: A neo-Piagetian approach. *Perceptual and Motor Skills*, 40, 545-546.
- 1976 Pascual-Leone, J. The forms of knowing in the psychological organism: Reflections on Royce and Rozenboom. *Philosophy of the Social Sciences*, 6, 175-181.

- 1976 Pascual-Leone, J. Metasubjective problems of constructive cognition: Forms of knowing and their psychological mechanism. *Canadian Psychological Review*, 17, 307.
- 1976 Pascual-Leone, J. On learning and development, Piagetian style: I. A reply to Lefebvre-Pinard. *Canadian Psychological Review*, 17, 270-288.
- 1976 Pascual-Leone, J. On learning and development, Piagetian style: II. A critical historical analysis of Geneva's research programme. *Canadian Psychological Review*, 17, 289-297.
- 1977 Pascual-Leone, J. Review of Klahr and Wallace's *Cognitive development, an information processing view*. *Child Development Abstracts and Bibliography*, 51(5,6), 251-252.
- 1977 Delval, J., with Pascual-Leone, J. Entrevista con Juan Pascual-Leone. *Cuadernos de Psicología* (Madrid, Editorial Fundamentos), 8-9, 26-38.
- 1978 Pascual-Leone, J. Computational models for metasubjective processes. *Behavioral and Brain Sciences*, 1, 112-113.
- 1978 Pascual-Leone, J. Piaget's two main stage criteria: A selective reply to Dr. Brainerd's paper. *Behavioral and Brain Sciences*, 2, 200-201.
- 1978 Pascual-Leone, J. Compounds, confounds and models in developmental information processing: A reply to Trabasso and Foellinger. *Journal of Experimental Child Psychology*, 26, 18-40.
- 1979 Pascual-Leone, J. On language and cognitive development: A review of Oleron's *Language and mental development*. *Child Development Abstracts and Bibliography*, 53, 78.
- 1979 Pascual-Leone, J., & Goodman, D. Intelligence and experience: A neo-Piagetian approach. *Instructional Science*, 8, 301-367.
- 1980 Pascual-Leone, J., & Sparkman, E. The dialectics of empiricism and rationalism: A last methodological reply to Trabasso. *Journal of Experimental Child Psychology*, 29, 88-101.
- 1981 Pascual-Leone, J. M-capacity, the component analysis of visual patterns, and metasubjective analysis: A commentary to Mr. Minami's work. *Hiroshima Forum for Psychology*, 8, 104-106.
- 1981 Pascual-Leone, J. Stadi e decalages: Una prospettiva neo-piagetiana. In O. Andreani (Ed.), *Proceedings of the IV (1977) Biennial Congress of the International Society for the Study of Behavioural Development*. *Processi Cognitivi*, 2, 147-164. Milan: Franco Angeli.
- 1981 Pascual-Leone, J., Johnson, J., Goodman, D., Hameluck, D., & Theodor, L. 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*. Mahwah, NJ: Erlbaum.
- 1984 de Ribaupierre, A., & Pascual-Leone, J. Pour une integration des methodes en psychologie: Approches experimentale, psychogenetique et differentielle. *L'Annee Psychologique*, 84, 227-250.
- 1985 Pascual-Leone, J. Not beyond Piaget, but neoPiagetian: A review of Brief's *Beyond Piaget: A philosophical psychology*. *Canadian Psychology*, 26, 245-248.

