Motor Development Research Group Full Publication List

Books Edited:

1. Kelso, J.A.S., & **Clark, J.E.** (Eds.) (1982). *The Development of Movement Control and Coordination*. New York: John Wiley.
2. **Clark, J.E.**, & Humphrey, J.H. (Eds.) (1985) *Motor Development: Current Selected Research*. Princeton, N.J.: Princeton Book.
3. **Clark, J.E.**, & Humphrey, J.H. (Eds.) (1987). *Advances in Motor Development Research* (Vol.I). New York: AMS Press.
4. **Clark, J.E.**, & Humphrey, J.H. (Eds.) (1988) *Advances in Motor Development Research* (Vol.II). New York: AMS Press.
5. **Clark, J.E.**, & Humphrey, J.H. (Eds.) (1990). *Advances in Motor Development Research* (Vol. III). New York: AMS Press.
6. **Clark, J.E.**, & Humphrey, J.H. (Eds.) (1997). *Motor Development: Research and Reviews* (Vol. I). Reston Va: NASPE Publications.
7. **Clark, J.E.**, & Humphrey, J.H. (Eds.) (2002). *Motor Development: Research and Reviews* (Vol. II). Reston Va: NASPE Publications.

Book Chapters

(*designates refereed publication; + designates invited publication)

1. +**Clark, J.E.** (1978). Memory processes in the early acquisition of motor skills. In M. Ridenour (Ed.), *Motor Development: Issues and Applications*. Princeton, NJ: Princeton Book Company.
2. +**Clark, J.E.** (1982). The role of response mechanisms in motor skill development. In J.A.S. Kelso & J.E. Clark (Eds.), *The Development of Movement Control and Coordination*. London: John Wiley.
3. Phillips, S.J., & **Clark, J.E.** (1984). An integrative approach to teaching kinesiology: A lifespan approach. In R. Shapiro & J.R. Marett (Eds.), *Second National Conference on Teaching Kinesiology and Biomechanics in Sports*.
4. +**Clark, J.E.** (1986). The perception-action perspective: A Commentary on von Hofsten. In M.G. Wade & H.T.A. Whiting (Eds.), *Motor Development in Children: Aspects of Coordination and Control.* Dordrecht, The Netherlands: Martinus Nijhoff Publishers.
5. +**Clark, J.E.** (1988). Development of voluntary skilled movement. In E. Meisami & P.S. Timiras (Eds.), *Handbook of Human Growth and Developmental Biology* (vol.I, Part B, pp. 237-250) Boca Raton, FL: CRC Press
6. +**Clark, J.E.**, & Whitall, J. (1989). Changing patterns of locomotion: From walking to skipping. In M. Woollacott & A. Shumway-Cook (Eds.), *Development of posture and gait across the lifespan* (pp. 128-151). Columbia, SC: University of South Carolina Press.
7. +**Clark, J.E.**, Truly, T.L., & Phillips, S.J. (1990). A dynamical systems approach to understanding the development of lower limb coordination in locomotion. In H. Bloch & B. Bertenthal (Eds.), *Sensory- motor organizations and development in infancy and early childhood* (pp. 363-378). Dordrecht: Kluwer Academic.
8. +**Clark, J.E.**, & Phillips, S.J. (1991). The development of intralimb coordination in the first six months of walking. In J.Fagard & P. Wolff (Eds.), *The development of timing control and temporal organization in coordinated action*(pp. 245-257). Amsterdam: Elsevier Science Publishers.
9. *Clark, J.E., & Phillips, S.J. (1992). A dynamical systems approach to the development of intralimb coordination in the first year of walking. In M.H. Woollacott & F. Horak (Eds.), *Posture and Gait: Control Mechanisms* (Wol. II, pp. 350-353). Eugene, OR: University of Oregon Books.
10. *Whitall, J., Block, M.E., & **Clark, J.E.** (1992). The development of walking: Interlimb coordination as coupled limit cycle systems. In M.H. Woollacott & F. Horak (Eds.), *Posture and Gait: Control Mechanisms* (Vol II, pp.315-318). Eugene,

OR: University of Oregon Books.

