

Anhang

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Literatur

- Abend, M.G. (2005). *Leben heißt Loslassen. Alles, was wir festhalten, hält auch uns fest.* Petersberg: Via Nova.
- Adams, J.A. (1971). A closed-loop theory of motor learning. *Journal of Motor Behavior*, 3, 111–150.
- Adler, R.H. (1996). Rehabilitation aus biopsychosozialer Sicht. In R.H. Adler, J.M. Herrmann, K. Köhle, O.W. Schonecke, T. von Uexküll & W. Wesiack (Hrsg.), *Psychosomatische Medizin* (S. 483–489). München: Urban & Schwarzenberg.
- Antonovsky, A. (1997). *Salutogenese: Zur Entmystifizierung der Gesundheit.* Tübingen: DGVT.
- Arora, S., Aggarwal, R., Sevdalis, N., Moran, A., Sirimanna, P., Kneebone, R. & Darzi, A., (2010). Development and validation of mental practice as a training strategy for laparoscopic surgery, *Surgical Endoscopy and other Interventional Techniques*, 24, 179–187.
- Arora, S., Aggarwal, R., Sirimanna, P., Moran, A., Grantcharov, T., Kneebone, R., Sevdalis, N. & Darzi, A. (2011). Mental practice enhances surgical technical skills: A randomized controlled study. *Annals of Surgery*, 253(2), 265–70.
- Arora, S., Aggarwal, R., Moran, A., Sirimanna, P., Crochet, P., Darzi, A., Kneebone, R. & Sevdalis, N. (2011). Mental practice: Effective stress management training for novice surgeons. *Journal of the American College of Surgeons* 2011; 212: 225–233.
- Atienza, F., Balaguer, I. & Garcia-Merita, M. (1998). Video modeling and imagery training on performance of tennis service of 9- to 12-year-old children. *Perceptual and Motor Skills*, 87, 519–529.
- Avikainen, S., Fors, N. & Hari, R. (2002). Modulated activation of the human SI and SII cortices during observation of hand actions. *Neuroimage*, 15, 640–646.
- Bakker, F.C., Boschker, M.S.J. & Chung, T. (1996). Changes in muscular activity while imagining weight lifting using stimulus or response propositions. *Journal of Sport and Exercise Psychology*, 18 (3), 313–324.
- Balgo, R. (1998). *Bewegung und Wahrnehmung als System.* Schorndorf: Hofmann.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.
- Bar-Eli, M. & Blumenstein, B. (2004). Performance enhancement in swimming: the effect of mental training with biofeedback. *Journal of Science and Medicine in Sport*, 7, 454–464.
- Bar-Eli, M., Dreshman, R., Blumenstein, B. & Weinstein, Y. (2002). The effect of mental training with biofeedback on the performance of young swimmers. *Applied Psychology: An International Review*, 51, 567–581.
- Bauer, J. (2006). *Warum ich fühle, was du fühlst.* München: Heyne.
- Beauchamp, P.H. (1999). Peak putting performance : psychological skills and strategies utilized by PGA tour golfers. In M.R. Farally & A.J. Cochran (Eds.), *Science and golf: III. Proceedings of the World Scientific Congress of Golf.* Champaign, IL: Human Kinetics, 181–189.
- Beckers, D. & Deckers, J. (1997). *Ganganalyse und Gangschulung.* Berlin, Heidelberg, New York: Springer.
- Beecher, H.K. (1955). The powerful placebo. *Journal of the American Medical Association*, 159, 1602–1606.
- Beilock, S., Alfremlow, J., Rabe, A. & Carr, T. (2001). 'Don't miss!' The debilitating effects of suppressive imagery on golf putting performance. *Journal of Sport and Exercise Psychology*, 23, 200–221.
- Bell, K.F. (1983). *Championship thinking: The athlete's guide to winning performance in all sports.* Englewood Cliffs, NJ: Prentice-Hall.
- Bell, R.J. (2006). 'Pick it up, it's good': Utilizing solution-focused guided imagery with golfers experiencing the yips. a single-subject research design. *Dissertation Abstracts International*, 67 (4-A), 1266.
- Bell, R.J. & Thompson, C.L. (2007). Solution-focused guided imagery for a golfer experiencing the yips: a case study. *Athletic Insight*, 9 (1), 52–66.
- Berg, van den, F. (2003). *Angewandte Physiologie, Bd. 1.* Stuttgart: Thieme.
- Berlit, P. (Hrsg.). (2005). *Klinische Neurologie (2. Aufl.).* Berlin, Heidelberg, New York: Springer.
- Bernardi, N.F., De Buglio, M., Trimarchi, P.D., Chielli, A. & Bricolo, E. (2013). Mental practice promotes motor anticipation: Evidence from skilled music performance. *Frontiers in Human Neuroscience*, 7, 451.
- Bernier, M. & Fournier, J.F. (2010). Functions of mental imagery in expert golfers. *Psychology of Sport and Exercise*, 11, 444–452.
- Berthoz, A. (1996). The role of inhibition in the hierarchical gating of executed and imagined movements. *Cognitive Brain Research*, 3, 101–113.
- Bertollo, M., Saltarelli, B. & Robazza, C. (2009). Mental preparation strategies of elite modern pentathletes. *Psychology of Sport and Exercise*, 10, 244–254.
- Bhambri, E., Dhillon, P. & Sahni, S. (2005). Effect of psychological interventions in enhancing mental toughness dimensions of sports persons. *Journal of the Indian Academy of Applied Psychology*, 31, 63–68.
- Birbaumer, N. & Schmidt, R.F. (2003). *Biologische Psychologie (5. Aufl.).* Berlin, Heidelberg, New York: Springer.
- Bird, E.I. (1984). EMG quantification of mental rehearsal. *Perceptual and Motor Skills*, 59, 899–906.
- Blair, A., Hall, C. & Leyshon, G. (1993). Imagery effects on the performance of skilled and novice soccer players. *Journal of Sports Sciences*, 11, 95–101.
- Blickhan, R. (2001). Motorische Systeme bei Vertebraten. In J. Dudel, R. Menzel & R.F. Schmidt (Hrsg.), *Neurowissenschaft – Vom Molekül zur Kognition* (S. 191–213). Berlin, Heidelberg, New York: Springer.
- Blumentritt, S. (1997). *Ganganalyse in der Orthopädie.* In Hans-Ruland-Stiftung für Rehabilitationsforschung (Hrsg.), *Die Ganganalyse in der interdisziplinären Rehabilitation* (S. 72–91). Bad Herrenalb: Hans-Ruland-Stiftung für Rehabilitationsforschung.
- Borgstein, J. & Grootendorst, C. (2002). Half a brain. *The Lancet*, 359, 473.
- Bortz, J. & Döring, N. (1995). *Forschungsmethoden und Evaluation.* Berlin, Heidelberg, New York: Springer.
- Braun, S., Kleynen, M., Schols, J., Schack, T., Beurskens, A. & Wade, D. (2008). Using mental practice in stroke

- rehabilitation: a framework. *Clinical Rehabilitation*, 22, 579–591.
- Braun, S.M., Beurskens, A.J., Brom, P.J., Schaack, T. & Wade, D.T. (2006). The effects of mental practice in stroke rehabilitation: a systematic review. *Archives of Physical Medicine and Rehabilitation*, 87, 842–852.
- Braun, S.M., Beurskens, A.J., Kleynen, M., Schols J.M. & Wade, D.T. (2011). Rehabilitation with mental practice has similar effects on mobility as rehabilitation with relaxation in people with Parkinson's disease: A multicentre randomised trial. *Journal of Physiotherapy*, 57, 27–34.
- Braun, S., Kleynen, M., van Heel, T., Kruihof, N., Wade, D., & Beurskens, A. (2013). The effects of mental practice in neurological rehabilitation: A systematic review and meta-analysis. *Frontiers in Human Neuroscience*, 7, 390.
- Braus, D.F. (2004). *EinBlick ins Gehirn: Moderne Bildgebung in der Psychiatrie*. Stuttgart, New York: Thieme.
- Brewer, B.W., Lindner, D.E. & Phelps, C.M. (1995). Situational correlates of emotional adjustment to athletic injury. *Clinical Journal of Sport Medicine*, 5, 241–245.
- Brewer, B.W., van Raalte, J.L. & Lindner, D.E. (1991). Role of the sport psychologist in treating injured athletes: A survey of sports medicine providers. *Journal of Applied Sport Psychology*, 3, 183–190.
- Bronner, O. (1992). *Die untere Extremität*. München: Pflaum.
- Brooks, R.W. (1995). Mental practice and the musician: A practical approach to practice. *Update: Applications of Research in Music Education*, 13, 4–8.
- Brouziyne, M. & Molinaro, C. (2005). Mental imagery combined with physical practice of approach shots for golf beginners. *Perceptual and Motor Skills*, 101, 203–211.
- Bruckner, J. (1988). *People walking: Pathological patterns and normal changes over the life span*. Thorofare: Slack.
- Brück, W. (2002). *Pathologie und Pathophysiologie*. In M. Schmidt & F. Hoffmann (Hrsg.). *Multiple Sklerose* (S. 26–34). München: Urban & Fischer.
- Brückner, J.-P. & Wegner, M. (2001). Zur Leistungsstruktur der Deutschen Triathlonmeisterschaften der Jugend und Junioren 2000. *Leistungssport*, 31, 34–41.
- Bussmann, G. & Alfermann, D. (1990). Aufhören oder weitermachen? *Sportpsychologie*, 4, 20–26.
- Caeyenberghs, K., Tsoupas, J., Wilson, P.H. & Smits-Engelsman, B.C.M. (2009). Motor imagery development in primary school children. *Developmental Neuropsychology*, 34 (1), 103–121.
- Calabrese, P., Messonnier, L., Bijaoui, E., Eberhard, A. & Benchetrit, G. (2004). Cardioventilatory changes induced by mentally imaged rowing. *European Journal of Applied Physiology*, 91, 160–166.
- Callow, N. & Hardy, L. (1997). Kinesthetic imagery and its interaction with visual imagery perspectives during the acquisition of a short gymnastic sequence. *Journal of Sports Sciences*, 15, 75.
- Callow, N., Roberts, R. (2010). Imagery research: An investigation of three issues. *Psychology of Sport and Exercise*, 11, 325–329.
- Callow, N. & Waters, A. (2005). The effect of kinesthetic imagery on the sport confidence of flat-race horse jockeys [Elektronische Version]. *Psychology of Sport and Exercise*, 6, 443–459.
- Callow, N., Roberts, R., Hardy, L., Jiang, D., & Edwards, M.G. (2013). Performance improvements from imagery: Evidence that internal visual imagery is superior to external visual imagery for slalom performance. *Frontiers in Human Neuroscience*, 7, 697.
- Calmels, C. & Fournier, J.F. (2001). Duration of physical and mental execution of gymnastic routines. *The Sport Psychologist*, 15, 142–150.
- Candia, V., Wienbruch, C., Elbert, T., Rockstroh, B. & Ray, W. (2003). Effective behavioral treatment of focal hand dystonia in musicians alters somatosensory cortical organization. *Proceedings of the National Academy of Sciences of the United States of America*, 100, 7942–7946.
- Cerritelli, B., Maruff, P., Wilson, P. & Currie, J. (2000). The effect of an external load on the force and timing components of mentally represented actions. *Behavioral Brain Research*, 108, 91–96.
- Cha, Y.J., Yoo, E.Y., Jung, M.Y., Park, S.H. & Park, J.H. (2012). Effects of functional task training with mental practice in stroke: A meta analysis. *Neurorehabilitation* 30, 239–246.
- Cho, H.Y., Kim, J.S. & Lee, G. C. (2013). Effects of motor imagery training on balance and gait abilities in post-stroke patients: A randomized controlled trial. *Clinical Rehabilitation*, 27, 675–680.
- Christakou, A., Zervas, Y. & Lavallee, D. (2007). The adjunctive role of imagery on the functional rehabilitation of grade II ankle sprain. *Human Movement Science*, 26, 141–154.
- Classen, J., Liepert, J., Wise, S.P., Hallett, M. & Cohen, L.G. (1998). Rapid plasticity of human cortical movement representation induced by practice. *Journal of Neurophysiology*, 79, 1117–1123.
- Cluitmans, J. & Pons, C. (1997). Vorwort. In D. Beckers & J. Deckers, *Ganganalyse und Gangschulung*. Berlin, Heidelberg, New York: Springer.
- Cocks, M., Moulton, C.-A., Luu, S. & Cil, T. (2014). What surgeons can learn from athletes: Mental practice in sports and surgery. *Journal of Surgical Education*, 71, 262–269.
- Coffman, D.D. (1990). Effects of mental practice, physical practice, and knowledge of results on piano performance. *Journal of Research in Music Education*, 38, 187–196.
- Cogan, K. & Petrie, T. (1995). Sport consultation: an evaluation of a season-long intervention with female collegiate gymnasts. *The Sport Psychologist*, 9, 282–296.
- Cohn, P.J. (1991). An exploratory study on peak performance in golf. *The Sport Psychologist*, 5, 1–14.
- Cooke, L., Munroe-Chandler, K., Hall, C., Tobin, D. & Guerrero, M. (2014). Development of the children's active play imagery questionnaire. *Journal of Sports Sciences*, 32, 860–869.
- Corbin, C.B. (1972). *Mental practice*. In W.P. Morgan (Hrsg.), *Ergogenic aids and muscular performance*. New York: Academic Press.