- 1986 Pascual-Leone, J. A review of Case's *Intellectual development: Birth to adulthood*. *Canadian Journal of Behavioural Science*, 18, 472-475.
- 1986 Pascual-Leone, J. A review of Fast's *Event theory: A Piaget-Freud integration*. *Child Development Abstracts and Bibliography*, 60, 244.
- 1986 Pascual-Leone, J. A review of Case's *Intellectual development: Birth to adulthood*. *Interchange*, 17(3), 73-75.
- 1987 Pascual-Leone, J. Organismic processes for neo-Piagetian theories: A dialectical causal account of cognitive development. *International Journal of Psychology*, 22, 531-570.
- 1988 Pascual-Leone, J. Affirmations and negations, disturbances and contradictions, in understanding Piaget: Is his later theory causal? A review of Piaget's (1985) *The equilibration of cognitive structures*. *Contemporary Psychology*, 33, 420-421.
- 1989 Johnson, J., & Pascual-Leone, J. Developmental levels of processing in metaphor interpretation. *Journal of Experimental Child Psychology*, 48, 1-31.
- 1989 Miller, R., Pascual-Leone, J., Campbell, C., & Juckes, T. Cross cultural similarities and differences on two neo-Piagetian cognitive tasks. *International Journal of Psychology*, 24, 293-313.
- 1989 Johnson, J., Fabian, V., & Pascual-Leone, J. Quantitative hardware-stages that constrain language development. *Human Development*, 32, 245-271.
- 1989 Johnson, J., & Pascual-Leone, J. Reply to A. Karmiloff-Smith. *Human Development*, 32, 276-278.
- 1989 Pascual-Leone, J. A commentary on Halfords' "Reflections on 25 years of Piagetian cognitive developmental psychology, 1963-1988." *Human Development*, 32, 375-378.
- 1990 Pascual-Leone, J. Intension, intention, and early precursors of will: Constructive epistemological remarks on Lewis' research paradigm. *Psychological Inquiry*, 1, 248-277.
- 1990 Shafir, U., & Pascual-Leone, J. Postfailure reflectivity/impulsivity and spontaneous attention to errors. *Journal of Educational Psychology*, 82, 378-387.
- 1991 Pascual-Leone, J. & Morra, S. Horizontality of water level: A neoPiagetian developmental review. *Advances in Child Development and Behaviour*, 23, 231-276.
- 1991 Pascual-Leone, J. A commentary on Boom and Juckes' on the learning paradox. *Human Development*, 34, 288-293.
- 1992 Miller, R., Pascual-Leone, J., & Andrew, D.J. Cognitive executive processes and mental capacity on the compound stimulus visual information task in a group of Zulu-speaking children. *South African Journal of Psychology*, 22(1).
- 1992 Pascual-Leone, J. Field dependence/independence and the Water Level Task: A commentary to Pennings' paper. *Perceptual and Motor Skills*, 74, 1055-1058.
- 1992 Pascual-Leone, J. Dynamic system reasoning and dialectical reasoning: A commentary to Chandler and Boutilier. *Human Development*, 35, 138-141.
- 1992 Stewart, L., & Pascual-Leone, J. Mental capacity constraints and the development of moral reasoning. *Journal of Experimental Child Psychology*, 54, 251-287.
- 1993 Pascual-Leone, J. Afirmaciones y negaciones, perturbaciones y contradicciones en Piaget: Es causal su ultima teoria? *Tarbiya: Revista del Instituto de Ciencias de la Educacion*, 5, 31-38.

- 1993 Corral, A., & del Valle, Ch., with Pascual-Leone, J. Entrevista con Pascual-Leone: Sobre inteligencia artificial, creatividad, inteligencia verdadera, voluntad, aprendizaje y desarrollo. *Tarbiya: Revista del Instituto de Ciencias de la Educacion*, 5, 15-27.
- 1994 Pascual-Leone, J., & Irwin, R.R. Noncognitive factors in high-road/low-road learning: I. Modes of abstraction in adulthood. *Journal of Adult Development*, 1, 73-89.
- 1994 Pascual-Leone, J., & Baillargeon, R. Developmental measurement of mental attention. *International Journal of Behavioral Development*, 17, 161-200.
- 1994 Pascual-Leone, J. An essay review of Halford's *An experimentalist's understanding of children*. *Human Development*, 37, 370-384.
- 1994 Pascual-Leone, J., & Irwin, R.R. Noncognitive factors in high-road/low-road learning: II. The will, the self, and modes of instruction in adulthood. *Journal of Adult Development*, 1, 153-168.
- 1995 Pascual-Leone, J. Learning and development as dialectical factors in cognitive growth. *Human Development*, 38, 338-348.
- 1996 Pascual-Leone, J. Piaget, Vygotski, y la función del símbolo. *Substratum*, III (8-9), 63-87.
- 1996 Pascual-Leone, J. Vygotsky, Piaget, and the problems of Plato. *Swiss Journal of Psychology*, 55, 84-92.
- 1997 Pascual-Leone, J. A commentary to S. Pulos. Divergent validity and the measurement of processing capacity. *International Journal of Behavioral Development*, 20, 735-738.
- 1997 Pascual-Leone, J. Constructivismo dialectico como fundamento epistemologico de la ciencia humana. *Interamerican Journal of Psychology*, 31, 1-26.
- 1998 Baillargeon, R., Pascual-Leone, J. & Roncadin, C. Mental-attentional capacity: Does cognitive style make a difference? *Journal of Experimental Child Psychology*, 70, 143-166.
- 1998 Pascual-Leone, J. SSSs or functionalist modes of processing? A commentary on Kargopoulos and Demetriou's paper. *New Ideas in Psychology*, 16, 89-95.
- 1998 Pascual-Leone, J. To appraise developmental difficulty, or mental demand, relational complexity is not enough. *Behavioral and Brain Sciences*, 21, 843-844.
- 2000 Pascual-Leone, J. If the magical number is 4, how does one account for operations within working memory? *Behavioral and Brain Sciences*, 24, 136-138.
- 2000 Pascual-Leone, J. Is the French connection neo-Piagetian? Not nearly enough! *Child Development*, 71, 843-845.
- 2000 Pascual-Leone, J. Mental attention, consciousness, and the progressive emergence of wisdom. *Journal of Adult Development*, 7, 241-254.
- 2000 Pascual-Leone, J. Reflections on working memory: Are the two models complementary? *Journal of Experimental Child Psychology*, 77, 138-154.
- 2001 Greenberg, L., & Pascual-Leone, J. A dialectical constructivist view of the creation of personal meaning. *Journal of Constructivist Psychology*, 14, 165-186.
- 2001 Goode, P., Goddard, P., & Pascual-Leone, J. Event-related potentials index cognitive style differences during a serial-order recall task. *International Journal of Psychophysiology*, 3, 123-140.
- 2003 Johnson, J., Im-Bolter, N., & Pascual-Leone, J. Development of mental attention in gifted and mainstream children: The role of mental capacity, inhibition, and speed of