11. *+Forrester, L.F., Phillips,S.J., & **Clark, J.E.** (1993). Locomotor coordination in infancy: The transition from walking to running. In G.J.P. Savelsbergh (Ed.), *The development ofcoordination in infancy* (pp. 359- 393). Amsterdam: Advances in Psychology Series, North Holland.
12. +**Clark, J.E.**, Truly, T.L., & Phillips, S.J. (1993). On the development of walking as a limit cycle system. In E. Thelen & L. Smith (Eds.), *Dynamical systems in development: Application*(pp.71-93). Cambridge: MIT Press.
13. *+Whitall, J., & **Clark, J.E.** (1994). The development of bipedal interlimb coordination. In S.P. Swinnen, H. Heuer, J. Massion, & P. Casaer (Eds.), *Interlimb coordination: Neural, dynamical , and cognitive constraints*. NY: Academic Press.
14. +**Clark, J.E.** (1994) Motor development. In V.S. Ramachandran (Ed.), *Encyclopedia ofHuman Behavior* (Vol. 3, pp. 245-255). NY: Academic Press.
15. +**Clark, J.E.** (1995). Dynamical systems perspective on gait. In R.L. Craik & C.A. Oatis (Eds.), *Gait analysis: Theory and application*. (pp. 79-86). St.Louis, MO: C.V. Mosby.
16. +**Clark, J.E.** (1995). Dynamical systems perspective. In R.L. Craik & C.A. Oatis (Eds.), *Gait analysis: Theory and application*. (pp. 25-27). St.Louis, MO: C.V. Mosby.
17. *+**Clark, J.E.** (1997). A dynamical systems perspective on the development of complex adaptive skill. In C. Dent-Read & P. Zukow-Goldring (Eds.),*Evolving explanations ofdevelopment: Ecological approaches to organism-environment systems* (pp. 383-406). Washington, DC: APA Publications.
18. +**Clark, J.E.** (2001). Infancy. In Patrick, K., Spear, B., Holt, K., & Sofka, D. Eds., *Bright Futures in Practice: Physical Activity*.(pp.19-30) Arlington, VA: National Center for Education in Maternal and Child Health.
19. +**Clark, J.E.** (2001). Developmental Coordination Disorder. In Patrick, K., Spear, B., Holt, K., & Sofka, D. Eds., *Bright Futures in Practice: Physical Activity.* (pp.102-107). Arlington, VA: National Center for Education in Maternal and Child Health.
20. Metcalfe, J.S., Chen, L.C., Kopp, M.A., Jeka, J.J., & **Clark, J.E.** (2001). Beyond postural sway reduction: Do newly walking infants couple to a driving somatosensory stimulus? In J. van der Kamp, A. Ledebt, G. Savelsvergh, & E. Thelen (Eds.), *Advances in motor development and learning in infancy*. Amsterdam, NL: Research Institute for Fundamental and Clinical Human Movement Sciences.
21. **Clark, J.E.,** & Metcalfe, J.S. (2002). The mountain of motor development: A metaphor. In J.E. Clark & J.H. Humphrey (Eds.), *Motor Development: Research & Reviews, Vol. 2.* pp. 163-190. Reston, VA: NASPE.
22. **Clark, J.E.** (2005). Development of locomotion. In Hopkins, B. *The Cambridge Encyclopedia of Child Development*. Cambridge: Cambridge University Press.
23. Chen, L-C., & **Clark, J.E. (**2008). Growth and motor development during infancy. In G. Payne & P.Geng (Eds.), *Introduction to Human Motor Development*. Beijing, China: People's Education Press of Beijing. [in Chinese]
24. Bo, J., & **Clark, J.E.** (2008). Fine motor skill development in infants and children. In G. Payne & P.Geng (Eds.), *Introduction to Human Motor Development*. Beijing, China: People's Education Press of Beijing. [in Chinese]

Research Publications:

(*designates refereed publication;+designates invited publication; after 1990, senior authorship is either first OR last in author order)

1. *__Clark, J.E.__ (1978). Compatibility and complexity in response decision processing. *Psychology of Motor Behavior and Sport*, 174-181.
2. *__Clark, J.E.__, Stamm, C.L., & Urquia, M.G. (1978). Developmental variability: The issue of reliability. *Psychology of Motor Behavior and Sport*, 251-257.
3. *__Clark, J.E.__, & Moore, J.E. (1981). Young children's ability to use precued

information to select and maintain a response. *Perceptual and Motor Skills*, *52*, 655-658.