- Coué, E. (1993). *Die Selbstbemeisterung durch bewußte Autosuggestion*. Basel: Schwabe & Co.
- Crosbie, J.H., McDonough, S.M., Gilmore, D.H. & Wiggam, M.I. (2004). The adjunctive role of mental practice in the rehabilitation of the upper limb after hemiplegic stroke. *Clinical Rehabilitation*, 18, 60–68.
- Crossman, J. & Jamieson, J. (1985). Differences in perception of seriousness and disrupting effects of athletic injury as viewed by athletes and their trainer. *Perceptual and Motor Skills*, 61, 1131–1134.
- Csikszentmihalyi, M. (1991). *Flow. The psychology of optimal experience*. SOS Free Stock.
- Cumming, J., Hall, C. & Shambrook, C. (2004). The influence of an imagery workshop on athletes' use of imagery. *Athletic Insight: Online Journal of Sport Psychology*, 6, 1.
- Cumming, J., Nordin, S., Horton, R. & Reynolds, S. (2006). Examining the direction of imagery and self-talk on dart throwing performance and self efficacy. *The Sport Psychologist*, 20, 257–274.
- Cumming, J. & Ste-Marie, D. (2001). The cognitive and motivational effects of imagery training: a matter of perspective. *The Sport Psychologist*, 15, 276–288.
- Cunnington, R., Egan, G.F., O'Sullivan, J.D., Hughes, A.J., Bradshaw, J.L. & Colebatch, J.G. (2001). Motor imagery in Parkinson's disease. *Movement Disorders*, 16, 849–857.
- Cupal, D.D. & Brewer, B.W. (2001). Effects of relaxation and guided imagery on knee strength, reinjury anxiety, and pain following anterior cruciate ligament reconstruction. *Rehabilitation Psychology*, 46, 28–43.
- Daly, J.M., Brewer, B.W., Van Raalte, J.L., Petitpas, A.J. & Sklar, J.H. (1995). Cognitive appraisal, emotional adjustment and adherence to rehabilitation following knee surgery. *Journal of Sport Rehabilitation*, 4, 22–30.
- Daug, R. (1994). Motorische Kontrolle als Informationsverarbeitung: Vom Auf- und Niedergang eines Paradigmas. In P. Blaser, K. Witte & C. Stucke (Hrsg.), *Steuer- und Regelvorgänge der menschlichen Motorik* (S. 13–37). St. Augustin: Academia.
- Daug, R. & Blischke, K. (1996). Sportliche Bewegung zwischen Kognition und Motorik. In R. Daug, K. Blischke, F. Marschall & H. Müller (Hrsg.), *Kognition und Motorik* (S. 13–35). Hamburg: Czwalina.
- De Vries, S. & Mulder, T. (2007) Motor imagery and stroke rehabilitation: A critical discussion. *Journal of Rehabilitation Medicine* 39, 5–13
- De Vries, S., Tepper, M., Otten, B. & Mulder, Th. (2011). Recovery of motor imagery ability in stroke patients. *Rehabilitation Research and Practice*, Article ID 283840
- De Witt, D. (1980). Cognitive and biofeedback training for stress reduction with university athletes. *Journal of Sport Psychology*, 2, 288–294.
- Debarnot, U., Creveaux, T., Collet, C., Gemignani, A., Massarelli, R., Doyon, J. & Guillot, A. (2009). Sleep-related improvements in motor learning following mental practice. *Brain and Cognition*, 69, 398–405.
- Debrunner, A.M. (1994). *Orthopädie, orthopädische Chirurgie: die Störungen des Bewegungsapparates in Klinik und Praxis*. Bern: Huber.
- Decety, J. & Boisson, D. (1990). Effect of brain and spinal cord injuries on motor imagery. *European Archives in Psychiatry and Clinical Neuroscience*, 240, 39–43.
- Decety, J. & Jeannerod, M. (1996). Mentally simulated movements in virtual reality: Does Fitt's law hold in motor imagery? *Behavioral Brain Research*, 72, 127–134.
- Decety, J., Jeannerod, M., Germain, M. & Pastene, J. (1991). Vegetative response during imagined movement is proportional to mental effort. *Behavioral Brain Research*, 42, 1–5.
- Decety, J., Jeannerod, M. & Prablanc, C. (1989). The timing of mentally represented actions. *Behavioral Brain Research*, 34, 35–42.
- Decety, J. & Michel, F. (1989). Comparative analysis of actual and mental movement times in two graphic tasks. *Brain and Cognition*, 11, 87–97.
- Deconinck, F.J.A., Spitaels, L., Fias, W. & Lenoir, M. (2009). Is developmental coordination disorder a motor imagery deficit? *Journal of clinical and experimental neuropsychology*, 31 (6), 720–730.
- DeFrancesco, C. & Burke, K. (1997). Performance enhancement strategies used in a professional tennis tournament. *International Journal of Sport Psychology*, 28, 185–195.
- Deschaumes-Molinario, C., Dittmar, A. & Vernet-Maury, E (1991). Relationship between mental imagery and sporting performance. *Behavioural Brain Research*, 45, 29–36.
- Devonport, T. J. (2006). Perceptions of the contribution of psychology to succeed in elite kickboxing. *Journal of Sport Science and Medicine*, CSSI, 99–107.
- Di Monaco, M., Lero, F., Di Monaco, R., Mautino, F. & Cavanna, A. (2003). Functional recovery after concomitant fractures of both hip and upper limb in elderly people. *Journal of Rehabilitation Medicine*, 35, 195–197.
- Dickstein R. & Deutsch J.E. (2007). Motor imagery in physical therapist practice. *Physical Therapy*, 87, 942–953.
- Dickstein, R., Dunsky, A. & Marcovitz, E. (2004). Motor imagery for gait rehabilitation in post-stroke hemiparesis. *Physical Therapy*, 84, 1167–1177.
- Die Zeit. Einschnitte ins Leben. Verfügbar unter: www.zeit.de/1999/28/199928.hirnamputiert_xml [19.07.2010].
- Diener, H.-C., Hacke, W. & Forsting, M. (2004). *Der Schlaganfall*. Stuttgart: Thieme.
- Dijkerman, H.C., Letswaart, M., Johnston, M. & MacWalter, R.S. (2004). Does motor imagery training improve hand function in chronic stroke patients? *Clinical Rehabilitation*, 18, 538–549.
- Dominey, P., Decety, J., Broussolle, E., Chazot, G. & Jeannerod, M. (1995). Motor imagery of a lateralized sequential task is asymmetrically slowed in hemi-Parkinson's patients. *Neuropsychologia*, 33, 727–741.
- Driskell, J., Copper, C. & Moran, A. (1994). Does mental practice enhance performance? *Journal of Applied Psychology*, 79, 481–492.