- processing. *Child Development*, 74, 1594-1614.
- 2004 Cardellini, L., & Pascual-Leone, J. On cognitive mentors, cognitive development, education, and constructivism: An interview with Juan Pascual-Leone. *Journal of Cognitive Education and Psychology*, 4, 199-219.
- 2004 Pascual-Leone, J. Hidden operators of mental attention applying on LTM give the illusion of a separate working memory. *Behavioral and Brain Sciences*, 27, 709-711.
- 2004 Pascual-Leone, J. Not a bridge, but an organismic (general & causal) neuro-Psychology should make a difference in emotion theory. *Behavioral and Brain Sciences*, 28, 213.
- 2006 Im-Bolter, N., Johnson, J., & Pascual-Leone, J. Processing limitations in children with specific language impairment: The role of executive function. *Child Development*, 77, 1822-1841.
- 2006 Pascual-Leone, J. Mental attention, not language, may explain evolutionary growth of human intelligence and brain size. *Behavioral and Brain Sciences*, 29, 19.
- 2007 Roncadin, C., Pascual-Leone, J., Rich, J., & Dennis, M. (2007). Developmental relations between working memory and inhibitory control. *Journal of the International Neuropsychological Society*, 13, 59-67.
- 2009 Pascual-Leone, A., Greenberg, L. S., & Pascual-Leone, J. Developments in task analysis: New methods to study change. *Psychotherapy Research*, 19, 527-542.
- 2010 Arsalidou, M., Pascual-Leone, J., & Johnson, J. Misleading cues improve developmental assessment of attentional capacity: The colour matching task. *Cognitive Development*, 25, 262-277.
- 2010 Agostino, A., Johnson, J., & Pascual-Leone, J. Executive functions underlying multiplicative reasoning: Problem type matters. *Journal of Experimental Child Psychology*, 105, 286-305.
- 2012 Balioussis, C., Johnson, J., & Pascual-Leone, J. 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.
- 2013 Arsalidou, M., Pascual-Leone, J., Johnson, J., Morris, D. and Taylor, M. J. A balancing act of the brain: Activations and deactivations driven by cognitive load. *Brain and Behavior*. doi: 10.1002/brb3.128
- 2013 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.
- 2013 Pascual-Leone, J. (2013). Can we model organismic causes of working memory, efficiency and fluid intelligence? A meta-subjective perspective. *Intelligence*, 41, 738-743.
- 2014 Howard, S.J., Johnson, J., & Pascual-Leone, J. Clarifying inhibitory control: Diversity and development of attentional inhibition. *Cognitive Development*, 31, 1-21.
- 2015 Pascual-Leone, A., & Pascual-Leone, J. Memory reconsolidation keeps track of Emotional changes, but what will explain the actual "processing"? *Behavioral and Brain Sciences*, 38, e20.
- 2015 Pascual-Leone, J., Pascual-Leone, A., & Arsalidou, M. Neuropsychology still needs to

- model organismic processes “from within”. *Behavioral and Brain Sciences*, 38, e83.
- 2015 Im-Bolter, N., Johnson, J., Ling, D., & Pascual-Leone, J. Inhibition: Mental control process or mental resource? *Journal of Cognition and Development*, 16, 666-681.
- 2016 Arsalidou, M., & Pascual-Leone, J. (2016). Constructivist developmental theory is needed in developmental neuroscience. *npj-Science of Learning* 1, 16016, 1-9. doi: 10.1038/npjscilearn.2016.16
- 2016 Kim, T.H.M., Pascual-Leone, J., Johnson, J., & Tamim, H. The mental-attention Tai Chi effect with older adults. *BMC Psychology*, 4:29.
- In press Arsalidou, M., Pawliw-Levac, M., Sadeghi, M., & Pascual-Leone, J. Brain areas associated with numbers and calculations in children: Meta-analyses of fMRI studies. *Developmental Cognitive Neuroscience*.

Technical Reports and Non-Refereed Media Presentations:

- 1979 Gibbon, S.Y. (Chairman), Day, M.C., DeAvila, E.A., Flagg, B.N., Geyer, J.J., Haith, M.M., Hochberg, J.J., O'Brien, K.G., Pascual-Leone, J., Sheena, B., & White, S.H. *Report of the conference on visual information processing research and technology* to the National Institute of Education, U.S. Department of Health, Education and Welfare. Document #CS-001770.
- 1987 Pascual-Leone, J. *Dynamic developmental processes and the assessment of culturally diverse children*. Report to the Consultative Committee on Assessment and Placement of (Minority) Students for Educational Equity, Ministry of Education, Government of Ontario.
- 1997 Pilar Garcia, M. del Pilar & Pascual-Leone, J. Extensive interview on constructivist pedagogy: Maestro: Amoroso y Analitico. *La Patria* [A daily of Manizales, Colombia Miercoles, August 20, 1997].
- 1997 Television interview with Dr. Patricia Cristina Perez in Space "A Cara y Ceca" [August 3, 1997]. San Luis, Argentina.
- 2001 Brief television interview, Cadiz, Spain.
- 2001 Newspaper interview on “giftedness,” Santiago, Chile.
- 2004 Interviewed on my theory and research career, for the Oral History Project of the Society for Research in Child Development, June.