4. *__Clark, J.E.__ (1982). Developmental differences in response processing. *Journal of Motor Behavior, 14*, 247- 254.
5. *__Clark, J.E.__, & Watkins, D. (1984). Static balance in young children. *Child Development*, *55*, 854-857.
6. *__Clark, J.E.__, & Phillips, S.J. (1985). Validating a developmental sequence for the standing long jump. *Motor Development: Current Selected Research*, *1*, 73-85.
7. *Phillips, S.J., __Clark, J.E.__, & Petersen, R.D. (1985). Developmental differences in standing long jump takeoff parameters. *Journal of Human Movement Studies*, *11*, 75-87.
8. +__Clark, J.E.__ (1985). Movement Skill Development. *Adapted Physical Activity Quarterly*, *2,* 353-355.
9. *__Clark, J.E.__ (1987). Age-related differences in programming a movement. *Advances in Motor Development Research*, *1*, 95-104.
10. *Phillips, S.J., & __Clark, J.E.__ (1987). Infants' first unassisted walking steps: Relationships to speed. *Biomechanics X-A*, 425-428.
11. *DiRocco, P.J., __Clark, J.E.__, & Phillips, S.J. (1987). Jumping patterns of mentally retarded children. *Adapted Physical Activity Quarterly*, *4*, 178-191.
12. *__Clark, J.E.__, & Phillips, S.J. (1987). The step cycle organization of infant walkers. *Journal of Motor Behavior*, *19*, 421-433.
13. *__Clark, J.E.__, & Phillips, S.J. (1987). An examination of the contributions of selected anthropometric factors to gender differences in motor skill development. *Advances in Motor Development Research*, *1*, 171-178.
14. *__Clark, J.E.__, Lanphear, A., & Riddick, C. (1987). The effects of videogames on the response selection processing of the elderly. *Journal of Gerontology*, *42*, 82-85.
15. *__Clark, J.E.__, Whitall, J., & Phillips, S.J. (1988). Human interlimb coordination: The first 6 months of independent walking. *Developmental Psychobiology*, *21*, 445-456.
16. *+__Clark, J.E.__, & Whitall, J. (1989). What is motor development: The lessons of history. *Quest*, *41*, 183-202.
17. *+__Clark, J.E.__, Phillips, S.J., & Petersen, R. (1989). Developmental stability in jumping. *Developmental Psychology*, *25*, 929-935.
18. +__Clark, J.E.__ (1990). Understanding Motor Development. *Pediatric Exercise Science*, *2*, 281-282.
19. *Caldwell, G.E., & __Clark, J.E.__ (1990). The measurement of skill within the dynamical systems perspective. *Advances in Motor Development Research*, *3*, 165-200.
20. *Haller, C.F., & __Clark, J.E.__ (1990). Effects of occluding a ball's trajectory on the interception performance of adults and children. *Advances in Motor Development Research*, *3*, 80-90.
21. *Lanphear, A.K., Whitall, J., Overby, L.Y., Tyler, R.W., & __Clark, J.E.__ (1991). Comparison of four types of feedback on the golf putting task performance of novice adults. *Journal of Human Movement Studies*, *21,* 201-215.
22. *+__Clark, J.E.__, & Phillips, S.J. (1993). A longitudinal study of intralimb coordination in the first year of independent walking: A dynamical systems analysis. *Child Development*, *64*, 1143-1157.
23. *Jensen, J.L., Phillips, S.J., & __Clark, J.E.__ (1994). For young jumpers, differences are in the movement's control not its coordination. *Research Quarterly for Exercise and Sport, 65*, 258-268.
24. *+__Clark, J.E.__ (1995). On becoming skillful: Patterns and constraints. *Research Quarterly for Exercise and Sport, 66,* 173-183.
25. *Phillips, S.J., & __Clark, J.E.__ (1997). Temporal coordination and control in the development of the standing long jump. *Motor Development: Research and Reviews,1,* 99-121.