- Eberspächer, H. (1998). *Ressource Ich: Der ökonomische Umgang mit Streß*. München: Hanser.
- Eberspächer, H. (2001). *Mentales Training. Das Handbuch für Trainer und Sportler*. München: Copress.
- Eberspächer, H. (2004). *Gut sein, wenn's drauf ankommt*. München: Hanser.
- Eberspächer, H. & Immenroth, M. (1998). Kognitives Fertigkeitstraining im Mannschaftssport – Praxisbericht über den Einsatz im Fußball. *Psychologie und Sport*, 5, 16–27.
- Eberspächer, H. & Immenroth, M. (1999). Mentales Training – hilft es auch dem modernen Chirurgen? *Zentralblatt für Chirurgie*, 124, 895–901.
- Eberspächer, H., Immenroth, M. & Mayer, J. (2002). Sportpsychologie – ein zentraler Baustein im modernen Leistungssport. *Leistungssport*, 32, 5–10.
- Eberspächer, H. & Mayer, J. (2003). Mentales Training im Judo. In U. Mosebach (Hrsg.), *Judo in Bewegung*. (S. 247–265). Bonn: Dieter Born.
- Eberspächer, H., Mayer, J., Hermann, H.-D. & Kuhn, G. (2005). *Olympiasonderförderung Sportpsychologie. Leistungssport*, 35 (1), 38–41.
- Eckardt, A. & Betz, U. (1996). Standardisierte Nachbehandlung von Hüftendoprothesen im Rahmen der Qualitätssicherung. In J. Jerosch, H. Effenberger & S. Fuchs (Hrsg.), *Hüftendoprothetik* (S. 78–79). Stuttgart: Thieme.
- Ehrsson, H.H., Geyer, S. & Naito, E. (2003). Imagery of voluntary movement of fingers, toes, and tongue activates corresponding body-part-specific motor representations. *Journal of Neurophysiology*, 90, 3304–3316.
- Einsiedel, T., Becker, C., Däxle, M., Lechner, F., Kinzl, L. & Gebhard, F. (2003). Einschränkung der Alltagsbewältigung geriatrischer Patienten nach knöchernen Verletzungen der oberen Extremität – ein unterschätztes Problem? 67. Jahrestagung der Deutschen Gesellschaft für Unfallchirurgie, Berlin.
- Elbert, T., Pantev, C., Wienbruch, C., Rockstroh, B. & Taub, E. (1995). Increased cortical representation of fingers of the left hand in string players. *Science*, 270, 305–307.
- Elbert, T. & Rockstroh, B. (2003). Kortikale Reorganisation, Kapitel XV (60). In Karnath, H.-O. & Thier, P. (Hrsg.), *Neuropsychologie* (S. 685–700). Berlin, Heidelberg, New York: Springer.
- Emrich, E. (2003). *Leistungssport*. In P. Röthig & R. Prohl (2003). *Sportwissenschaftliches Lexikon* (7. Aufl., S. 343–344). Schorndorf: Hofmann.
- Engel, G.L. (1977). The need for a new model: A challenge for biomedicine. *Science*, 196, 129–136.
- Engelkamp, J. & Pechmann, T. (1993). Kritische Anmerkungen zum Begriff der mentalen Repräsentation. In J. Engelkamp & T. Pechmann (Hrsg.), *Mentale Repräsentation*. Bern: Huber.
- Erdfelder, E. (2003). Das Gedächtnis des Augenzeugen. Aktuelle Hypothesen und Befunde zur Genese fehlerhafter Aussagen. *Report Psychologie*, 28, 434–445.
- Evans, L., Hare, R. & Mullen, R. (2006). Imagery use during rehabilitation from Injury. *Journal of Imagery Research in Sport and Physical Activity*, 1 (1), Art. 1.
- Fairweather, M.M. & Sidaway, B. (1993). Ideokinetic imagery as a postural development technique. *Research Quarterly for Exercises and Sport*, 64, 385–392.
- Farah, M.J. (1984). The neurological basis of mental imagery: A componential analysis. *Cognition*, 18, 245–272.
- Feil, P.H. (1989). A theory of motor performance and its applications to preclinical dental skill acquisition. *Journal of Dental Education*, 53, 226–232.
- Feil, P.H. (1992). An assessment of the application of psychomotor learning theory constructs in preclinical laboratory instruction. *Journal of Dental Education*, 56, 628–633.
- Feltz, D.L. & Landers, D.M. (1983). The effects of mental practice on motor skill learning and performance: A meta-analysis. *Journal of Sport Psychology*, 5, 25–57.
- Feltz, D.L., Landers, D.M. & Becker, B.J. (1988). A revised meta-analysis of the mental practice literature on motor skill learning. In D. Druckmann & J.A. Swets (Eds.), *Enhancing human performance: Issues, theories, and techniques* (pp. 61–101, Appendix B). Washington, DC: National Academy Press.
- Fenker Jr., R. & Lambiotte, J. (1987). A performance enhancement program for a college football team: One incredible season. *The Sport Psychologist*, 1, 224–236.
- Féry, Y. (2003). Differentiating visual and kinesthetic imagery in mental practice. *Canadian Journal of Experimental Psychology*, 57, 1–10.
- Féry, Y. & Morizot, P. (2000). Kinesthetic and visual image in modeling closed motor skills: The example of the tennis serve. *Perceptual and Motor Skills*, 90, 707–722.
- Flachenecker, P. & Zettl, U.K. (2002). Epidemiologie. In M. Schmidt & F. Hoffmann (Hrsg.), *Multiple Sklerose* (S. 4–11). München: Urban & Fischer.
- Foerster, H. von (1993). *Kybernetik*. Berlin: Merve.
- Foerster, H. von & Pörksen, B. (2006). *Wahrheit ist die Erfindung eines Lügners. Gespräche für Skeptiker*. Heidelberg: Auer.
- Fourkas, A.D., Bonavolonta, V., Avenanti, A. & Aglioti, S.M. (2008). Kinesthetic imagery and tool-specific modulation of corticospinal representations in expert tennis players. *Cerebral Cortex* 18, 2382–2390.
- Fournier, J., Calmels, C., Durand-Bush, N. & Salmela, J. (2005). Effects of a season-long PST program on gymnastic performance and on psychological skill development. *International Journal of Sport and Exercise Psychology*, 3, 59–77.
- Frank, A. (1993). Regular review: low back pain. *British Medical Journal*, 306, 901–909.
- Frank, C., Land, W.M., Popp, C. & Schack, Th. (2014). Mental representation and mental practice: Experimental investigation on the functional links between motor memory and motor imagery. *Plos one*, 9, e95175.
- Frenkel, M.O., Maltese, S. & Schankin, A. (2012). Befunde aus EEG-Untersuchungen zum Mentalen Training: Ein Übersichtsartikel. *Zeitschrift für Sportpsychologie*, 19, 16–25.
- Frenkel, M.O., Herzig, D.S., Gebhard, F., Mayer, J., Becker, C. & Einsiedel, Th. (2014). *Mental practice maintains range of*

- motion despite forearm immobilization: A pilot study in healthy persons. *Journal of Rehabilitation Medicine*, 46, 225–232.
- Friedrich, H.F. & Mandl, H. (1992). Lern- und Denkstrategien. Ein Problemaufriss. In H. Mandl & H.F. Friedrich (Hrsg.), *Lern- und Denkstrategien. Analyse und Intervention* (S. 3–53). Göttingen: Hogrefe.
- Frieling, E. & Sonntag, K. (1999). *Lehrbuch Arbeitspsychologie*. Bern: Huber.
- Friston, K.J., Frith, C.D., Passingham, R.E., Liddle, P.F. & Frackowiak, R.S. (1992). Motor practice and neurophysiological adaption in the cerebellum: A positron tomography study. *Proceedings: Biological Sciences*, 248 (1323), 223–228.
- Fuchs, G.A. (2002). *Die Parkinsonsche Krankheit. Ursachen und Behandlungsformen*. München: C.H. Beck
- Fukumura, K., Sugawara, K., Tanabe, S., Ushiba, J. & Tomita, Y. (2007). Influence of mirror therapy on human motor cortex. *International Journal of Neuroscience*, 117, 1039–1048.
- Gabbard, C. (2009). Studying action representation in children via motor imagery. *Brain and Cognition*, 71, 234–239.
- Gaggioli, A., Morganti, F., Walker, R., Meneghini, A., Alcaniz, M., Lozano, J.A., Montesa, J., Gil, J.A. & Riva, G. (2004). Training with computer-supported motor imagery in post-stroke rehabilitation. *Cyberpsychology & Behavior*, 7, 327–332.
- Garza, D. & Feltz, D. (1998). Effects of selected mental practice techniques on performance ratings, self-efficacy, and state anxiety of competitive figure skaters. *The Sport Psychologist*, 12, 1–15.
- Gassner, K., Einsiedel, T., Linke, M., Görlich, P. & Mayer, J. (2007). Verbessert Mentales Training des Erlernens der Gehbewegung mit Oberschenkelprothese? *Der Orthopäde*, 36, 673–678.
- Geue, B. (1990). *Therapieziel: Gesundheit*. Berlin, Heidelberg, New York: Springer.
- Ghez, C. & Gordon, J. (1996a). Einführung in die Motorik, Kapitel VII (26). In E.R. Kandel, J.H. Schwartz, T.M. Jessell (Hrsg.), *Neurowissenschaften – Eine Einführung* (S. 499–513). Heidelberg, Berlin, Oxford: Spektrum Akademischer Verlag.
- Ghez, C. & Gordon, J. (1996b). Willkürmotorik, Kapitel VII (29). In E.R. Kandel, J.H. Schwartz, T.M. Jessell (Hrsg.), *Neurowissenschaften – Eine Einführung* (S. 541–563). Heidelberg, Berlin, Oxford: Spektrum Akademischer Verlag.
- Giesecking, W. (1963). *So wurde ich Pianist*. Leipzig: Brockhaus.
- Giesecking, W. (1964). *So wurde ich Pianist*. Wiesbaden: Brockhaus.
- Gough, M.H. (1994). How should surgical trainees be selected? In P.J. Morris & R.A. Malt (Eds.), *Oxford textbook of surgery*, Vol. 2 (pp. 2751–2754). New York, Oxford, Tokyo: Oxford University Press.
- Grabherr, L. & Mast, F.W. (2010). Effects of microgravity on cognition: The case of mental imagery. *Journal of Vestibular Research*, 20, 53–60.
- Grafton, S.T., Arbib, M.A., Fadiga, L. & Rizzolatti, G. (1996). Localization of grasp representations in humans by positron emission tomography, 2. Observation compared with imagination. *Experimental Brain Research*, 112, 103–111.
- Grafton, S.T., Mazziotta, J.C., Presty, S., Friston, K.J., Frackowiak, R.S. & Phelps, M.E. (1992). Functional anatomy of human procedural learning determined with regional cerebral blood flow and PET. *Journal of Neuroscience*, 12, 2542–2548.
- Gray, J.J., Haring, M.J. & Banks, N.M. (1984). Mental rehearsal for sport performance: Exploring the relaxation-imagery paradigm. *Journal of Sport Behavior*, 7, 68–78.
- Greendale, G.A., Barrett-Connor, E., Ingles, S. & Haile, R. (1995). Late physical and functional effects of osteoporotic fracture in women: The Rancho Bernardo Study. *Journal of the American Geriatrics Society*, 43, 955–961.
- Gregg, M. & Hall, C. (2006). The relationship of skill level and age to the use of imagery by golfers. *Journal of Applied Sport Psychology*, 18, 363–375.
- Grimbergen, K.A. (1997). Minimally invasive surgery. Human-machine aspects and engineering approaches. In T.B. Sheridan & T. van Lunteren (Eds.), *Perspectives on the human controller* (pp. 223–231). Mahwah, NJ: Lawrence Erlbaum.
- Grouios, G. (1992a). Mental practice: A review. *Journal of Sport Behaviour*, 15, 42–59.
- Grouios, G. (1992b). The effect of mental practice on diving performance. *International Journal of Sport Psychology*, 23, 60–69.
- Grove, J., Norton, P., Van Raalte, J. & Brewer, B. (1999). Stages of change as an outcome measure in the evaluation of mental skills training programs. *The Sport Psychologist*, 13, 107–116.
- Gruner, A., Hockertz, T. & Reilmann, H. (2004). Die periprotektische Fraktur. *Unfallchirurg*, 107, 35–49.
- Guillot, A. & Collet, Ch. (2005). Contribution from neurophysiological and psychological methods to the study of motor imagery. *Brain Research Reviews*, 50, 387–397.
- Guillot, A., Collet, Ch., Nguyen, V.A., Malouin, F., Richards, C. & Doyon, J. (2009). Brain activity during visual versus kinesthetic imagery: an fMRI study. *Human Brain Mapping*, 30, 2157–2172.
- Guillot, A., Nadrowska, E. & Collet, C. (2009). Using motor imagery to learn tactical movements in basketball. *Journal of sport behavior*, 32 (2), 189–206.
- Guillot, A., Genevois, C., Desliens, S., Saieb, S. & Rogowski, I. (2012). Motor imagery and ‘placebo-racket effects’ in tennis serve performance. *Psychology of Sport and Exercise*, 13, 533–540.
- Guillot, A., Moschberger, K. & Collet, Ch. (2013). Coupling movement with imagery as a new perspective for motor imagery practice. *Behavioral and Brain Functions* 9, 8.
- Guttman, A., Burstin, A., Brown, R., Bril, S. & Dickstein, R. (2012). Motor imagery practice for improving sit to stand and reaching to grasp in individuals with poststroke hemiparesis. *Topics in Stroke Rehabilitation*, 19, 306–319.
- Göbel, H. (2001). Epidemiologie und Kosten chronischer Schmerzen. *Schmerz*, 15, 92–98.

