- Bosch, F. (2015). *Strength Training and Coordination: An Integrative Approach*. Amsterdam: Uitgevers.
- Carroll, T.J., Riek, S. and Carson, R.G. (2001). Neural adaptations to resistance training. Implications for movement control. *Sports Medicine* 31(12):829–840.
- Davis, B. et al. (2000). The nature and classification of skill. In: B. Davis et al. (eds.), *Physical Education* and the Study of Sport. 4th ed. London: Harcourt Publishers, pp. 284–285.
- De Boer, R.W. (1987). Moments of force, power, and muscle coordination in speed-skating. *International Journal of Sports Medicine* 8(6):371–378.
- De Boer, R.W., Karemaker, J.W. and Strackee, J. (1987). Hemodynamic fluctuations and baroreflex sensitivity in humans: a beat-to-beat model. *American Journal of Physiology* 253:680–689.
- Fahey, T.D. (1998). Adaptation to exercise: progressive resistance exercise. In: T.D. Fahey (ed.), *Encyclopedia of Sports Medicine and Science*. Internet Society for Sport Science.
- Fleishman, E.A. (1958). An analysis of positioning movements and static-reactions. *Journal of Experimental Psychology* 55:13–24.
- Galligan, F., Maskery, C., Spence, J., Howe, D., Barry,
 T., Ruston, A., and Crawford, D. (2000). Acquiring skill. In: F. Galligan, et al. (eds.), *Advanced PE for Edexcel.* 1st ed. Bath: Bath Press, pp. 102–108.
- Harris, G.R., Stone, M.H., O'Bryant, H.S., Proulx, C.M. and Johnson, R.L. (2000). Short-term performance effects of high power, high force, or combined weight-training methods. *Journal of Strength & Conditioning Research* 14:14–20.
- Jones, D.A. and Rutherford, O.M. (1987). Human muscle strength training: the effects of three different regimens and the nature of the resultant changes. *Journal of Physiology* 391:1–11.

- Lederman, E. (2010). *Neuromuscular Rehabilitation in Manual and Physical Therapies*. London: Elsevier Churchill Livingstone.
- Macmillan, M. (2000). An Odd Kind of Fame: Stories of Phineas Gage. Cambridge, MA: The MIT Press.
- Mutton, D.L., Loy, S.F., Rogers, D.M., Holland, G.J., Vincent, W.J. and Heng, M. (1993). Effect of run vs combined cycle/run training on VO2max and running performance. *Medicine and Science in Sports and Exercise* 25:1393–1397.
- Rutherford, O.M. and Jones, D.A. (1986). The role of learning and coordination in strength training. *European Journal of Applied Physiology* 55(1): 100–105.
- Schmidt, R.A. (1988). *Motor Control and Learning*. 5th ed. Champaign, IL: Human Kinetics.
- Schurr, E.L. (1980). Movement Experiences for Children: A Humanistic Approach to Elementary School Physical Education. Englewood Cliffs, NJ: Prentice-Hall.
- Stanton, R., Reaburn, P.R. and Humphries, B. (2004). The effect of short-term Swiss ball training on core stability and running economy. *Journal of Strength* & Conditioning Research 18(3):522–528.
- Warren, B. (2006). Young transfer of strength and power training to sports performance. *International Journal of Sports Physiology and Performance* 1:74–83.
- Wilson, G. and Murphy, A. (1996). The use of isometric test of muscular function in athletic assessment. *Sport Medicine* 22(1):19–37.
- Young, A., Stokes, M., Round, J.M. and Edwards, R.H. (1983). The effect of high-resistance training on the strength and cross-sectional area of the human quadriceps. *European Journal of Clinical Investigation* 13(5):411–417.

Knapp, B. (1967). Skill in Sport: The Attainment of Proficiency. London: Routledge & Kegan Paul.