26. +**Clark, J.E.** (1998). Learning in the development of infant locomotion. *American Journal of Human Biology, 10,* 807-810.
27. *Barela, J.A., Jeka, J.J., & **Clark, J.E.** (1999). The use of somatosensory information during the acquisition of independent upright stance. *Infant behavior & development*, *22*, 89-104.
28. *Barela, J.A., Whitall, J., Black, P., & **Clark, J.E.** (2000). Can intralimb coordination in hemiplegic gait be explained by speed and mechanical constraints? *Human Movement Science, 19*, 251-273.
29. *Metcalfe, J.S., & **Clark, J.E.** (2000). Sensory information affords exploration of posture in newly walking infants and toddlers. *Infant Behavior & Development, 23,* 391-405.
30. +**Clark, J.E**. (2002). Stepping into a new paradigm with an old reflex. A commentary on "The relationship between physical growth and a newborn reflex" by Esther Thelen, Donna A. Fisher, and Robyn Ridley-Johnson. *Infant Behavior & Development, 128,* 1-3
31. *Barela, J.A., Black, P., Whitall, J., Getchell, N., & **Clark, J.E.** (2002). Hemiplegic intralimb coordination: A dynamical systems analysis. *Brazilian Journal of Biomechanics, 3(4),* 5-14.
32. +**Clark, J.E**. (2003). The changing role of mentoring the future professorate with special attention to being a low-consensus discipline. *Quest, 55,* 51-61. 33.
33. *Barela, J.A., Jeka, J.J., & **Clark, J.E**. (2003). Postural control In children: Coupling to dynamics somatosensory information. *Experimental Brain Research, 150,* 434-442.
34. *Kagerer, F.A., Bo, J., Contrereas-Vidal, J.L., & **Clark, J.E.** (2003). Visuomotor adaptation in children with Developmental Coordination Disorder. *Proceedings of the International Graphonomics Society, 59-62.*
35. *Kagerer, F., Bo, J., Contreras-Vidal, J.L., & **Clark, J.E.** (2004). Visuomotor adaptation in children with Developmental Coordination Disorder. *Motor Control,8,* 450-460.
36. *Metcalfe, J.S., Chen, L-C., Chang, T.Y., McDowell, K., Jeka, J.J., & **Clark, J.E.** (2005) .The changing temporal organization of posture across the first year of independent walking. *Experimental Brain Research, 161*, 405-416
37. *Metcalfe, J.S., McDowell, K., Chang, T.Y., Chen, L-C., Jeka, J.J., & **Clark, J.E**. (2005). Development of somatosensory-motor integration: An event-related analysis of infant posture in the first year of independent walking. *Developmental Psychobiology,46,*19-35.
38. *Contreras-Vidal, J.L., Bo, J., Boudreau, P., & **Clark J.E**. (2005). Development of visuo-motor representations for hand movement in young children. *Experimental Brain Research, 162,* 155-164.
39. +**Clark, J.E**. (2005). From the beginning: A developmental perspective on movement and mobility. *Quest, 57,* 37-45*.*
40. ***Clark, J.E.**, Getchell, N., Smiley-Oyen, A.L., & Whitall, J. (2005). Developmental Coordination Disorder: Issues, Identification, and Intervention. *Journal of Physical Education, Recreation, and Dance, 76(4),* 49-53.
41. *Kagerer, F.A., Contreras-Vidal, J.L., Bo, J., & **Clark, J.E.** (2006). Abrupt, but not gradual visuo-motor distortion facilities adaptation in children with Developmental Coordination Disorder. *Human Movement Science, 25,* 622-633
42. +**Clark, J.E.**, & Oliveira, M. A. (2006). Motor behavior as a scientific field: a view from the start of the 21st century. *Brazilian Journal of Motor Behavior, 1*, 1-19.
43. *Bo, J., Contreras-Vidal, J.L., Kagerer, F.A., & **Clark, J.E**. (2006). Effects of increased complexity of visuomotor transformations on children's arm movements. *Human Movement Science. 25*, 553-567*.*
44. *Whitall, J., Getchell, N., McMenamin, S., Horn, C., Pabreja, P., Wilms-Floet, A., & **Clark, J.E.** (2006). Perception-action coupling in children with and without DCD: Frequency locking between task relevant auditory signals and motor responses

in a dual motor task. *Child, Health and Development, 32,* 679-692.