- Hacker, W. (1998). *Allgemeine Arbeitspsychologie*. Bern: Huber.
- Hale, B.D. (1982). The effects of internal and external imagery on muscular and ocular concomitants. *Journal of Sport Psychology*, 4, 379–387.
- Hall, C.R., Buckolz, E. & Fishburne, G.J. (1992). Imagery and the acquisition of motor skills. *Canadian Journal of Sport Sciences*, 17, 19–27.
- Hall, C.R. & Martin, K.A. (1997). Measuring movement imagery abilities: A revision of the Movement Imagery Questionnaire. *Journal of Mental Imagery*, 21, 143–154.
- Hall, C.R. & Pongrac, J. (1983). *Movement Imagery Questionnaire*. London, ON: University of Western Ontario.
- Hall, E. & Erffmeyer, E. (1983). The effect of visuo-motor behavior rehearsal with videotaped modeling on free throw accuracy of intercollegiate female basketball players. *Journal of Sport Psychology*, 5, 343–346.
- Hall, J.C. (2002). Imagery practice and the development of surgical skills. *The American Journal of Surgery* 184, 465–470.
- Hallman, T.A.D. & Munroe-Chandler, K.J. (2009). An examination of ice hockey players' imagery use and movement imagery ability. *Journal of Imagery Research in Sport and Physical Activity*, 4 (1), Art. 3.
- Hanakawa, T. Immisch, I., Toma, K., Dimyan, A., Van Gelderen, P. & Hallett, M. (2003). Functional properties of brain areas associated with motor execution and imagery. *Journal of Neurophysiology*, 89, 989–1002.
- Hanton, S. & Jones, G. (1999). The effects of a multimodal intervention program on performers: II. Training the butterflies to fly in formation. *The Sport Psychologist*, 13, 22–41.
- Hardy, J., Hall, C. & Carron, A. (2003). Perceptions of team cohesion and athletes' use of imagery. *International Journal of Sport Psychology*, 34, 151–167.
- Hardy, L. & Callow, N. (1999). Efficacy of external and internal visual imagery perspectives for the enhancement of performance on tasks in which form is important. *Journal of Sport & Exercise Psychology*, 21, 95–112.
- Harrington, A. (1999). *The placebo effect: An interdisciplinary exploration*. Harvard: University Press.
- Harris, D.V. & Robinson, W.J. (1986). The effects of skill level on EMG activity during internal and external imagery. *Journal of Sport Psychology*, 8, 105–111.
- Hartl, M.K. (2007). *Ergebnisse operativer Behandlung von periprotetischen Femurfrakturen*. Halle-Wittenberg: Martin-Luther-Universität Halle-Wittenberg.
- Head, H. (1926). *Aphasia and kindred disorders of speech*, Vol. 1. Cambridge: Cambridge University Press.
- Heckhausen, H. (1980). *Motivation und Handeln*. Berlin, Heidelberg, New York: Springer.
- Hefti, F. (2006). *Kinderorthopädie (Abb. 4.66)*. Berlin, Heidelberg, New York: Springer.
- Heil, J. (1993). *Psychology of sport injury*. Champaign: Human Kinetics Publishers.
- Hellstedt, J. (1987). Sport psychology at a ski academy: Teaching mental skills to young athletes. *The Sport Psychologist*, 1, 56–68.
- Hellström, J. (2009). Psychological hallmarks of skilled golfers. *Sports Medicine*, 39 (10), 845–855.
- Herbert, D., Dean, C. & Gandevia, S.C. (1998). Effects of real and imagined training on voluntary muscle activation during maximal isometric contractions. *Acta Physiologica Scandinavica*, 163, 361–369.
- Heremans, E., Nieuwboer, A., Spildooren, J., De Bondt, S., D'hooge, A.M., Helsen, W. & Feys, P. (2012). Cued motor imagery in patients with multiple sclerosis. *Neuroscience*, 206, 115–21.
- Hermann, H.-D. (2001). Mediatoren und Modifikatoren der Belastungsreaktionen nach Sportverletzungen. Beiträge zu einem interdisziplinären Modell. Hamburg: Kovač.
- Hermann, H.-D. & Eberspächer, H. (1994). *Psychologisches Aufbautraining nach Sportverletzungen*. München: BLV.
- Hermann, H.-D. & Mayer, J. (2003). Psychologische Aspekte in der orthopädisch-traumatologischen Rehabilitation nach Sportverletzungen. *DVS-Informationen*, 18, 8–12.
- Heuer, H. (1985). Wie wirkt mentale Übung? *Psychologische Rundschau*, 36, 191–200.
- Highlen, P.S. & Bennett, B.B. (1983). Elite divers and wrestlers: A comparison between open- and closed-skill athletes. *Journal of Sport Psychology*, 5, 390–409.
- Hinshaw, K.E. (1991). The effects of mental practice on motor skill performance: Critical evaluation and meta-analysis. *Imagination, Cognition and Personality*, 11, 3–35.
- Hinterwimmer, S., Engelschalk, M., Sauerland, S., Eitel, F. & Mutschler, W. (2003). Operative vs. konservative Therapie der vorderen Kreuzbandruptur: eine systematische Literaturübersicht. *Unfallchirurg*, 106, 374–379.
- Hoffmann, F. (2002). Symptomatische Therapie. In M. Schmidt & F. Hoffmann (Hrsg.), *Multiple Sklerose (S. 182–236)*. München: Urban & Fischer.
- Hohmann, T., Schott, N., Abeln, V., Chukèr, A., Matzel, S. & Schneider, S. (u. R.). Motor imagery during parabolic flights.
- Holmes, P.S. & Collins, D.J. (2001). The PETTLEP approach to motor imagery: A functional equivalence model for sport psychologists. *Journal of Applied Sport Psychology*, 13 (1), 60–83.
- Horstmann, T., Mayer, F., Heitkamp, H.C. & Dickhuth, H.-H. (1998). Biokinetische Messungen bei Arthrosepatienten. *Deutsche Zeitschrift für Sportmedizin*, 49, 187–191.
- Hoyek, N., Champely, S., Collet, Ch., Fargier, P. & Guillot, A. (2009). Age and gender-related differences in the temporal congruence development between motor imagery and motor performance. *Learning and Individual Differences*, 19, 555–560.
- Hummelsheim, H. & Hauptmann, B. (1998). *Neurologische Rehabilitation*. Berlin, Heidelberg, New York: Springer.
- Hund-Georgiadis, M. & von Cramon, D.Y. (1999). Motor-learning-related changes in piano players and non-musicians revealed by functional magnetic-resonance signals. *Experimental Brain Research*, 125, 417–425.
- Hwang, S., Jeon, H.S., Yi, C., Kwon, O.Y., Cho, S.H. & You, S.H. (2010). Locomotor imagery training improves gait per-