- Benjamin, M. (2009). The fascia of the limbs and back: a review. *Journal of Anatomy*. January, 214(1):1–18.
- Fuller, R.B. (1962). Tensile-integrity structures, United States Patent 3,063,521, November 13.
- Horan, S.A., Evans, K. and Kavanagh, J.J. (2011). Movement variability in the golf swing of male and female skilled golfers. *Medicine & Science in Sports* & Exercise 43(8):1474–1483.
- Langevin (2006). Connective tissue: a body-wide signaling network? *Medical Hypotheses* 66(6): 1074–1077.
- Lee, D. (1999). *The Pelvic Girdle: An Approach to the Examination and Treatment of the Lumbo-Pelvic-Hip Region*. Toronto: Churchill Livingstone.
- Lee, D. (2011). *The Pelvic Girdle*. 4th ed. Edinburgh: Churchill Livingstone.
- Lindsay, M. (2008). Fascia: Clinical Applications for Health and Human Performance. New York, NY: Delmar Cengage Learning.
- Logan, G. and McKinney, W. (1970). The serape effect. In: A. Lockhart (ed.), *Anatomic Kinesiology*. 3rd ed. Dubuque, IA: Brown, pp. 287–302.
- Myers, D.G. (2011). *Anatomy Trains: Myofascial Meridians for Manual and Movement Therapies*. 3rd ed. Edinburgh: Churchill Livingstone.
- Paoletti, S. (2002). *The Fascia*. Seattle, WA: Eastland Press Inc.
- Pugh, A. (1976). An Introduction to Tensegrity. Berkeley, CA: University of California Press.
- Santana, J.C. (2003). The serape effect: a kinesiological model for core training. *Strength and Conditioning Journal* 25(2):73–74.
- Santello, M. and Lang, C.E. (2015). Are movement disorders and sensorimotor injuries pathologic synergies? When normal multi-joint movement synergies become pathologic. *Frontiers in Human Neuroscience* 8:1050.
- Schleip, R., Findley, T.W., Chaitow, L. and Huijing, P. (2012). Fascia: the Tensional Network of the Human Body: The Science and Clinical Applications in Manual and Movement Therapies. Edinburgh: Churchill Livingstone.

- Schleip, R., Klingler, W. and Lehmann-Horn, F. (2005). Active fascial contractility: fascia may be able to contract in a smooth muscle-like manner and thereby influence musculoskeletal dynamics. *Medical Hypotheses* 65(2):273–277.
- Schleip, R. and Muller, G.D. (2012). Training principles for fascial connective tissues. Scientific foundation and suggested practical application. *Journal of Bodyworks and Movement Therapies* 17(1): 103–115.
- Shrier, I. (2004). Does stretching improve performance? A systematic and critical review of the literature. *Clinical Journal of Sport Medicine* 14:267–273.
- Staubesand, J., Baumbach, K.U.K. and Li, Y. (1997). La structure find de l'apone 'vrose jambie 're. *Phlebologie* 50:105–113.
- Stecco, C., Gagey, O., Bellonic, A., Pozzuolia, A., Porzionatoc, A., Macchic, V., Aldegheria, R., De Caroc, R. and Delmas, V. (2007). Anatomy of the deep fascia of the upper limb. Second part: study of innervation. *Morphologie* 91:38–43.
- Stecco, C., Porzionato, A., Lancerotto, L., Stecco, A., Macchi, V., Day, J.A. and De Caro, R. (2008).
 Histological study of the deep fasciae of the limbs. *Journal of Bodywork and Movement Therapies* 12:225–230.
- Tesarz, J., Hoheisel, U., Wiedenhofer, B. and Mense, S. (2011). Sensory innervation of the thoracolumbar fascia in rats and humans. *Neuroscience* 194: 302–308.
- Ting, L.H., Chiel, H.J., Trumbower, R.D., Allen, J.L., McKay, J.L., Hackney, M.E. and Kesar, T.M. (2015). Neuromechanical principles underlying movement modularity and their implications for rehabilitation. *Neuron* 86(1):38–54.
- Vleeming, A., Pool-Goudzwaard, A.L., Stoeckart, R., van Wingerden, J.P., Snijders, C.J., Vleeming, A. et al. (1995). The posterior layer of the thoracolumbar fascia. Its function in load transfer from spine to legs. *Spine* 20(7):753–758.
- Wilson, G.J., Murphy, A.J. and Walshe, A. (1996). The specificity of strength training: the effect of posture. *European Journal of Applied Physiology* 73:346–352.

- Adams, J.A. (June 1971). A closed-loop theory of motor learning. *Journal of Motor Behavior* 3(2):111–149.
- Bosch, F. (2015). *Strength Training and Coordination: An Integrative Approach*. Amsterdam: Uitgevers.
- Branchi, I., D'Andrea, I., Fiore, M., Di Fausto, V., Aloe, L. and Alleva, E. (2006). Early social enrichment shapes social behavior and nerve growth factor and brain-derived neurotrophic factor levels in the adult mouse brain. *Biological Psychiatry* 60:690–696.
- Bubic, A. (2010). Prediction, cognition and the brain. *Frontiers in Human Neuroscience* 4:25.
- Cai, L.L., Fong, A.J., Otoshi, C.K., Liang, Y., Burdick, J.W., Roy, R.R., and Edgerton, V.R. (2006).
 Implications of assist-as-needed robotic step training after a complete spinal cord injury on intrinsic strategies of motor learning. *Journal of Neuroscience* October 11, 26(41):10564–10568.
- Collier, R. (2013). Intermittent fasting: the science of going without. *Canadian Medical Association Journal* June 11; 185(9):E363–E364.
- Cotman, C.W. (2007). Exercise builds brain health: key roles of growth factor cascades and inflammation. *Trends in Neurosciences* 30:464–472.
- Diamond, M.C., Krech, D. and Rosenzweig, M.R. (1964). The effects of an enriched environment on the rat cerebral cortex. *Journal of Comparative Neurology* 123:111–119.
- Duman, R.S. and Monteggia, L.M. (2006). A neurotrophic model for stress-related mood disorders. *Biological Psychiatry* 2:1116–1127.
- Folland, P. and Williams, A.G. (2007). The adaptations to strength training: morphological and neurological contributions to increased strength. *Sports Medicine* 37(2):145–168.
- Gleick, J. (1987). *Chaos: Making a New Science*. New York, NY: Viking Penguin.
- Gordon, N.S., Burke, S., Akil, H., Watson, S.J. and Panksepp, J. (2003). Socially induced brain 'fertilization'. *Neurosceicne Letter*. Elsevier.
- Gordon, N.S., Burke, S., Akil, H., Watson, S.J. and Panksepp, J. (2003). Socially-induced brain "fertilization": play promotes brain derived neurotrophic factor transcription in the amygdala and dorsolateral frontal cortex in juvenile rats. *Neuroscience Letters*. April 24; 341(1):17–20.
- Greenough, W.T. and Black, J.E. (1992). Induction of brain structure by experience. Substrates for