45. * Oliveira, M.A., Shim, J.K., Loss, J.F., Petersen, R.D.S. &, **Clark, J.E.** (2006). Effect of kinetic redundancy on hand digit control in children with DCD. *Neuroscience Letters, 410,* 42-46. PMCID: PMC1785294
46. * Chen, L.-C., Metcalfe, J. S., Jeka, J. J., & **Clark, J. E.** (2007). Two steps forward and one back: Learning to walk affects infants' sitting posture. *Infant Behavior and Development, 30,* 16-25.
47. *Shim, J.K, Oliveira, M.A., Hsu, J., Huang, J., Park, J., & **Clark, J.E.** (2007). Hand digit control in children: Age-related change in hand digit force interactions during maximum flexion and extension force production tasks. *Experimental Brain Research, 176,* 374-386.
48. +Thomas, J.R., **Clark, J.E**., Feltz, D.L., Kretchmar, R.S., Morrow, J.R., Reeve, T.G., & Wade, M.G. (2007). The Academy promotes, unifies, and evaluates doctoral education in Kinesiology. *Quest, 59,* 161-181.
49. +**Clark, J.E.** (2007). On the problem of motor skill development. *Journal of Physical Education, Recreation, and Dance, 78(5),* 39-44.
50. *Bair, W-N, Kiemel, T., Jeka, J.J. & **Clark, J.E**. (2007). Development of multisensory reweighting for posture control in children. *Experimental Brain Research, 183,*435-446. PMCID: PMC2720682
51. *Bo, J. Bastian, A.J., Contreras-Vidal, J.L., Kagerer, F.A., & **Clark, J.E.** (2008). Continuous and discontinuous drawing: High temporal variability exists only in discontinuous circling in young children. *Journal of Motor Behavior, 40,* 391-399. PMCID: PMC2596960
52. *Chen, L-C, Metcalfe, J.M., Chang, T-Y., Jeka, J.J.,& **Clark, J.E**. (2008). The development of infant upright posture: Sway less or sway differently? *Experimental Brain Research, 186,* 293-303.
53. *Oliveira, M.A., Hsu, J., Park,J., **Clark, J.E**., & Shim, J.K. (2008). Age-related changes in multi-finger interactions in adults during maximum voluntary finger force production tasks. *Human Movement Science, 27,* 714-727. PMCID: PMC2637388
54. *Mackenzie, S., Getchell, N.,, Deutsch, K., Wilms-Floet, A., **Clark, J.E.,** & Whitall, J. (2008). Multi-limb coordination and rhythmic variability under varying sensory availability conditions in children with DCD. *Human Movement Science, 27,* 256-269. PMCID: PMC2519152
55. *Bo, J., Bastian, A.J., Kagerer, F.A., Contreras-Vidal, J.L., & **Clark, J.E.** (2008). Temporal variability in continuous versus discontinuous drawing for children with Developmental Coordination Disorder. *Neuroscience Letters.431,* 215-220. PMCID: PMC2596960
56. *Whitall, J., Chang, T-Y, Horn, C.L., Jung-Potter, J., McMenamin, S., Wilms-Floet, A., & **Clark, J.E**. (2008). Auditory-motor coupling of bilateral finger tapping in children with and without DCD compared to adults. *Human Movement Science, 27,* 914-931. PMCID: PMC2630489
57. +**Clark, J.E**. (2008). Kinesiology in the 21st century: A preface. *Quest, 60,* 1-2.
58. *Bo, J., Block, H.J., **Clark, J.E.**, & Bastian, A.J. (2008). A cerebellar deficit in sensorimotor prediction can explain movement timing variability. *Journal of Neurophysiology, 100,* 2825-2832. PMCID: PMC2585388
59. *King, B.R., Kagerer, F.A., Contreras-Vidal, J.L., & **Clark, J.E.** (2009). Evidence for multisensory spatial-to-motor transformations in aiming movements of children. *Journal of Neurophysiology, 101,* 315-322. PMCID: PMC2637014
60. King, B.R., Pangelinan, M.M., Kagerer, F.A., &**Clark, J.E**. (2010). Improvements in proprioceptive functioning influence multisensory-motor integration in 7- to 13-year-old children. *Neuroscience Letters, 483,* 36-40
61. Pangelinan, M.M., Kagerer, F.A., Momen, B., Hatfield, B.D., & **Clark, J.E**. (in press). Electrocortical dynamics reflect age-related differences in movement kinematics in children and adults. *Cerebral Cortex.*

62. King, B.R. Harring, J., Oliveira, M.A., & **Clark, J.E.** (in press). Statistically characterizing intra- and inter-individual variability in children with developmental coordination disorder. *Research in Developmental Disabilities*
63. Pangelinan, M.M., Zhang, G., VanMeter, J.W., **Clark, J.E.,** Hatfield, B.D., & Haufler, A.J. (in press). Beyond age and gender: Relationships between cortical and subcortical brain volume and cognitive- motor ability in school-age children. *NeuroImage.*
64. Roche, R., Wilms-Floet, A.M., **Clark, J.E.,** & Whitall, J. (in press). Auditory and visual information do not self-paced affect bilateral finger tapping in children with DCD. *Human Movement Science*.
65. Bair, W.N., Barela, J.A., Whitall, J., Jeka, J.J., & **Clark, J.E**. (under review). Children with Developmental Coordination Disorder need both touch and vision for static postural control. *Gait & Posture.*

You have two choices for applying to Princeton for first-year admissionâ€”single-choice early action or regular decision. Before you begin preparing your application, we strongly encourage you to review our standardized testing policy, (Please see statement from Dean Richardson about expectations for the upcoming year.) which includes detailed information regarding our.