- formance in people with chronic hemiparetic stroke: A controlled clinical trial. *Clinical rehabilitation*, 24, 514–522.
- Hymann, W.A. (1994). Errors in the use of medical equipment. In M.S. Bogner (Ed.), *Human error in medicine* (pp. 327–347). Hillsdale, NJ: Lawrence Erlbaum.
- Höpfner, H.-D. & Skell, W. (1983). Zur Systematisierung von Formen der Übung kognitiver Prozesse – Klassifikationsgesichtspunkte und Darstellung entscheidender Variablen. *Forschung der sozialistischen Berufsbildung*, 17, 161–166.
- Iacoboni, M., Woods, R., Brass, M., Bekkering, H., Mazziotta, J.C. & Rizzolatti, G. (1999). Cortical mechanism of human imitation. *Science*, 286, 2526–2528.
- levleva, L. & Orlick, T. (1991). Mental links to enhanced healing: An exploratory study. *The Sport Psychologist*, 5, 25–40.
- levleva, L. & Orlick, T. (1993). Mental paths to enhanced recovery from a sports injury. In D. Pargman (Ed.), *Psychological bases of sports injuries* (pp. 219–245). Morgantown: Fitness Information Technology.
- Immenroth, M. (2002). Die Restriktions-Hypothese. Ein Erklärungsansatz für die Lern- und Leistungssteigerung durch Mentales Training. In B. Strauß, M. Tietjens, N. Hagemann & A. Stachelhaus (Hrsg.). *Expertise im Sport* (S. 111–112). Köln: bps.
- Immenroth, M. (2003). Mentales Training in der Medizin. Anwendung in der Chirurgie und Zahnmedizin. Hamburg: Kovač.
- Immenroth, M., Bürger, T., Brenner, J., Nagelschmidt, M., Eberspächer, H. & Troidl, H. (2007). Mental training in surgical education – a randomized controlled trial. *Annals of Surgery*, 245 (3), 385–391.
- Immenroth, M., Eberspächer, H. & Hermann, H.-D. (2008). Training kognitiver Fertigkeiten. *Enzyklopädie der Psychologie*. Göttingen: Hogrefe.
- Immenroth, M., Haasis, M., Mayer, J. & Eberspächer, H. (2003). Mentales Training im Lebenslauf (I) – Kinder. In J. Munzert, S. Künzell, H. Maurer, M. Reiser, N. Schott & K. Zentgraf (Hrsg.), *Psychomotorische Entwicklung – Sport und Bewegung im Lebenslauf* (S. 65). Gießen: 35. Jahrestagung der Arbeitsgemeinschaft für Sportpsychologie.
- Isaac, A. (1992). Mental practice – does it work in the field? *The Sport Psychologist*, 6, 192–198.
- Jackson, P.L., Doyon, J., Richards, C.L. & Malouin, F. (2004). The efficacy of combined physical and mental practice in the learning of a foot-sequence task after stroke. *Neurorehabilitation & Neural Repair*, 18, 106–111.
- Jacobson, E. (1930). Electrical measurements of neuromuscular state during mental activities. II. Imagination and recollection of various muscular acts. *American Journal of Physiology*, 94, 22–34.
- Jacobson, E. (1932). Electrophysiology of mental activities. *American Journal of Physiology*, 44, 677–694.
- Jastrow, J.A. (1892). Study of involuntary movements. *American Journal of Psychology*, 4, 398–407.
- Jeannerod, M. (1994). The representing brain: Neural correlates of motor intention and imagery. *Behavioral and Brain Sciences*, 17, 187–245.
- Jeannerod, M. (1995). Mental imagery in the motor context. *Neuropsychologia*, 33, 1419–1432.
- Jenkins, W.M., Merzenich, M.M., Ochs, M.T., Allard, T., Guic-Robles, E. (1990a). Functional reorganization of primary somatosensory cortex in adult owl monkeys after behaviorally controlled tactile stimulation. *Journal of Neurophysiology*, 63, 82–104.
- Jenkins, W.M., Merzenich, M.M. & Recanzone, G. (1990b). Neocortical representational dynamics in adult primates: Implications for neuropsychology. *Neuropsychologia*, 28, 573–584.
- Jerosch, J. & Heisel, J. (1996). Endoprothesenschule. Rehabilitations- und Betreuungskonzepte für die ärztliche Praxis. Köln: Deutscher Ärzte-Verlag.
- Jiang, Y. (2004). Resolving dual-task interference: an fMRI study. *NeuroImage*, 22, 748–754.
- Johnson, S.H. (2000). Imagining the impossible: intact motor representations in hemiplegics. *Neuroreport*, 11, 729–732.
- Johnson, S.H., Sprehn, G. & Saykin, A.J. (2002). Intact motor imagery in chronic upper limb hemiplegics: evidence for activity-independent action representations. *Journal of Cognitive Neuroscience*, 14, 841–852.
- Johnson-Frey, S.H. (2004). Stimulation through simulation? Motor imagery and functional reorganization in hemiplegic stroke patients. *Brain and Cognition*, 55, 328–331.
- Johnston, L.H. & Carroll, D. (1998). The context of emotional responses to athletic injury: a qualitative analysis. *Journal of Sport Rehabilitation*, 7, 206–220.
- Jones, J. (1965). Motor learning without demonstration of physical practice, under two conditions of mental practice. *The Research Quarterly*, 36, 270–276.
- Jugenheimer, M. (2006). Operationsfibel: Laparoskopische Cholezystektomie. Haslemere: Euromed Communications.
- Jürgens, C. (2000). Ruptur des vorderen Kreuzbands. Naht? Augmentation? Plastik? *Trauma Berufskrankheit*, 2, Suppl. 2, 140–144.
- Kaminski, G. (1988). Psychological perspectives of childrens' and youths' toplevel sports. Paper presented at the 'Koreanisch-Deutsches Seminar', Yusei University, Seoul.
- Kandel, E. (1995). *Essentials of neural science and behavior*. New York: McGraw-Hill.
- Kandel, E. (1996). Gehirn und Verhalten, Kapitel I (1). In E.R. Kandel, J.H. Schwartz & T.M. Jessell (Hrsg.), *Neurowissenschaften – Eine Einführung* (S. 5–21). Heidelberg, Berlin, Oxford: Spektrum Akademischer Verlag.
- Kandel, E. & Kupfermann, I. (1996). Von den Nervenzellen zur Kognition, Kapitel V (18). In E.R. Kandel, J.H. Schwartz & T.M. Jessell (Hrsg.), *Neurowissenschaften – Eine Einführung* (S. 327–353). Heidelberg, Berlin, Oxford: Spektrum Akademischer Verlag.
- Karnath, H.-O. & Thier, P. (Hrsg.). (2003). *Neuropsychologie*. Berlin, Heidelberg, New York: Springer.

- Karni, A., Meyer, G., Jezard, P., Adams, M.M., Turner, R. & Ungerleider, L.G. (1995). Functional MRI evidence for adult motor cortex plasticity during motor skill learning. *Nature*, 377, 155–158.
- Kassat, G. (1998). Ereignis Bewegungslernen. Rödinghausen: Fitness Contur.
- Kawashima, R.P., Roland, E. & O'Sullivan, B.T. (1994). Fields in human motor areas involved in preparation for reaching, actual reaching, and visuomotor learning: a positron emission tomography study. *Journal of Neuroscience*, 14, 3462–3474.
- Keller, P.E. (2012). Mental imagery in music performance: underlying mechanisms and potential benefits. *Annals of the New York Academy of Sciences*, 1252, 206–213.
- Kemmler, R. (1979). Mentales Training beim Piloten. In G. Bäumler, E. Hahn & J. Nitsch (Hrsg.), *Aktuelle Probleme der Sportpsychologie* (S. 166–171). Schorndorf: Hofmann.
- Kendall, G., Hrycaiko, D., Martin, G. & Kendall, T. (1990). The effects of an imagery rehearsal, relaxation, and self-talk package on basketball game performance. *Journal of Sport and Exercise Psychology*, 12, 157–166.
- Kenitzer, R. & Briddell, W. (1991). Effect of mental imagery strategies on swimming performance. *Applied Research in Coaching and Athletics Annual*, 6, 259–273.
- Kerr, G., & Minden, H. (1988). Psychological factors related to the occurrence of athletic injuries. *Journal of Sport & Exercise Psychology*, 10, 167–173.
- Kirkby, R. (1991). Use of sport psychology techniques by professional Australian Football League players. *Perceptual and Motor Skills*, 73, 1224.
- Klein, S. (2006). *Zeit. Der Stoff, aus dem das Leben ist. Eine Gebrauchsanleitung*. Frankfurt a.M.: Fischer.
- Klöppel, R. (2007). *Mentales Training für Musiker*. Kassel: Gustav Bosse.
- Knobl, P.E. (2009). An evaluation of motor imagery and exercise interventions in Parkinson's Disease. Honours Bachelor of Science in Kinesiology and Physical Education. Brantford: Wilfrid Laurier University.
- Kohlmann, T. & Schmidt, C.O. (2005). Rückenschmerzen in Deutschland – eine epidemiologische Bestandsaufnahme. *Orthopädie & Rheuma*, 5, 38–41.
- Konczak, J. (2002). Motorische Kontrolle. In J. Müsseler & W. Prinz (Hrsg.), *Allgemeine Psychologie* (S. 865–888). Heidelberg, Berlin: Spektrum Akademischer Verlag.
- Konczak, J. (2003). Motorisches Lernen, Kapitel XV (58). In H.-O. Karnath & P. Thier (Hrsg.), *Neuropsychologie* (S. 669–677). Berlin, Heidelberg, New York: Springer.
- Kosslyn, S.M., Margolis, J.A., Barrett, A.M., Goldknopf, E.J. & Daly, P.F. (1990). Age differences in imagery abilities. *Child Development*, 61, 995–1010.
- Krumm, R. (2007). *Mentales Training für Piloten*. Stuttgart: Motor Buch.
- Kuhl, J. (1995). Handlungs- und Lageorientierung. In W. Sariges (Hrsg.), *Managementdiagnostik* (S. 303–316). Göttingen: Hogrefe.
- Kuhl, J. (2001). *Motivation und Persönlichkeit. Interaktionen psychischer Systeme*. Göttingen: Hogrefe.
- Lafleur, M.F., Jackson, P.L., Malouin, F., Richards, C.L., Evans, A.C. & Doyon, J. (2002). Motor learning produces parallel dynamic functional changes during the execution and imagination of sequential foot movements. *NeuroImage*, 16, 142–157.
- Lamirand, M. & Rainey, D. (1994). Mental imagery, relaxation, and accuracy of basketball foul shooting. *Perceptual and Motor Skills*, 78, 1229–1300.
- Landa, J. (2004). Risk and injuries in contact fighting. *Journal of Combative Sport*, 4.
- Lane, A. M. (2006). Reflections of professional boxing consultancy: A response to Schinke (2004). *Athletic Insight*, 8.
- Langeheine, L. (2004). *Üben mit Köpfchen. Mentales Training für Musiker*. Frankfurt a.M.: Zimmermann.
- Lazarus, R.S. & Folkman, S. (1984). *Stress, appraisal, and coping*. Berlin, Heidelberg, New York: Springer.
- Leddy, M.H., Lambert, M.J. & Ogles, B.M. (1996). Psychological consequences of athletic injury among high-level competitors. *Research Quarterly for Exercise and Sport*, 4, 347–354.
- Leigh, H. & Reiser, M.F. (1980). *The patient. Biological, psychological, and social dimensions of medical practice*. New York: Plenum Medical Book Company.
- Lejeune, M., Decker, C. & Sanchez, X. (1994). Mental rehearsal in table tennis performance. *Perceptual and Motor Skills*, 79, 627–641.
- Leonardo, M., Fieldman, J., Sadato, N., Campbell, G., Ibanez, Y., Cohen, L., Deiber, M.P., Jezard, P., Pons, T., Turner, R., Le Bihan, D. & Hallett, M. (1995). A functional resonance imaging study of cortical regions associated with motor task execution and motor ideation in humans. *Human Brain Mapping*, 3, 83–92.
- Levy, A.R., Nicholls, A.R. & Polman, R.C.J. (2011). Pre-competitive confidence, coping, and subjective performance in sport. *Scandinavian Journal of Medicine & Science in Sports*, 21, 721–729.
- Lim, S. & Lippman, L.G. (1986). Mental practice and memorization of piano music. *The Journal of General Psychology*, 118, 21–30.
- Liu, K.P., Chan, C.C., Lee, T.M. & Hui-Chan, C.W. (2004). Mental imagery for promoting relearning for people after stroke. *Archives of Physical Medicine & Rehabilitation*, 85, 1403–1408.
- Liu, H., Song, L. & Zhang, T. (2014). Changes in brain activation in stroke patients after mental practice and physical exercise: A functional MRI study. *Neural Regeneration Research*, 9, 1474–1484.
- Li-Wei, Z., Qi-Wei, M., Orlick, T. & Zitzelsberger, L. (1992). The effect of mental-imagery training on performance enhancement with 7–10-year-old children. *The Sport Psychologist*, 6, 230–241.
- Loftus, E.F. (1975). Leading questions and the eyewitness report. *Cognitive Psychology*, 7, 560–572.
- Loftus, E.F. & Palmer, J.C. (1974). Reconstruction of automobile destruction: An example of the interaction between language and memory. *Journal of Verbal Learning and Verbal Behavior*, 13, 585–589.