cognitive development. In: M.R. Gunnar and C.A. Nelson (eds.), *The Minnesota Symposia on Child Psychology, Vol. 24, Developmental Behavioral Neuroscience*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc, pp. 155–200.

- Grigg, P. (1994). Peripheral neural mechanisms in proprioception. *Journal of Sport Rehabilitation* 3: 2–17.
- Hall, J.E. (2005). Guyton & Hall Physiology Review. Philadelphia, PA: WB Saunders.

Head, H. and Holmes, G. (1911). Sensory disturbances from cerebral lesions. *Brain* 34:102–254.

Hebb, D.O. (1949). *The Organization of Behavior: A Neuropsychological Theory*. New York, NY: Wiley and Sons.

Henneman, E., Somjen, G. and Carpenter, D.O. (1965).
Functional significance of cell size in spinal motoneurons. *Journal of Neurophysiology* 28: 560–580.

- Hick, W.E. (1952). On the rate of gain of information. *Quarterly Journal of Experimental Psychology* 4: 11–26.
- Jami, L. (1992). Golgi tendon organs in mammalian skeletal muscle: functional properties and central actions. *Physiological Reviews* 72:623–666.
- Kamen, G. and Roy, A. (2000). Motor unit synchronization in young and elderly adults. *European Journal of Applied Physiology* 81(5): 403–410.
- Kamm, K., Thelen, E. and Jensen, J.L. (1990). A dynamical systems approach to motor development. *Physical Therapy* 70:763–775.
- Kelso, J. (1984). Phase transitions and critical behavior in human bimanual coordination. American Journal of Physiology: Regulatory, Integrative, and Comparative Physiology 246(6):R1000–1004.
- Kelso, J. and Scholze, J. (1985). Comparative phenomena in biological motion. In H. Haken (ed.), *Complex Systems: Operational Approaches in Neurobiology, Physical Systems, and Computers*. Berlin: Springer–Verlag, pp. 124–149.
- Kistemaker, D.A., Knoek Van Soest, A.J., Wong, J.D., Kurtzer, I. and Gribble, P.L. (2013). Control of position and movement is simplified by combined muscle spindle and Golgi tendon organ feedback. *Journal of Neurophysiology* 109(4):1126–1139.
- Kitago, T. and Krakauer, J.W. (2013). Motor learning principles for neurorehabilitation. *Handbook of Clinical Neurology* 110.

- Knight, C.A. and Kamen, G. (2001). Adaptations in muscular activation of the knee extensor muscles with strength training in young and older adults. *Journal of Electromyography & Kinesiology* 11(6):405–412.
- Lewis, T. (2016). Human brain: facts, functions & anatomy. *Live Science*, March 25. Available at: www. livescience.com/29365-human-brain.html.

Mattson, M.P. (2005). Energy intake, meal frequency, and health: a neurobiological perspective. *Annual Review of Nutrition* 25:237–260.