INVITED ADDRESSES AND COLLOQUIA (Last 20 Years only):

- 1996 Organismic processes of mental attention: Their role in life-span development. In A. de Ribaupierre (Chair), *What develops and why?* Invited symposium, the Growing Mind & Piaget-Vygotsky conferences, Geneva Switzerland.
- 1996 Is mental attention different from its content? Towards a neuropsychological model of mental capacity and cognitive style. In R. Case (Chair), *Neo-Piagetian models of the mind, its structure and its development*. Invited symposium, the Growing Mind (Piaget Centennial) conference, Geneva, Switzerland.
- 1996 Discussant and Co-Convener. In O. Houde (Chair), *Contraintes d'inhibition dans le fonctionnement et le dysfonctionnement cognitifs*. Invited symposium at the Growing Mind conference, Geneva, Switzerland.

- 1997 *Mental attentional processes and cognitive development*. Main address, Interamerican Psychological Association Meeting. Sao Paulo, Brazil, July.
- 1997 *Constructivism and cognitive and self development*. Series of three invited talks, University of Belgrano, Buenos Aires, Argentina, August.
- 1997 Three main addresses: (1) *Los procesos de desarrollo cognitivo: esquemas, capacidades organismicas y estrategias mentales*, (2) *Procesos cognoscitivos y la funcion simbolica*, (3) *Procesos organismicos de aprendizaje y desarrollo*. I International and IV National Encounter of Constructivist Pedagogies, Active Pedagogies and Human Development, University of Manizales, Colombia, August.
- 1998 Pascual-Leone, J., & Johnson, J. Cognition, intelligence and the nature of giftedness. Paper given in invited symposium on *Cognition and Intelligence*. Congresso Internacional Sobre Superdotacao (International Congress on Giftedness), Ministry of Education, Brasilia, Brazil, August.
- 1998 *Constructivismo dialectico y alternativas metodologicas para la invetigacion quantitativa*. Colloquium, University of Brasilia, Brazil, August.
- 1998 *A dialectical constructivist approach to cognitive development: (1) Constructivist epistemology, (2) Piagetian versus neoPiagetian theories of development*. Two-part colloquium, Catholic University of Brasilia, Brazil, August.
- 1998 Mental attention, consciousness and the progressive emergence of wisdom. Paper presented in invited symposium on *Developmental psychology and the higher stages of development*. What is the Psychology of the New Millenium? A Conference on Consciousness and the Future of Psychology, Maharishi University of Management, Fairfield, IA, October.
- 1999 Pascual-Leone, J., & Johnson, J. 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, Jean Piaget Society, Mexico City, Mexico, June.
- 2000 *Academically gifted children: Are they advanced in intelligence, in executive processes, or in motivation?* Colloquium, Department of Developmental Psychology, University of Amsterdam, the Netherlands.
- 2000 *Analisis constructivista de tareas en psicologia evolutiva*. Invited address and participation in IX Congreso Infancia y Adolescencia (INFAD-2000), Cadiz, Spain.
- 2000 *Cognition, intelligence, and the nature of giftedness*. Invited talk, Association for Bright Children of Ontario, Peel, ON.
- 2000 *Niños sobredotados en la escuela: Son superiores en inteligencia, en procesos ejecutivos o en motivacion?* Invited address, Seminario Internacional de Motivacion e Intervencion Educativa, Huelva, Spain, May.
- 2001 *Hacia prueba de "inteligencia" culturalmente libres: El como distinguir entre saber-hacer ejetutivo u capacidades de atencion mental*. Invited address, XXVIII meetings of the Inter-American Psychological Association, Santiago, Chile.
- 2001 Series of invited conferences (English translation of titles): (1) Natural intelligence: executive processes and mental attention in cognitive development, (2) Constructivist task analysis in developmental psychology and education, (3) Children's ability to follow verbal directions: Measuring mental capacity in the linguistic medium, (4)