- Lorey, B., Pilgramm, S., Bischoff, M., Stark, R., Vaitl, D., Kindermann, S., Munzert, J. & Zentgraf, K. (2011). Activation of the parieto-premotor network is associated with vivid motor imagery—a parametric fMRI study. *PLoS ONE* 6:e20368.
- Lotze, M., Montoya, P., Erb, M., Hülsmann, E., Flor, H., Klose, U., Birbaumer, N. & Grodd, W. (1999). Activation of cortical and cerebellar motor areas during executed and imagined hand movements: An fMRI study. *Journal of Cognitive Neuroscience*, 11, 491–501.
- Lotze, R.H. (1852). *Medizinische Psychologie oder Physiologie der Seele*. Leipzig: Weidmann'sche Buchhandlung.
- Louis, M., Collet, C., Champely, S. & Guillot, A. (2012). Differences in motor imagery time when predicting task duration in alpine skiers and equestrian riders. *Research Quarterly for Exercise and Sport*, 83, 86–93.
- Louis, M., Collet, Ch. & Guillot, A. (2011). Differences in motor imagery times during aroused and relaxed conditions. *Journal of Cognitive Psychology*, 23, 3, 374–382.
- Louridas, M., Bonrath, E.M., Sinclair, N.J., Dedy, N.J. & Grantcharov, T.P. (2015). Randomized clinical trial to evaluate mental practice in enhancing advanced laparoscopic surgical performance. *British Journal of Surgery*, 102, 37–44.
- Luft, A.R., Skalej, M., Stefanou, A., Klose, U. & Voigt, K. (1998). Comparing motion- and imagery-related activation in the human cerebellum: A functional MRI study. *Human Brain Mapping*, 6, 105–113.
- MacDermid, J.C., Richards, R.S. & Roth, J.H. (2001). Distal radius fracture: a prospective outcome study of 275 patients. *Journal of Hand Therapy*, 14, 154–169.
- MacIntyre, T., Moran, A. & Jennings, D.J. (2002). Are mental imagery abilities related to canoe-slalom performance? *Perceptual and Motor Skills*, 94, 1245–1250.
- MacIntyre, T.E. & Moran, A.P. (2007). A qualitative investigation of imagery use and meta-imagery processes among elite canoe-slalom competitors. *Journal of Imagery Research in Sport and Physical Activity*, 2 (1), Art. 3.
- Madigan, R., Frey, R. & Matlock, T. (1992). Cognitive strategies of university athletes. *Canadian Journal of Applied Sport Sciences*, 17, 135–140.
- Mahoney, M.J. & Avenir, M. (1977). Psychology of the elite athlete: An exploratory study. *Cognitive Therapy and Research*, 1, 135–141.
- Malouin, F., Richards, C.L., Desrosiers, J. & Doyon, J. (2004a). Bilateral slowing of mentally simulated actions after stroke. *Neuroreport*, 15, 1349–1353.
- Malouin, F., Richards, C.L., Doyon, J., Desrosiers, J. & Belleville, S. (2004b). Training mobility tasks after stroke with combined mental and physical practice: a feasibility study. *Neurorehabilitation & Neural Repair*, 18, 66–75.
- Malouin F., Jackson, P.L. & Richards, C.L. (2013). Towards the integration of mental practice in rehabilitation programs. A critical review. *Frontiers in Human Neuroscience* 2013, 7, 576.
- Mamassis, G. & Doganis, G. (2004). The effects of a mental training program on juniors pre-competitive anxiety, self-confidence, and tennis performance. *Journal of Applied Sport Psychology*, 16, 118–137.
- Marculli, C. (2001). Die psychologische Rehabilitation nach Sportverletzungen. Entwicklung des Interventionsprogramms ‚Comeback‘ und Evaluation von dessen Auswirkungen. Zürich: Gesellschaft zur Förderung der Sportwissenschaftlichen an der ETH Zürich.
- Marculli, C. (2002). Die psychologische Betreuung nach Sportverletzungen – eine retrospektive Befragung der Teilnehmer am Projekt ‚Comeback‘. *Schweizerische Zeitschrift für Sportmedizin und Sporttraumatologie*, 50, 71–76.
- Marmor, G.S. (1975). Development of kinetic images: When does the child first represent movement in mental images? *Cognitive Psychology*, 7, 548–559.
- Maruff, P., Wilson, P. H., De Fazio, J., Cerritelli, B., Hedt, A. & Currie, J. (1999). Asymmetries between dominant and non-dominant hands in real and imagined motor task performance. *Neuropsychologia*, 37, 379–384.
- Maturana, H.R. (1982). *Erkennen. Die Organisation und Verkörperung von Wirklichkeit*. Ausgewählte Arbeiten zur biologischen Epistemologie. Braunschweig: Vieweg.
- Maturana, H.R. & Varela, F.J. (1987). *Der Baum der Erkenntnis*. München: Scherz.
- Mausfeld, R. (2001). Allgemeine Sinnesphysiologie. In J. Dudel, R. Menzel & R.F. Schmidt (Hrsg.), *Neurowissenschaft – Vom Molekül zur Kognition* (S. 279–292). Berlin, Heidelberg, New York: Springer.
- Mayer, J. (2001). *Mentales Training, ein salutogenes Therapieverfahren zur Bewegungsoptimierung*. Hamburg: Kovač.
- Mayer, J., Bohn, J., Görlich, P. & Eberspächer, H. (2005). *Mentales Gehtraining – Wirksamkeit eines Therapieverfahrens in der Rehabilitation nach Hüftendoprothetik*. Zeitschrift für Orthopädie, 143, 419–423.
- Mayer, J., Hermann, H.-D. (2014). *Sportpsychologie im Nachwuchsfußball. Mentale Fertigkeiten entwickeln und trainieren*. Münster: Philippka.
- Mayer, J., Görlich, P. & Eberspächer, H. (2003). *Mentales Gehtraining – ein salutogenes Therapieverfahren für die Rehabilitation*. Berlin, Heidelberg, New York: Springer.
- Mayer, J., Memmert, D. & Schäfer, J. (2006). Hilft mentales Training beim taktischen Umlernen? In B. Halberschmidt & B. Strauß (Hrsg.), *Elf Freunde sollt ihr sein!?* (S. 102). Hamburg: Czwalina.
- McCaffrey, N. & Orlick, T. (1989). Mental factors related to excellence among top professional golfers. *International Journal of Sport Psychology*, 20, 256–278.
- McEwen, S.E., Huijbregts, M.P.J., Ryan, J.D. & Polatajko, H.J. (2009). Cognitive strategy use to enhance motor skill acquisition post-stroke: A critical review. *Brain Injury*, 23 (4), 263–277.
- McKenzie, A. & Howe, B. (1991). The effect of imagery on tackling performance in rugby. *Journal of Human Movement Studies*, 20, 163–176.
- McLennan, N.L., Georgiou, N.L., Mattingley, J.L., Bradshaw, J.L. & Chiu, E. (2000). Motor imagery in Huntington's disease. *Journal of Clinical & Experimental Neuropsychology*, 22, 379–390.

- Mehrtrens, G., Valentin, H. & Schönberger, A. (1993). Arbeitsunfall und Berufskrankheit. Berlin: Schmidt.
- Meichenbaum, D. (1985). Stress inoculation training. New York: Pergamon.
- Meijer, O.G. & Roth, K. (Eds.). (1988). Complex movement behavior: The motor-action controversy. Amsterdam: Elsevier Science Publisher.
- Meinel, K. & Schnabel, G. (1987). Bewegungslehre – Sportmotorik. Berlin: Volk und Wissen.
- Memmert, D., Schäfer, J. & Mayer, J. (2009). Does mental practice help in tactical relearning? *Journal of Mental Imagery*, 33 (1 & 2), 117–134.
- Mendoza, D. & Wichmann, H. (1978). 'Inner' darts: Effects of mental practice on performance of dart throwing. *Perceptual and Motor Skills*, 47, 1195–1199.
- Menzel, R. (2001). Neuronale Plastizität, Lernen und Gedächtnis. In J. Dudel, R. Menzel & R.F. Schmidt (Hrsg.), *Neurowissenschaft – Vom Molekül zur Kognition* (S. 487–525). Berlin, Heidelberg, New York: Springer.
- Mereles, D., Ehlken, N., Kreuzer, S., Ghofrani, S., Hoepfer, M.M., Halank, M., Meyer, F.J., Karger, G., Buss, J., Juenger, J., Holzapfel, N., Opitz, C., Winkler, J., Herth, F.F., Wilkens, H., Katus, H.A., Olschewski, H., Grünig, E. (2006). Exercise and respiratory training improve exercise capacity and quality of life in patients with severe chronic pulmonary hypertension. *Circulation*, 114, 14, 1482–1489.
- Merzenich, M.M., Nelson, R.J., Stryker, M.P., Cynader, M.S., Schoppmann, A. & Zook, J.M. (1984). Somatosensory cortical map changes following digit amputation in adult monkeys. *The Journal of Comparative Neurology*, 224, 591–605.
- Meyers, A., Schleser, R. & Okwamabua, T. (1982). A cognitive-behavioral intervention for improving basketball performance. *Research Quarterly for Exercise and Sport*, 13, 344–347.
- Millard, M., Mahoney, C. & Wardrop, J. (2001). A preliminary study of mental and physical practice on the kayak wet exit skill. *Perceptual and Motor Skills*, 92, 977–984.
- Miller, G.A., Galanter, E. & Pribram, K.H. (1960). Plans and the structure of behavior. New York: Holt, Rinehart & Winston.
- Miltner, R., Netz, J. & Hömberg, V. (2000). Kognitive Therapie sensomotorischer Störungen. *Zeitschrift für Physiotherapie*, 52, 954–964.
- Miltner, R., Simon, U., Netz, J. & Hömberg, V. (1999). Bewegungsvorstellung in der Therapie von Patienten mit Hirninfarkt. *Neurologie & Rehabilitation*, 5, 66–72.
- Mogford, R.H. (1997). Mental models and situation awareness in air traffic control. *International Journal of Aviation Psychology*, 7 (4), 331–341.
- Monsma, E., Mensch, J. & Farroll, J. (2009). Keeping your head in the game: Sport-specific imagery and anxiety among injured athletes. *Journal of Athletic Training*, 44 (4), 410–417.
- Monsma, E.V., Short, S.E., Hall, C.R., Gregg, M. & Sullivan, P. (2009). Psychometric properties of the revised Movement Imagery Questionnaire (MIQ-R). *Journal of Imagery Research in Sport and Physical Activity*, 4 (1), Art. 9.
- Morganti, F., Gaggioli, A., Castelnovo, G., Bulla, D., Vettorello, M. & Riva, G. (2003). The use of technology-supported mental imagery in neurological rehabilitation. *Cyberpsychology & Behavior*, 6, 421–427.
- Morris, T., Spittle, M. & Watt, A. (2005). Imagery in sport. Champaign, Ill.: Human Kinetics.
- Moseley, G.L. (2004). Graded motor imagery is effective for long-standing complex regional pain syndrome: a randomised controlled trial. *Pain*, 108, 192–198.
- Moseley, G.L. (2005). Is successful rehabilitation of complex regional pain syndrome due to sustained attention to the affected limb? *Pain*, 114, 54–61.
- Mouret, P. & Zichner, L. (1992). Postoperative Behandlung, Rehabilitation und gutachterliche Beurteilung von Endoprothesenträgern des Hüftgelenks. *Versicherungsmedizin*, 44, 7–10.
- Mouret, P. (1997). Postoperative Nachbehandlung, Rehabilitation und gutachterliche Aspekte bei Patienten nach Hüftgelenkendoprothesen. In L. Zichner, M. Engelhardt & J. Freiwald (Hrsg.). *Sport bei Arthrose und nach endoprothetischem Einsatz* (S. 83–89). Wehr: Ciba-Geigy.
- Muellbacher, W. (2001). Die Rolle des Motorkortex beim Motorischen Lernen. *Journal für Neurologie, Neurochirurgie und Psychiatrie*, 3, 20–25.
- Mulder, T. (2007). *Das adaptive Gehirn*. Stuttgart: Thieme.
- Mulder, T., De Vries, S. & Zijlstra, S. (2005). Observation, imagination and execution of an effortful movement: more evidence for a central explanation of motor imagery. *Experimental Brain Research*, 163, 344–351.
- Mulder, T., Zijlstra, S., Zijlstra, W. & Hochstenbach, J. (2004). The role of motor imagery in learning a totally novel movement. *Experimental Brain Research*, 154, 211–217.
- Munroe, K.J., Giacobbi, P.R., Hall, C. & Weinberg, R. (2000). The four Ws of imagery use: where, when, why and what. *The Sport Psychologist*, 14, 119–137.
- Munroe-Chandler, K.J., Hall, C.R., Fishburne, G.J., Murphy, L. & Hall, N.D. (2012). Effects of a cognitive specific imagery intervention on the soccer skill performance of young athletes: Age group comparisons. *Psychology of Sport and Exercise*, 13, 324–331.
- Munzert, J. (1992). Motorik-Repräsentation, Bewegungswissen und Bewegungshandeln. *Sportwissenschaft*, 22, 344–356.
- Munzert, J. (2001). Bewegungsvorstellungen – Bewegungshandlungsvorstellungen. In D. Hackfort (Hrsg.). *Handlungspsychologische Forschung für die Theorie und Praxis der Sportpsychologie* (S. 49–63). Köln: bps.
- Munzert, J., Dültgen, K. & Möllmann, H. (2000). Individuelle Merkmale von Bewegungsvorstellungen. Eine explorative Untersuchung im Badminton. *psychologie und sport*, 7, 15–25.
- Munzert, J. & Hackfort, D. (1999). Individual preconditions for mental training. *International Journal of Sport Psychology*, 30, 41–62.
- Munzert, J., Lorey, B. & Zentgraf, K. (2009). Cognitive motor processes: The role of motor imagery in the study of motor representation. *Brain Research Reviews*, 60, 306–326.