- Merzenich, M.M. (2001). Cortical plasticity contributing to child development. In: J.L.
 McClelland and R.S. Siegler (eds.), *Carnegie Mellon* Symposia on Cognition. Mechanisms of Cognitive Development: Behavioral and Neural Perspectives.
 Mahwah, NJ: Lawrence Erlbaum Associates, Inc, pp. 67–95.
- Merzenich, M.M. (2013). Soft-Wired: How the New Science of Brain Plasticity Can Change Your Life. San Francisco, CA: Parnassus Publishing.
- Merzenich, M.M. and de Charms, C. (1996). Neural representations, experience and change. In: R. Llinas and P. Churchland (eds.), *The Mind-Brain Continuum*. Boston, MA: MIT Press, pp. 61–81.
- Merzenich, M.M. and Jenkins, W.M. (1993). Cortical representation of learned behaviors. In: P. Andersen (ed.), *Memory Concepts*. Amsterdam, NL: Elsevier, pp. 437–453.
- Miller, P. (2002). *Theories of Developmental Psychology*. 4th ed. New York, NY: Worth Publishers.
- Nash, J.M. (1997). Fertile minds. Time 149(5).
- Pascual-Leone, A. (1998). Cortical plasticity associated with Braille learning. *Next Generation Immunology* 2:168–174.
- Penfield, W. and Boldrey, E. (1937). Somatic motor and sensory representation in the cerebral cortex of man as studied by electrical stimulation. *Brain* 60:389–443.
- Sawicki, G.S., Lewis, C.L. and Ferris, D.P. (2009). It pays to have a spring in your step. *Exercise and Sport Sciences Reviews* 37:130–138.
- Schactor, D. (2011). *Psychology*. New York, NY: Worth Publishers.
- Schmidt, R.A. (1975). A schema theory of discrete motor skill learning. *Psychological Review* 82(4):225–260.

Schmidt, R.A. (1991). Motor Learning and Performance. Champaign, IL: Human Kinetics.

- Shadmehr, R., Smith, M.A. and Krakauer, J.W. (2010). Error correction, sensory prediction, and adaptation in motor control. *Annual Review of Neuroscience* 33:89–108.
- Shatz, C.J. (2009). MHC Class I: an unexpected role in neuronal plasticity. *Neuron* 64:40–45.

Simons, D.J. and Chabris, C.F. (1999). Gorillas in our midst: sustained inattentional blindness for dynamic events. *Perception* 28:1059–1074.

- Spencer, J.P., Clearfield, M., Corbetta, D., Ulrich, B., Buchanan, P. and Schöner, G. (2006). Moving toward a grand theory of development: in memory of Esther Thelen. *Child Development* 77:1521–1538.
- Steers, R.M. and Porter, L.W. (1979). Motivation and Work Behavior. New York, NY: McGraw-Hill.
- Syed, M. (2011). *Bounce: The Myth of Talent and the Power of Practice*. London: 4th Estate.
- Thomas, R.M. (2001). Connectionism and dynamic systems. In: R.M. Thomas, (ed.), *Recent Theories of Human Development*. Thousand Oaks, CA: Sage, pp. 61–62.
- Torrents, C. and Balague, N. (2006). Dynamic systems theory and sports training. *Journal of Education*. *Physical Training. Sport* 1(60):72–83.
- Van Praag, H. and Gerd, K. (2000). Neural consequences of environmental enrichment. *Nature Reviews Neuroscience* 1(3):191–198.
- Wade, N.J. (2003). The search for a sixth sense: the cases for vestibular, muscle, and temperature senses. *Journal of the History of Neuroscience* 12:175–202.
- Wager, T.D. (2005). Expectations and anxiety as mediators of placebo effects in pain. *Pain* 115:225–226.
- Warren, R.M. (1970). Perceptual restoration of missing speech sounds. *Science* 167(3917):392–393.
- Williams, A.M., Davids, K. and Williams, J.G. (1999). Visual Perception and Action in Sport. London: Taylor & Francis.
- Wulf, G., McNevin, N.H., Fuchs, T., Ritter, F. and Toole, T. (2000). Attentional focus in complex skill learning. *Research Quarterly for Exercise and Sport* 71(3):229–239.

- An, J., Wulf, G. and Kim, S. (2013). Carry distance and x-factor increases in golf through an external focus of attention. *Journal of Motor Learning and Development* 1(1):2–11.
- Arutyunyan, G.A., Gurfinkel, V.S. and Mirskii, M.L. (1969). Organization of movements on execution by man of an exact postural task. *Biofizica* 14(6):1103– 1107.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioural change. *Psychological Review* 84:191–215.
- Baratta, R., Solomonow, M., Zhou, B.H., Letson, D., Chuinard, R. and D'Ambrosia, R. (1988). Muscular coactivation: the role of the antagonist musculature in maintaining knee stability. *American Journal of Sports Medicine* 16(2):113–122.
- Bartlett, R., Wheat, J. and Robins, M. (2007). Is movement variability important for sports biomechanists? *Sports Biomechanics* 6(2):224–243.
- Baumeister, R.F. (1984). Choking under pressure: selfconsciousness and paradoxical effects of incentives on skillful performance. *Journal of Personality and Social Psychology* 46:610–620.
- Beilock, S.L. and Gray, R. (2007). Why do athletes
 "choke" under pressure? In: G. Tenenbaum and
 R.C. Eklund (eds.), *Handbook of Sport Psychology*.
 3rd ed. Hoboken, NJ: Wiley, pp. 425–444.
- Bosch, F. (2015). *Strength Training and Coordination*. *An Integrative Approach*. Uitgevers.
- Brown, C., Bowser, B. and Simpson, K.J. (2011). Movement variability during single leg jump landings in individuals with and without chronic ankle instability. *Clinical Biomechanics* 27:52–63.
- Cannon, W.B. (1927). The James-Lange theory of emotion: a critical examination and an alternative theory. *American Journal of Psychology* 39:106–124.
- Cignetti, F., Schena, F. and Rouard, A. (2009). Effects of fatigue on inter-cycle variability in cross-country skiing. *Journal of Biomechanics* 42:1452–1459.
- Danion, F., Varrience, E. and Pailhous, J. (2003). Stride variability in human gait: the effect of stride frequency and stride length. *Gait and Posture* 18(1):69–77.
- Darwin, C. (1872). The Expression of Emotions in Man and Animals. 3rd ed. New York, NY: Appleton.
- Davids, K., Glazier, P., Araújo, D. and Bartlett, R. (2003). Movement systems as dynamical systems:

the functional role of variability and its implications for sports medicine. *Sports Medicine* 33(4):245–260.

- Dewar, G. (2014). The cognitive benefits of play: effects on the learning brain. *Parenting Science*. Available at: www.parentingscience.com/benefits-of-play.html.
- Dishman, R.K. (1994) *Advances in Exercise Adherence*. Champaign, IL: Human Kinetics.
- Ekman, P. (1999). Basic emotions. In: T. Dalgleish and M. Power (eds.), *Handbook of Cognition and Emotion*. Sussex: John Wiley & Sons, pp. 45–60.

Eysenck, M.W. and Calvo, M.G. (1992). Anxiety and performance: the processing efficiency theory. *Cognition and Emotion* 6:409–434.

Glasgow, P., Bleakley, C.M. and Philips, N. (2013). Being able to adapt to variable stimuli: the key driver in injury and illness prevention? *British Journal of Sports Medicine* 47:64–65.

- Glazier, P., Davids, K. and Bartlett, R.M. (2003). Dynamic system theory: a relevant framework for performance-oriented sports biomechanics research. *Sportscience* 7. Available at www.sportsci.org/ jour/03/psg.htm.
- Goleman, D. (1995). *Emotional Intelligence*. New York, NY: Bantam Books.

Groner, C. (2014). Internal vs. External Focus: Effects on Motor Learning. Hoboken, NJ: Wiley.

- Kal, E.C., van der Kamp, J. and Houdijk, H. (2013). External attentional focus enhances movement automatization: a comprehensive test of the constrained action hypothesis. *Human Movement Sciences* 32:527–539.
- Kelso, J. and Scholze, J. (1985). Comparative phenomena in biological motion. In: H. Haken (ed.), Complex Systems: Operational Approaches in Neurobiology, Physical Systems, and Computers. Berlin: Springer–Verlag, pp. 124–149.
- Kyllo, B.L. and Landers, D.M. (1995) Goal setting in sport and exercise: A research synthesis to resolve the controversy. *Journal of Sports and Exercise Psychology* 17:117–137.
- Lancy, D.F. (2008). *The Anthropology of Childhood: Cherubs, Chattel, Changelings.* Cambridge: Cambridge University Press.
- Latash, M.L. (2012). The bliss of motor abundance. *Experimental Brain Research* 217:1–5.
- Lewis, B. and Linder, D. (1997). Thinking about choking? Attentional processes and paradoxical performance. *Personality and Social Psychology Bulletin* 23:937–944.