- Gifted children in the school: Are they superior in intelligence, executive processes or motivation. School of Psychology, Pontificia Universidad Catolica de Chile, Santiago, Chile.
- 2004 Discussant in A. Demetriou & J. Pascual-Leone (Conveners), *Continuity and discontinuity in development: New answers to an old question*. Symposium presented at the meetings of the International Society for the Study of Behavioral Development, Ghent, Belgium.
- 2005 *Developmental intelligence in normal and gifted children: Is Binet's hope now a reality*. Keynote Address, Congress on Intelligence in the Child, French Federation of Psychologists, Paris, France.
- 2006 *Developmental intelligence and cognitive style in children and adults*. Invited address, Psychology Department, University of Cyprus.
- 2006 *Is working memory a product of mental/executive attention?* Keynote Address, Third European Working Memory Symposium, Genoa, Italy.
- 2007 *Is cognitive giftedness expression of developmental intelligence?* Keynote Address, Italian Association for Learning Difficulties (AIRIPA), Belluno, Italy.
- 2007 *Dialectical constructivism as a foundation of human science: An organismic developmental approach*. Inaugural Address, Doctoral School in Human Sciences, University of Genova, Italy.
- 2007 *Is cognitive giftedness expression of intelligence?* Colloquium Department of Psychology, University of Trieste, Italy.
- 2008 *A developmental theory of mental attention: Its application to measurement and task analysis*. Keynote address, Jean Piaget Archives Advanced Course, Geneva, Switzerland.
- 2008 Invited member, Book Discussion session, meetings of Jean Piaget Society, Quebec City, PQ.
- 2009 Invited participant in Café Scientifique on *IQ, EQ, and AI: What does it mean to be intelligent?* Organized by Ontario Science Centre, Toronto, ON.
- 2012 Co-chair, Invited panel discussion: *Rethinking cognitive development*. Meetings of Jean Piaget Society, Toronto, ON, Canada.
- 2015 *Developmental infrastructure of complex motivation*. Colloquium given to the Department of Psychology, University of Windsor, Windsor, ON.

REFEREED CONFERENCE PAPERS/POSTERS (Last 20 Years only):

- 1997 Pascual-Leone, J., Johnson, J., Baskind, S., & Dworsky, S. *Individual differences on measures of mental-attentional capacity*. Society for Research in Child Development. Washington, DC.
- 1997 Pascual-Leone, J. *Mental attention, executives, and moral development*. Symposium presentation, Interamerican Psychological Association, Sao Paulo, Brazil.
- 1998 Pascual-Leone, J., Johnson, J., Baskind, S., & Dworsky, S. *Misleading situations, active inhibition, and the fair assessment of mental capacity*. Canadian Society for Brain, Behaviour, and Cognitive Science, Ottawa, ON.
- 1999 Johnson, J., Pascual-Leone, J., & Im-Bolter, N. *Testing theories of development in gifted children: Speed processing, inhibition, and mental attention*. Society for

- Research in Child Development, Albuquerque, NM.
- 2000 Cuning, S., Johnson, J., Pascual-Leone, J., & Polak, E. *Ability to follow directions: Assessing mental capacity in the linguistic domain*. Development 2000: A Conference on developmental psychology, University of Waterloo, Waterloo, ON.
- 2000 Pascual-Leone, J., Johnson, J., Bauer, S., & Cuning, S. *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.
- 2001 Cuning, S., Johnson, J., & Pascual-Leone, J. *Direction-following in linguistically diverse groups: A means for assessing mental-attentional capacity*. American Psychological Society, Toronto, ON.
- 2001 Johnson, J., Pascual-Leone, J., & Agostino, A. *Solving multiplication problems: The role of mental attention*. Society for Research in Child Development, Minneapolis, MN.
- 2001 Pascual-Leone, J., Johnson, J., Bauer, S., & Agostino, A. *How much does arithmetic proficiency in the school years owe to mental attentional capacity?* International Society for the Study of Behavioral Development, Ottawa, ON.
- 2004 Cuning, S., Johnson, J., & Pascual-Leone, J. Following directions: Another route to mental capacity assessment. In S. Morra & J. Johnson (Convenors), *Verbal working memory and cognitive development*. Symposium, International Society for the Study of Behavioral Development, Ghent, Belgium, July.
- 2004 Im-Bolter, N., Johnson, J., & Pascual-Leone, J. *Executive processes and mental attention in children with language impairments*. Symposium on Research in Child Language Disorders, Madison, WI.
- 2004 Johnson, J., Pascual-Leone, J., Im-Bolter, N., & Verrilli, E. *Executive functions and mental attention in cognitively gifted children*. International Society for the Study of Behavioral Development, Ghent, Belgium.
- 2004 Pascual-Leone, J., Johnson, J., & Calvo, A. *Can mental attentional capacity predict the Canadian cognitive abilities score of school children?* Jean Piaget Society, Toronto, ON.
- 2005 Agostino, A., Im-Bolter, N., Johnson, J., & Pascual-Leone, J. *Strategic thinking: The development of children's multiplication strategy use*. Society for Research in Child Development, Atlanta, GA.
- 2005 Im-Bolter, N., Johnson, J., & Pascual-Leone, J. *Inhibition: mental control process or mental resource?* Society for Research in Child Development, Atlanta, GA.
- 2005 Johnson, J., Pascual-Leone, J., & Balioussis, C. *Effect of instructions on developmental patterns in motor task performance*. Society for Research in Child Development, Atlanta, GA.
- 2005 Pascual-Leone, J., Johnson, J., Calvo, A., & Verrilli, E. *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.
- 2005 Pascual-Leone, J., Johnson, J., Verrilli, E., & Calvo, A. *In search of latent giftedness: Do M-capacity measures detect it?* Society for Research in Child Development, Atlanta, GA.
- 2006 Agostino, A., Johnson, J., & Pascual-Leone, J. *The role of M-capacity and executive*