- Munzert, J. & Möllmann, H. (1997). Zeitliche Dauer mental simulierter Bewegungshandlungen im Badminton. *Psychologie und Sport*, 4, 102–113.
- Murphy, S. M. (1994). Imagery interventions in sport. *Medicine and Science in Sports and Exercise*, 26, 486–494.
- Myers, D.G. (2005). *Psychologie*. Berlin, Heidelberg, New York: Springer.
- Müller, K., Bütetisch, C.M., Seitz, R.J. & Hömberg, V. (2007). Mental practice improves hand function after hemiparetic stroke. *Restorative Neurology and Neuroscience*, 25, 501–511.
- Müller, W.K., Ziegler, R., Bauer, A. & Soldner, E.H. (1995). Virtual reality in surgical arthroscopic training. *Journal of Image Guided Surgery*, 1, 288–294.
- Nachemson, A.L. (1992). Newest knowledge of low back pain: a critical look. *Clinical Orthopaedics and Related Research*, 279, 8–20.
- Naito, E., Kochiyama, T., Kitada, R., Nakamura, S., Matsumura, M., Yonekura, Y. & Sadato, N. (2002). Internally simulated movement sensations during motor imagery activate cortical motor areas and the cerebellum. *The Journal of Neuroscience*, 22, 3683–3691.
- Nakata, H., Yoshie, M., Miura, A. & Kudo, K. (2010). Characteristics of the athletes' brain: Evidence from neurophysiology and neuroimaging. *Brain Research Reviews*, 62, 197–211.
- Neuhauser, H., Ellert, U. & Ziese, T. (2005). Chronische Rückenschmerzen in der Allgemeinbevölkerung in Deutschland 2002/2003: Prävalenz der besonders betroffenen Bevölkerungsgruppen. *Das Gesundheitswesen*, 67, 685–693.
- Newson, J., Knight, P. & Balnave, R. (2003). Use of mental imagery to limit strength loss after immobilization. *Sport Rehabilitation*, 12, 249–258.
- Nicholls, A., Polmann, R. & Holt, N. (2005). The effects of individualized imagery interventions on golf performance and flow states. *Athletic Insight: Online Journal of Sport Psychology*, 7, 1.
- Nico, D., Daprati, E., Rigal, F., Parsons, L. & Sirigu, A. (2004). Left and right hand recognition in upper limb amputees. *Brain*, 127, 120–132.
- Niethard, F.U. & Pfeil, J. (1997). *Orthopädie*. Stuttgart: Hippokrates.
- Nordin, S.M., & Cumming, J. (2005). Professional dancers describe their imagery: Where, when, what, why, and how. *The Sport Psychologist*, 19, 395–416.
- Olsson, C.-J. & Nyberg, L. (2010). Motor imagery: If you can't do it, you won't think it. *Scandinavian Journal of Medicine & Science in Sports*, 20, 711–715.
- Page, S.J. (2000). Imagery improves upper extremity motor function in chronic stroke patients. *Occupational Therapy Journal of Research*, 20, 200–215.
- Page, S.J., Levine, P., Sisto, S.A. & Johnston, M.V. (2001a). Mental practice combined with physical practice for upper-limb motor deficit in subacute stroke. *Physical Therapy*, 81, 1455–1462.
- Page, S.J., Levine, P., Sisto, S. & Johnston, M.V. (2001b). A randomized efficacy and feasibility study of imagery in acute stroke. *Clinical Rehabilitation*, 15, 233–240.
- Page, S.J., Sime, W. & Nordell, K. (1999). The effects of imagery on female college swimmers' perception of anxiety. *The Sport Psychologist*, 13, 458–469.
- Page, S.J., Szaflarski, J.P., Eliassen, J.C., Pan, H. & Cramer, S.C. (2009). Cortical plasticity following motor skill learning during mental practice in stroke. *Neurorehabilitation and Neural Repair*, 23 (4), 382–388.
- Page, S.J., Dunning, K., Hermann, V., Leonard, A. & Levine, P. (2011). Longer versus shorter mental practice sessions for affected upper extremity movement after stroke. A randomized controlled trial. *Clinical Rehabilitation*, 25, 627–637.
- Paivio, A. (1985). Cognitive and motivational functions of imagery in human performance. *Canadian Journal of Applied Sports Science*, 10, 22–28.
- Palágyi, M. (1924). *Naturphilosophische Vorlesungen. Über die Grundprobleme des Bewußtseins und des Lebens*. Leipzig: Barth.
- Palmer, S. (1992). A comparison of mental practice techniques as applied to the developing competitive figure skater. *The Sport Psychologist*, 6, 148–155.
- Papaxanthis, C., Schieppati, M., Gentili, R. & Pozzo, T. (2002a). Imagined and actual arm movements have similar durations when performed under different conditions of direction and mass. *Experimental Brain Research*, 143, 447–452.
- Papaxanthis, C., Pozzo, T., Skoura, X. & Schieppati, M. (2002b). Does order and timing in performance of imagined and actual movements affect the motor imagery process? The duration of walking and writing task. *Behavioural Brain Research*, 134, 209–215.
- Pascual-Leone, A., Dang, N., Cohen, L.G., Brasil-Neto, J.P., Cammarota, A. & Hallett, M. (1995). Modulation of muscle responses evoked by transcranial magnetic stimulation during the acquisition of new fine motor skills. *Journal of Neurophysiology*, 74, 1037–1045.
- Pascual-Leone, A., Grafman, J. & Hallett, M. (1994). Modulation of cortical motor output maps during development of implicit and explicit knowledge. *Science*, 263, 1287–1289.
- Pearson, L. & Jones, G. (1992). Emotional effects of sports injuries: Implication for physiotherapists. *Physiotherapy*, 78, 762–770.
- Perry, J. (1992). *Gait analysis*. Thorofare: Slack.
- Phipps, S. & Morehouse, C. (1969). Effects of mental practice on the acquisition of motor skills of varied difficulty. *Research Quarterly*, 40, 773–778.
- Pickel, K.L. (2004). When a lie becomes truth: The effects of self-generated misinformation on eyewitness memory. *Memory*, 12, 14–26.
- Pithan, J.M. & Stoll, O. (2012). Technische Lösung zur Erweiterung des videogestützten Techniktrainings im Wasserspringen um die interne Perspektive. *Leistungssport*, 42, 20–24.