- Locke, E.A. and Kristof, A.L. (1996). Volitional choices in the goal achievement process. In: P.M. Gollwitzer and J.A. Bargh (eds.), *The Psychology of Action: Linking Cognition and Motivation to Behavior*. New York, NY: Guilford Press, pp. 365–384.
- Locke, E.A. and Latham, G.P. (1990) A Theory of Goal Setting and Task Performance. Englewood Cliffs, NJ: Prentice Hall.
- Masters, R.S.W. (1992). Knowledge, knerves and knowhow – the role of explicit versus implicit knowledge in the breakdown of a complex motor skill under pressure. *British Journal of Psychology* 83:343–358.
- McAuley, E. and Mihalko, S.L. (1998). Measuring exercise related self-efficacy. In: J.L. Duda (ed.), *Advances in Sport and Exercise Psychology Measurement*. Morgantown, WV: Fitness Information Technology, pp. 371–390.
- McAuley, E., Mihalko, S. and Bane, S. (1997). Exercise and self-esteem in middle-aged adults: multidimensional relationships and physical fitness and self-efficacy influences. *Journal of Behavioral Medicine* 20:67–83.
- McNevin, N.H., Shea, C.H. and Wulf, G. (2003). Increasing the distance of an external focus of attention enhances learning. *Psychological Research* 67:22–29.
- Merzenich, M.M., Nahum, M. and Van Vleet, T.M. (2013). Neuroplasticity: introduction. In: *Progress in Brain Research*.
- Miller, G.A. (1956). Seven the magical number; plus or minus 2. *Psychological Review* 63:81–97.
- Mitra, S., Dangwal, R., Chatterjee, S., Jha, S., Bisht, R.S. and Kapur, P. (2005). Acquisition of computer literacy on shared public computers: children and the "Hole in the wall". *Australasian Journal of Educational Technology* 21(3):407–426.
- Myers, D.G. (2004). *Theories of Emotion. Psychology*. 7th ed. New York, NY: Worth Publishers.
- Neath, I. and Surprenant, A.M. (2003). *Human Memory: An Introduction to Research, Data, and Theory.* 2nd ed. Belmont, CA: Wadsworth.
- Newell, K.M. and Slifkin, A.B. (1998). The nature of movement variability. In: J.P. Piek (ed.), Motor Behavior and Human Skill: A Multidisciplinary Perspective. Champaign, IL: Human Kinetics.
- Onoda, S. (2014). Examining the relationships between self-efficacy, effort regulation strategy use, and English vocabulary skills. *Studies in Self-Access Learning Journal* 5(4):357–371.

- Peh, Y., Chow, J. and Davids, K. (2011). Focus of attention and its impact on movement behavior. *Journal of Science and Medicine in Sport* 14:70–78.
- Pellegrini, A.D. and Holmes, R.M. (2006). The role of recess in primary school. In: A.D. Pellegrini and R.M. Holmes (eds.), *Play = Learning: How Play Motivates and Enhances Children's Cognitive and Social-Emotional Growth*. New York, NY: Oxford University Press, pp. 36–53.
- Roberts, G.C. (2001). Advances in Motivation in Sports and Exercise. Champaign, IL: Human Kinetics.
- Schmidt, R.A. (1975). A schema theory of discrete motor skill learning. *Psychological Review* 82(4):225–260.
- Scirst, D.L. (2011). Psychology. 2nd ed. New York, NY 10010: Worth Publishers.
- Shapiro, D., Zernicke, R.F., Gregor, R.J. and Diestel, J.D. (1981). Evidence for generalized motor programs using gait-pattern analysis. *Journal of Motor Behavior* 13(1):33–47.
- Steriou, N. and Decker, L.M. (2011). Human movement variability, nonlinear dynamics, and pathology: is there a connection? *Human Movement Science* 30(5):869–888.
- Vance, J., Wulf, G., Töllner, T., McNevin, N. and Mercer, J. (2004). EMG activity as a function of the performer's focus of attention. *Journal of Motor Behavior* 36:450–459.
- Whitebread, D. (2012). The importance of play. Available at: www.importanceofplay.eu/IMG/pdf/dr_ david_whitebread_-_the_importance_of_play.pdf.
- Wine, J. (1971). Test anxiety and direction of attention. *Psychological Bulletin* 76:92–104.
- Wulf, G. (2014). Attentional focus and motor learning: a review of 15 years. *International Review of Sport and Exercise Psychology* 6(1):77–104.
- Wulf, G., Höß, M. and Prinz, W. (1998). Instructions for motor learning: differential effects of internal versus external focus of attention. *Journal of Motor Behavior* 30:169–179.
- Wulf, G., Landers, M., Lewthwaite, R. and Töllner, T. (2009). External focus instructions reduce postural instability in individuals with Parkinson disease. *Physical Therapy* 89:162–168.
- Wulf, G. and McNevin, N.H. (2003). Simply distracting learners is not enough: more evidence for the learning benefits of an external focus of attention. *European Journal of Sport Science* 3:1–13.
- Wulf, G., McNevin, N.H. and Shea, C.H. (2001). The automaticity of complex motor skill learning as a

function of attentional focus. *Quarterly Journal of Experimental Psychology* 54A:1143–1154.

- Wulf, G. and Prinz, W. (2001). Directing attention to movement effects enhances learning: a review. *Psychonomic Bulletin & Review* 8:648–660.
- Wulf, G., Weigelt, M., Poulter, D.R. and McNevin, N.H. (2003). Attentional focus on supra-postural tasks

affects balance learning. *Quarterly Journal of Experimental Psychology* 56:1191–1211 (Experiment 1).

Zachry, T., Wulf, G., Mercer, J. and Bezodis, N. (2005). Increased movement accuracy and reduced EMG activity as the result of adopting an external focus of attention. *Brain Research Bulletin* 67:304–309.

REFERENCES

Simmons, L. (2008). *Book of Methods*. Columbus, OH: Westside Barbell.