- processes in mathematical cognition*. Cogito, Montreal, PQ.
- 2006 Johnson, J., Pascual-Leone, J., & Romero Escobar, E.M. *Theory-based quantitative models of capacity constraints in a mental attention memory task*. Third European Working Memory Symposium, Genoa, Italy.
- 2006 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.
- 2007 Agostino, A., Johnson, J., & Pascual-Leone, J. *Development of mathematical reasoning: Role of mental-attentional capacity and executive processes*. Society for Research in Child Development, Boston, MA.
- 2007 Agostino, A., Johnson, J., & Pascual-Leone, J. *Development of reading comprehension: Role of mental-attentional capacity and executive processes*. Society for Research in Child Development, Boston, MA.
- 2007 Arsalidou, M., Goel, V., & Pascual-Leone, J. *Neural correlates of visual problem solving and task demand*. TENNET Theoretical & Experimental Neuropsychology, Montreal, PQ.
- 2007 Arsalidou, M., Pascual-Leone, J., & Johnson, J. *The color matching task: A new paradigm to assess mental-attention*. Cognitive Development Society, Santa Fe, NM.
- 2007 Balioussis, C., Pascual-Leone, J., & Johnson, J. *Rethinking injury: A cognitive developmental approach to creating strategies*. Lifesavers: National Conference on Highway Safety Priorities, Chicago, IL.
- 2007 Balioussis, C., Pascual-Leone, J., & Johnson, J. *Reducing road injuries: A cognitive developmental approach*. Ontario Injury Prevention Conference, Thunder Bay, ON.
- 2007 Hitzig, S.L., Johnson, J., Pascual-Leone, J., & Calvo, A. *Time of day and age effects on executive functioning: Inhibition, updating, and switching*. Canadian Association on Gerontology (CAG) 36th Annual Scientific and Educational Meeting, Calgary, AB.
- 2007 Pascual-Leone, J., Johnson, J., & Romero Escobar, E.M. *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.
- 2008 Arsalidou, M., Pascual-Leone, J., & Johnson, J. *Measuring age-bound changes in mental capacity: The role of misleading cues*. Cognitive Neuroscience Society, San Francisco, CA.
- 2008 Arsalidou, M., Pascual-Leone, J., Johnson, J., & Taylor, M.J. *Neural responses to a visuospatial task with six levels of mental demand*. Canadian Society for Brain Behaviour and Cognitive Science, London, ON.
- 2008 Balioussis, C., J. Pascual-Leone, J., & Johnson, J. *Playground injuries: Accounting for cognitive developmental factors*. Ontario Injury Prevention Conference, Toronto, ON.
- 2008 Johnson, J., Lee, C., & Pascual-Leone, J. *Is mental attention a causal mechanism different from executive processes?* Jean Piaget Archives Advanced Course, Geneva, Switzerland.
- 2008 Johnson, J., Romero Escobar, E.M., & Pascual-Leone, J. *Exploring culture-fair assessment of cognitive abilities of immigrant children and children of immigrant*

- parents*. On New Shores: International Forum on Issues of Immigrant and Refugee Children, Youth, and Families Across the World. University of Guelph, Guelph, ON.
- 2009 Hitzig, S., Johnson, J., & Pascual-Leone, J. *Is executive functioning in adults subject to the synchrony effect?* American Psychological Association, Toronto, ON.
- 2009 Johnson, J., Howard, S., & Pascual-Leone, J. *Mental and perceptual attention in gifted children*. Society for Research in Child Development, Denver, CO.
- 2009 Johnson, J., Lee, C., & Pascual-Leone, J. *Mental attention predicts psychometric intelligence in a culture-fair manner*. American Psychological Association, Toronto, ON.
- 2010 Howard, S.J., Johnson, J., & Pascual-Leone, J. *Attentional processes subserving working memory: Mental versus perceptual attention*. Development 2010: A Canadian Conference on Developmental Psychology, Ottawa, ON.
- 2010 Johnson, J., Ko, W., & Pascual-Leone, J. *Longitudinal stability of capacity and executive function scores*. Development 2010: A Canadian Conference on Developmental Psychology, Ottawa, ON.
- 2010 Johnson, J., Lee, C., Hagan, C., & Pascual-Leone, J. *Mental attention predicts standardized ability scores at two time points*. Development 2010: A Canadian Conference on Developmental Psychology, Ottawa, ON.
- 2010 Romero Escobar, E.M., Johnson, J., & Pascual-Leone, J. *Latent variable modeling of the relationship between contextual variables and cognitive developmental tasks in a culturally diverse child sample*. Development 2010: A Canadian Conference on Developmental Psychology, Ottawa, ON.
- 2011 Johnson, J., Ko, W., & Pascual-Leone, J. *Assessing reliability and validity of attentional capacity and executive function tasks, over a three-year longitudinal span*. Society for Research in Child Development, Montreal, PQ.
- 2012 J. Pascual-Leone. Participant in discussion section on *Are developmental stages descriptively necessary? An open constructivist discussion*. Jean Piaget Society, Toronto, ON.
- 2012 J. Pascual-Leone. Participant in discussion section on *Reconceptualizing cognitive development: Should cultural knowledge domains be part of the discussion?* Jean Piaget Society, Toronto, ON.
- 2012 Pascual-Leone, J., & Johnson, J. *Scale invariance in the measurement of mental-attentional capacity*. SRCDD Themed Meeting: Developmental Methodology, Tampa, FL.
- 2013 Howard, S. J., Johnson, J., & Pascual-Leone, J. (2013). *Factors underlying cognitive giftedness: Mental versus perceptual attention*. Roundtable session, American Educational Research Association, San Francisco, CA.
- 2013 Howard, S. J., Johnson, J., & Pascual-Leone, J. (2013). *Clarifying inhibitory control: Exploring the structure and development of inhibition*. Society for Research in Child Development, Seattle, WA.
- 2013 Kim, T., Tamim, H., Johnson, J., & Pascual-Leone, J. *Tai Chi for older adults: Improving cognitive performance*. Canadian Society for Epidemiology and Biostatistics, St. John's, NL.
- 2013 Pascual-Leone, J., & Johnson, J. Organismic determinants of mental/executive attention explain the existence of stages. In U. Mueller (Chair), *How should we think about developmental stages?* Symposium, Jean Piaget Society, Chicago, IL.

- 2014 Giuliano, M., Lee, C., Johnson J., & Pascual-Leone, J. *Cognitive predictors of performance in fractions*. Development 2014: A Canadian Conference on Developmental Psychology, Ottawa, ON.
- 2014 Giuliano, M., Lee, C., Johnson J., & Pascual-Leone, J. *M-capacity and math fluency uniquely predict adults' understanding of fraction problems*. Association for Psychological Science, San Francisco, CA.
- 2014 Johnson, J., Kristen, I.T., & Pascual-Leone, J. *Language factors in measurement of working memory capacity*. Jean Piaget Society, San Francisco, CA.
- 2015 Giuliano, M., Johnson J., & Pascual-Leone, J. *Does Spanish word order enhance performance on a direction following task?* Jean Piaget Society, Toronto, ON.
- 2015 Pascual-Leone, J., & Johnson, J. *Scale invariance in the measurement of mental-attentional capacity*. In J. Johnson & J. Pascual-Leone (Symposium Organizers), *Mental-attentional (M-) capacity: Improving measurement of executive attention and working memory*. Jean Piaget Society, Toronto, ON.
- 2016 Arsalidou, M., & Pascual-Leone, J., Jabbari, Y., & Gordon, M. *Working memory capacity in young adult bilinguals*. 8th European Working Memory Symposium, Liege, Belgium.
- 2016 Arsalidou, M., Pascual-Leone, J., & Johnson, J. *Quantifying cognitive limitations behaviourally and with neuroimaging*. Budapest CEU Conference on Cognitive Development, Budapest, Hungary.
- 2016 Gordon, M., Pascual-Leone, J., & Arsalidou, M. *The relation of language background and numeric cognitive processes*. Canadian Centre of Studies and Research on Bilingualism and Language Planning (CCERBAL) – Bilingual from birth: process, pedagogy and policy. Ottawa, ON.
- 2016 Jabbari, Y., Arsalidou, M., & Pascual-Leone, J. *Impact of language background on visuo-spatial mental attentional capacity*. Canadian Centre of Studies and Research on Bilingualism and Language Planning (CCERBAL) – Bilingual from birth: process, pedagogy and policy. Ottawa, ON.
- 2016 Kim, S., Arsalidou, M., Pascual-Leone, J. *Importance of interference in measuring mental attentional capacity*. Canadian Society for Brain, Behaviour, and Cognitive Science, Ottawa, ON.
- 2016 Johnson, J., Pascual-Leone, J., Giuliano, M., Kumar, G., Barker, R., & Labrish, C. *Longitudinal growth of mental-attentional capacity*. Jean Piaget Society, Chicago, IL.
- 2016 Pisarenko, S., Pascual-Leone, J., & Arsalidou, M. *Orthography manipulations and the Stroop effect in Russian-English bilinguals*. Canadian Centre of Studies and Research on Bilingualism and Language Planning (CCERBAL) – Bilingual from birth: process, pedagogy and policy. Ottawa, ON.
- 2017 Agostino, A., Johnson, J., Im-Bolter, N., Walker, E., & Pascual-Leone, J. *Multiplication reasoning abilities and the role of mental attention*. Association for Psychological Science, Boston, MA.
- 2017 Arsalidou, M., Agostino, A., & Pascual-Leone, J. *Neural correlates for numbers and calculations in children*. Society for Research in Child Development, Austin, TX.

- 2017 Arsalidou, M., Kotova, T., Pawliw-Levac M., & Pascual-Leone, J. *The role of the insula in mathematical problem solving in children*. Budapest CEU Conference on Cognitive Development, Budapest, Hungary.
- 2017 Arsalidou, M., Pawliw-Levac, M., Sadeghi, M., & Pascual-Leone, J. *Mathematical cognition in children: Evidence from fMRI*. Fourth conference of Cognitive Science in Moscow, Moscow, Russian Federation.