Wulf, G. and Prinz, W. (2001). Directing attention to movement effects enhances learning: A review. *Psychonomic Bulletin & Review* 8: 648–660.

Arntz, A., Dreessen, L. and De Jong, P. (1994). The influence of anxiety on pain: attentional and attributional mediators. *Pain* 56:307–314.

Beecher, H.K. (1959). Sheik Adhith experimentation in man. Journal of the American Medical Association 169 (5):461–478.

Benedetti, F., Pollo, A., Lopiano, L., Lanotte, M., Vighetti, S. and Rainero, I. (2003). Conscious expectation and unconscious conditioning in analgesic, motor, and hormonal placebo/nocebo responses. *Journal of Neuroscience* 15:4315–4323.

Buonomano, D. and Merzenich, M. (1998). Cortical plasticity: from synapses to maps. *Annual Review of Neuroscience* 21:149–186.

Butler, D. and Moseley, G.L. (2003). *Explain Pain*. Adelaide: NOI Group Publishing.

Christensen, S.T. and Hartvigsen, J. (2008). Spinal curves and health: a systematic critical review of the epidemiological literature dealing with associations between sagittal spinal curves and health. *Journal of Manipulative and Physiological Therapeutics* 31(9):690–714.

Cook, G., Burton, L. and Hoogenboom, B. (2006). Preparticipation screening: the use of fundamental movements as an assessment of function – part 1. North American Journal of Sports Physical Therapy 1:62–72.

Cook, G., Burton, L., Kiesel, K., Rose, G. and Milo, F. (2010). *Movement: Functional Movement Systems: Screening, Assessment and Corrective Strategies.* Santa Cruz, CA: On Target Publications.

Davids, K. et al. (2003) "Essential noise" – enhancing variability of informational constraints benefits movement control: a comment on Waddington and Adams. *British Journal of Sports Medicine* 38(5).

Davids, K., Glazier, P., Araújo, D. and Bartlett, R.
(2003). Movement systems as dynamical systems: the functional role of variability and its implications for sports medicine. *Sports Medicine* 33(4):245–260.

Davids, K., Lees, A. and Burwitz, L. (2000). Understanding and measuring coordination and control in kicking skills in soccer: implications for talent identification and skill acquisition. *Journal of Sports Science* 18(9):703–714.

Dorrel, B.S., Shaffer, L.T. and Myer, G. (2015) Evaluation of the functional movement screen as an injury prediction tool among active adult populations. A systematic review and meta-analysis. *Sports Health* 7(6):532–537.

Eccleston, C. (1994). Chronic pain and attention: a cognitive approach. *British Journal of Clinical Psychology*. 33:535–547.

Fields, H.L. (2000). Pain modulation: expectation, opioid analgesia and virtual pain. *The Biological Basis for Mind Body Interactions*. 122:245–253.

Fields, H.L., Basbaum, A. and Heinricher, M. (2006).
CNS mechanisms of pain modulation. In: S.B.
McMahon and M. Koltzenburg (2006). *Textbook of Pain*. 5th ed. London: Elsevier, pp. 125–143.

Flor, H., Nikolajsen, L. and Jensen, T.S. (2006). Phantom limb pain: a case of maladaptive CNS plasticity? *Nature Reviews Neuroscience* 7:873–881.

Franklin, M.E. and Conner-Kerr, T. (1998). An analysis of posture and back pain in the first and third trimesters of pregnancy. *Journal of Orthopaedic & Sports Physical Therapy* 28(3):133–138.

Fritz, J.M. and Wainner, R.S. (2001). Examining diagnostic tests: an evidence-based perspective. *Physical Therapy* 81:1546–1564.

Hamberg-van Reenen, H.H. (2007). A systematic review of the relation between physical capacity and future low back and neck/shoulder pain. *Pain* 130(1–2):93–107.

Hopkins, J.T., Coglianese, M., Glasgow, P. et al. (2012). Alterations in evertor/invertor muscle activation and center of pressure trajectory in participants with functional ankle instability. *Journal of Electromyography and Kinesiology* 22:280–285.

Jacobs, J.V., Henry, S.M. and Nagle, K.J. (2009). People with chronic low back pain exhibit decreased variability in the timing of their anticipatory postural adjustments. *Behavioral Neuroscience* 123:455–458.

Kamm, K., Thelen, E. and Jensen, J.L. (1990). A dynamical systems approach to motor development. *Physical Therapy* 70:763–775.

Knudson, D.V. (2007). Fundamentals of Biomechanics. New York, NY: Springer.

Knutson, G.A. (2005). Anatomic and functional leglength inequality: a review and recommendation for clinical decision-making. Part I, anatomic leg-length inequality: prevalence, magnitude, effects and clinical significance. *Chiropractic & Osteopathy*, 13:11.