TEACHING:

Undergraduate Courses Taught:

Neural Bases of Behaviour
 Advanced Seminar in Developmental Psychology
 Cognitive Processes
 Infancy

Graduate Courses Taught:

Developmental Neuropsychology
 Piagetian, Structuralist, Neo-Piagetian, and Process-Structural Methods and Models
 Process and Task Analysis in Psychology
 Intelligence and Experience
 Cognitive Development I
 Cognitive Development II
 Developmental Laboratory
 Research Methodology in Developmental Psychology
 Special Topics: Seminar
 Cognitive Psychology
 Developmental Psychology

Selected Masters Thesis and Doctoral Dissertation Supervision:

- 1968 Eccles, E.M. *Field dependence and a neo-Piagetian model of information-processing capacity in young children*. MA thesis, University of British Columbia.
- 1969 Parkinson, G.M. *The recognition of messages from visual compound stimuli: A test of a quantitative developmental model*. MA thesis, York University, Toronto.
- 1970 Case, R. *Information processing, social class and instruction: A developmental investigation*. Doctoral dissertation, University of Toronto.
- 1971 Goodman D.R. *Cognitive style factors in linguistic performance with ambiguous sentences*. MA thesis, York University, Toronto.
- 1972 McFarland, R.A. *Information processing in reflective and impulsive children: A test of a quantitative developmental model*. MA thesis, York University, Toronto.
- 1972 McCoy, R. *Some temporal relations in visual processing*. MA thesis, York University, Toronto.
- 1972 Toussaint, N.A. *Automaton precursors of Piagetian logical structures*. Doctoral dissertation, University of British Columbia.

- 1973 Scardamalia, M. *Mental processing aspects of two formal operational tasks: A developmental investigation of a quantitative neo-Piagetian model*. Doctoral dissertation, University of Toronto.
- 1974 DeAvila, E.A. *Children's transformation of visual information according to non-verbal syntactical rules*. Doctoral dissertation, York University, Toronto.
- 1974 Logan R. *A quantification of the development of processing capacity*. MA thesis, York University, Toronto.
- 1975 de Ribaupierre, A. *Cognitive space and formal operations*. Doctoral dissertation, University of Toronto.
- 1975 Parkinson, G.M. *The limits of learning: A quantitative investigation of intelligence*. Doctoral dissertation, York University, Toronto.
- 1975 Miller, M.S. *Associative and conceptual learning: Towards a neo-Piagetian evaluation of Jensen's intelligence theory*. MA thesis, York University, Toronto.
- 1976 Burtis, J.P. *A study of the development of short term memory*. Doctoral dissertation, York University, Toronto.
- 1978 Skakich, S. *M-capacity, strategy and style in two neo-Piagetian tasks*. MA thesis, York University, Toronto.
- 1979 Goodman, D. *Stage transitions and the developmental trace of constructive operators: An investigation of a neo-Piagetian theory of cognitive growth*. Doctoral dissertation, York University, Toronto.
- 1979 Pulos, S. *Developmental cognitive constraints on structural learning*. Doctoral dissertation, York University, Toronto.
- 1980 Miller, M.S. *Executive schemes vs. mental capacity in predicting intellectual underperformance among lower socioeconomic status groups*. Doctoral dissertation, York University, Toronto.
- 1981 Hameluck, D. *Cognitive style and fixation-field effects in visual backward masking: A process structuralist account*. MA thesis, York University, Toronto.
- 1981 Furman, J. *The invention of problem solving strategies in children: A neo-Piagetian approach*. Doctoral dissertation, University of California, Berkeley.
- 1982 Benson, N.J. *Comprehension and production of possession verbs in children: A process-analytical developmental study*. MA thesis, York University, Toronto.
- 1982 Fabian, V. *Language development after 5: A neo-Piagetian investigation of subordinate conjunctions*. Doctoral dissertation, University of California, Berkeley.
- 1982 Johnson, J. *The development of metaphor comprehension: Its mental demand measurement and its process analytical models*. Doctoral dissertation, York University, Toronto.
- 1983 Jedrzkiewicz, J. *Adult development and mental effort: A neo-Piagetian experimental analysis*. MA thesis, York University, Toronto.
- 1985 Campbell, C. *Learning and development: An investigation of a neo-Piagetian theory of cognitive growth*. MA thesis, University of Natal, Durban, S. Africa.
- 1986 Stewart, L. *A metasubjective analysis of the development of moral reasoning*. Doctoral dissertation, York University, Toronto.

- 1986 Holloway, R. *Mental capacity, language, and play: A neo-Piagetian exploratory study of aspects of cognitive development from 6 to 20 months*. Doctoral dissertation, York University, Toronto.
- 1987 Shafir, U. *Post-failure reflectivity, negative feedback and rapid learning: A chronometric study of spontaneous hypothesis testing*. Doctoral dissertation, York University, Toronto.
- 1987 Jukes, T.J. *Mental capacity and executive strategies among Zulu-speaking children*. MA thesis, University of Natal, Durban, S. Africa.
- 1988 Alp, E. *Mental capacity and working memory in 1 to 3 year olds*. Doctoral dissertation, York University, Toronto.
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