Lederman, E. (2010). The fall of the postural-structuralbiomechanical model in manual and physical therapies: exemplified by lower back pain. *CPDO Online Journal*. March, 1–14. Available at: www. cpdo.net/Lederman_The_fall_of_the_posturalstructural-biomechanical_model.pdf.

- Levine, J.D., Gordon, N.C. and Fields, H.L. (1978). The mechanism of placebo analgesia. *The Lancet* 2:654– 657.
- McCaffery, M. and Pasero, C. (1999). Pain. Clinical Manual. 2nd ed. Maryland Heights. MO: Mosby.
- Melzack, R. (1990). Phantom limbs and the concept of a neuromatrix. *Trends in Neuroscience* 13:88–92.
- Melzack, R. (1996). Gate control theory. On the evolution of pain concepts. *Pain Forum* 5:128.
- Melzack, R. (1999). From the gate to the neuromatrix. *Pain* 6:S121–126.
- Melzack, R. and Katz, J. (2004). The gate control theory: reaching for the brain. In: K.D. Craig and T. Hadjistavropoulos (eds.), *Pain: Psychological Perspectives*. Mahwah, NJ: Lawrence Erlbaum Associates, pp. 13–34.
- Melzack, R. and Wall, P.D. (1965). Pain mechanisms: a new theory. *Science* 150:971–979.
- Merzenich, M.M. (2013). Soft-Wired: How the New Science of Brain Plasticity Can Change Your Life. San Francisco, CA: Parnassus Publishing.
- Meyer, R., Ringkamp, M., Campbell, J.N. and Raja, S.N. (2006). Peripheral mechanisms of cutaneous nociception. In: S.B. McMahon and M. Koltzenburg (eds.), *Textbook of Pain*. 5th ed. London: Elsevier, pp. 3–35.
- Moseley, G.L. (2003). Joining forces combining cognition-targeted motor control training with group or individual pain physiology education: a successful treatment for chronic low back pain. *Journal of Manual and Manipulative Therapy* 11:88–94.
- Moseley, G.L. (2004). Evidence for a direct relationship between cognitive and physical change during an education intervention in people with chronic low back pain. *European Journal of Pain* 8:39–45.
- Moseley, G.L. (2007). Reconceptualising pain according to modern pain science. *Body in Mind.org*. Available at: https://bodyinmind.org/resources/journal-articles/ full-text-articles/reconceptualising-pain-accordingto-modern-pain-science/.
- Moseley, G.L. and Arntz, A. (2007). The context of a noxious stimulus affects the pain it evokes. *Pain* 133(1–3):64–71.

Ossipov, M.H., Dussor, G.O. and Porreca, F. (2010). Central modulation of pain. *Journal of Clinical Investigation*. November 1; 120(11):3779–3787.

- Pollard, C.D., Heiderscheit, B.C., Van Emmerik, R.E.A. and Hamill, J. (2005). Gender differences in lower extremity coupling variability during an unanticipated cutting maneuver. *Journal of Applied Biomechanics* 21:143–152.
- Pollo, A., Amanzio, M., Arslanian, A., Casadio, C., Maggi, G. and Benedetti, F. (2001). Response expectancies in placebo analgesia and their clinical relevance. *Pain* 93:77–84.
- Poussa, M.S. (2005). Anthropometric measurements and growth as predictors of low-back pain: a cohort study of children followed up from the age of 11 to 22 years. *European Spine Journal* 14(6):595–598.
- Rassier, D.E. and Herzog, W. (2002). Force enhancement following an active stretch in skeletal muscle. *Journal of Electromyography and Kinesiology* 13:471–477.
- Robbins, D.W. (2005). Postactivation potentiation and its practical applicability: a brief review. *Journal of Strength and Conditional Research* 19:453–458.
- Shatz, C.J. (2009). MHC Class I: an unexpected role in neuronal plasticity. *Neuron* 64:40–45.
- Stergiou, N. and Decker, L.M. (2011). Human movement variability, nonlinear dynamics, and pathology: is there a connection? *Human Movement Science*. October 30(5):869–888.
- Sullivan, M.J.L., Thorn, B., Haythornthwaite, J.A., Keefe, F., Martin, M., Bradley, L.A. et al. (2001). Theoretical perspectives on the relation between catastrophizing and pain. *Clinical Journal of Pain* 17:52–64.
- Torrents, C. and Balague, N. (2006). Dynamic systems theory and sports training. *Journal of Education*. *Physical Training*. Sport 1(60):72–83.
- Travell, J.G. and Simmons, D.G. (1998). *Travell & Simon's Myofascial Pain and Dysfunction*. Philadelphia, PA: Lippincott Williams & Wilkins.
- Wager, T.D. (2005). Expectations and anxiety as mediators of placebo effects in pain. *Pain* 115: 225–226.