- Porro, C.A., Francescato, M.P., Cettolo, V., Diamond, M.E., Baraldi, P., Zuiani, C., Bazzocchi, M. & di Prampero, P.E. (1996). Primary motor and sensory cortex activation during motor performance and motor imagery: A functional magnetic resonance imaging study. *The Journal of Neuroscience*, 16, 7688–7698.
- Porro, C.A., Cettolo, V., Francescato, M.P., & Baraldi, P. (2000). Ipsilateral involvement of primary motor cortex during motor imagery. *European Journal of Neuroscience*, 12, 3059–3063.
- Post, P.G., Wrisberg, C.A. & Mullins, S. (2010). A field test of the influence of pre-game imagery on basketball free throw shooting. *Journal of Imagery research in sport and physical activity*, 5 (1), Art. 2.
- Prather, D.C. (1973). Prompted mental practice as a flight simulator. *Journal of Applied Psychology*, 57, 353–355.
- Predebon, J. & Docker, S. (1992). Free-throw shooting performance as a function of preshot routines. *Perceptual and Motor Skills*, 75, 167–171.
- Prinzel, L.J., Pope, A. & Freeman, F.G. (2002). Physiological self-regulation and adaptive automation. *The International Journal of Aviation Psychology*, 12, 179–196.
- Prystowsky, J.B., Regehr, G., Rogers, D.A., Loan, J.P., Hiemenz, L.L. & Smith, K.M. (1999). A virtual reality module for intravenous catheter placement. *The American Journal of Surgery*, 177, 171–175.
- Puni, A.Z. (1961). *Abriß der Sportpsychologie*. Berlin: Sportverlag.
- Quinn, A.M. & Fallon, B.J. (1999). The changes in psychological characteristics and reactions of elite athletes from injury onset until full recovery. *Journal of Applied Sport Psychology*, 11, 210–229.
- Raab, M. (2003). Implicit and explicit learning of decision making in sports is effected by complexity of situation. *International Journal of Sport Psychology*, 34, 273–288.
- Radulescu, P.V., Adam, J.J. & Fischer, M.H. (2010). Fitt's Law violation and motor imagery: are imagined movements truthful or lawful? *Experimental Brain Research*, 201, 607–611.
- Ram, N., Riggs, S.M., Skailing, S., Landers, D.M. & McCullagh, P. (2007). A comparison of modelling and imagery in the acquisition and retention of motor skills. *Journal of Sports Sciences*, 25 (5), 587–597.
- Ramachandran, V.S. & Blakeslee, S. (2002). Die blinde Frau, die sehen kann. Rätselhafte Phänomene unseres Bewusstseins. Reinbek: Rowohlt.
- Ranganathan, V.K., Kuykendall, T., Siemionow, V. & Yue, G.H. (2002). Level of mental effort determines training-induced strength increases. *Society for Neuroscience, Abstracts*, 32, 768.3.
- Ranganathan, V.K., Siemionow, V., Liu, J.Z., Sahgal, V. & Yue, G.H. (2004). From mental power to muscle power – gaining strength by using the mind. *Neuropsychologia*, 42, 944–956.
- Rao, S.M., Binder, J.R., Bandettini, P.A., Hammeke, T.A., Yetkin, F.Z., Jesmanowicz, A., Lisk, L.M., Morris, G.L., Mueller, W.M., Estkowski, L.D., Wong, E.C., Haughton, V.M. & Hyde, J.S. (1993). Functional magnetic resonance imaging of complex human movements. *Neurology*, 43, 2311–2318.
- Reed, C.L. (2002). Chronometric comparisons of imagery to action: Visualizing versus physically performing springboard dives. *Memory and Cognition*, 30, 1169–1178.
- Reichert, H. (2000). *Neurobiologie*. Stuttgart, New York: Thieme.
- Reidick, C. (2007). *Mentales Training im Kinder- und Jugendhochleistungssport – unter Berücksichtigung des 100m-Hürdenlaufs*. Heidelberg: Universität Heidelberg.
- Reidick, C. & Mayer, J. (2007). *Mentales Training im Kinder- und Jugendhochleistungssport. Technikerwerb 100 m Hürden*. In F. Ehrenspiel, J. Beckmann, S. Maier, Ch. Heiss & D. Waldenmayer (Hrsg.), *Diagnostik und Intervention. Bridging the gap* (S. 112). Hamburg: Czwalina.
- Reif, A.E. (1986). Risks und gains. In P.F. Vinger (Ed.), *Sports injuries* (pp. 48–57). Littleton, MA: PSG Publishing Company.
- Reiser, M. (2005). Kraftgewinne durch Vorstellung maximaler Muskelkontraktionen. *Zeitschrift für Sportpsychologie*, 12, 11–21.
- Reiser, M., Büsch, D. & Munzert, J. (2011). Strength gains by motor imagery with different ratios of physical to mental practice. *Frontiers in Psychology*, 2, 194.
- Rheinberg, F. (2000). *Motivation*. Stuttgart: Kohlhammer.
- Riccio, I., Iolascon, G., Barillari, M.R., Gimigliano, R. & Gimigliano, F. (2010). Mental practice is effective in upper limb recovery after stroke: A randomized single-blind cross-over study. *European Journal of Physical and Rehabilitation Medicine*, 46, 19–25.
- Richardson, A. (1967). Mental practice: A review and discussion (Part I & II). *Research Quarterly*, 38, 95–107, 263–273.
- Rieble, R., Seemann-Mostert, N. & Volkert, R. (1986). Rehabilitation prothetisch versorgter Arm- und Beinamputierter. In A. von Müllmann (Hrsg.), *Krankengymnastik bei Verletzungsfolgen am Bewegungsapparat* (S. 245–296). München: Pflaum.
- Rizzolatti, G., Fadiga, L., Gallese, V. & Fogassi, L. (1996). Premotor cortex and the recognition of motor actions. *Cognitive Brain Research*, 3, 131–141.
- Robazza, C. & Bortoli, L. (1998). Mental preparation strategies of olympic archers during competition: an exploratory investigation. *High Ability Studies*, 9, 219–235.
- Ross, J.S., Tkach, J., Ruggieri, P.M., Lieber, M. & Lapresto, E. (2003). The mind's eye: Functional MR imaging evaluation of golf motor imagery. *American Journal of Neuroradiology*, 24, 1036–1044.
- Ross, M.J. & Berger, R.S. (1996). Effects of stress inoculation training on athletes' postsurgical pain and rehabilitation after orthopedic injury. *Journal of Consulting and Clinical Psychology*, 64, 406–410.
- Ross, S.L. (1985). The effectiveness of mental practice in improving the performance of college trombonists. *Journal of Research in Music and in Music Education*, 33, 221–230.
- Rotella, R., Gansneder, B., Ojala, D. & Billing, J. (1980). Cognitions and coping strategies of elite skiers: an exploratory

- study of young developing athletes. *Journal of Sport Psychology*, 2, 350–354.
- Roth, G. & Menzel, R. (2001). Neuronale Grundlagen kognitiver Leistungen. In J. Dudel, R. Menzel & R.F. Schmidt (Hrsg.), *Neurowissenschaft – Vom Molekül zur Kognition* (S. 543–562). Berlin, Heidelberg, New York: Springer.
- Roth, M., Decety, J., Raybaudi, M., Massarelli, R., Delon-Martin, C., Segebarth, C., Morand, S., Gemignani, A., Décorps, M. & Jeannerod, M. (1996). Possible involvement of primary motor cortex in mentally simulated movement: A functional magnetic resonance imaging study. *NeuroReport*, 7, 1280–1284.
- Rotter, J.B. (1971). Generalized expectancies for interpersonal trust. *American Psychologist*, 26, 443–452.
- Roure, R., Collet, C., Deschaumes-Molinario, C., Dittmar, A., Rada, H., Delhomme, G. & Vernet-Maury, E. (1998). Autonomic nervous system responses correlate with mental rehearsal in volleyball training. *European Journal of Applied Physiology and Occupational Physiology*, 78, 99–108.
- Rubin-Rabson, G. (1941). Studies in the psychology of memorizing piano music. VI: A comparison of two forms of mental rehearsal and keyboard overlearning. *Journal of Educational Psychology*, 32, 593–602.
- Rubinstein, J.S., Meyer, D.E. & Evans, J.E. (2001). Executive control of cognitive processes in task switching. *Journal of Experimental Psychology – Human Perception and Performance*, 27, 763–797.
- Ryska, T. (1998). Cognitive-behavioral strategies and precompetitive anxiety among recreational athletes. *Psychological Record*, 48, 697–708.
- Sabate, M., Gonzalez, B. & Rodriguez, M. (2004) Brain lateralization of motor imagery: Motor planning asymmetry as a cause of movement lateralization. *Neuropsychologia*, 42, 1041–1049.
- Sadeghi, H., Omar-Fauzee, M.S., Jamal, M., Ab-Latif, R. & Cheric, M.C. (2010). The mental skills training of university soccer players. *International Education Studies*, 3 (82), 81–90.
- Saimpont, A., Malouin, F., Tousignant, B. & Jackson, Ph.L. (2013). Motor imagery and aging. *Journal of Motor Behavior*, 45, 21–28.
- Salmon, J., Hall, C. & Haslam, I. (1994). The use of imagery by soccer players. *Journal of Applied Sport Psychology*, 6, 116–133.
- Savoy, C. (1993). A yearly mental training program for a college basketball player. *The Sport Psychologist*, 7, 173–190.
- Savoy, C. (1997). Two individualized mental training programs for a team sport. *International Journal of Sport Psychology*, 28, 259–270.
- Savoy, C. & Beitel, P. (1996). Mental imagery for basketball. *International Journal of Sport Psychology*, 27, 454–462.
- Schack, T. (2007). Repräsentation und Bewegungssteuerung – die kognitiv-perzeptuelle Perspektive. *Zeitschrift für Sportpsychologie*, 14, 104–113.
- Schaper, N. & Sonntag, K. (1997). Kognitive Trainingsmethoden zur Förderung diagnostischer Problemlösefähigkeiten. In K. Sonntag & N. Schaper (Hrsg.), *Störungsmanagement und Diagnosekompetenz* (S. 193–210). Zürich: Verein der Fachverlage.
- Scheier, M.F. & Carver, C.S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4, 219–247.
- Schieber, M.H. (1999). Somatotopic gradients in the distributed organization of the human primary motor cortex hand area: Evidence from small infarcts. *Experimental Brain Research*, 128, 139–148.
- Schlicht, W. (1992). Mentales Training: Lern- und Leistungsgewinne durch Imagination? *Sportpsychologie*, 2, 24–29.
- Schmidt, R.A. (1975). A schema theory of discrete motor skill learning. *Psychological Review*, 82, 225–260.
- Schmidt, R.M. & Hoffmann, F. (2002). Klinik. In: M. Schmidt & F. Hoffmann (Hrsg.), *Multiple Sklerose* (S. 44–49). München: Urban & Fischer.
- Schmidt, U. & Schleiffenbaum, E. (2000). Sportpsychologische Beratung und Betreuung der Volleyball Damen-nationalmannschaft in der Vorbereitungsphase auf eine Europameisterschaft. *Psychologie und Sport*, 2, 42–50.
- Schneider, M.O. (2006). *Mentales Training in der Rehabilitation nach distaler Radiusfraktur*. Heidelberg: Universität Heidelberg.
- Schott, U. (1996). *Streu- und Stressverarbeitungsmechanismen in der Rehabilitation nach Sportverletzungen*. Unveröff. Diplomarbeit, Frankfurt a.M.: Johann-Wolfgang-Goethe-Universität.
- Schott, N. (2012). Age-related differences in motor imagery: Working memory as a mediator. *Experimental Aging Research*, 38: 559–583.
- Schott, N. (2013). Test zur Kontrollierbarkeit der Bewegungsvorstellungsfähigkeit (TKBV) bei älteren Erwachsenen. *Zeitschrift für Gerontologie und Geriatrie*, 46, 663–672.
- Schott, N. & Korbus, H. (2014). Preventing functional loss during immobilization after osteoporotic wrist fractures in elderly patients: A randomized clinical trial. *BMC Musculoskeletal Disorders*, 15, 287.
- Schott, N., Frenkel, M.-O., Korbus H. & Francis, K.L. (2013). Mental practice in orthopedic rehabilitation: Where, what, and how? A case report. *Movement & Sport Sciences*, 82, 93–103.
- Schuler, H. (2007). *Organisationspsychologie*. Bern: Huber.
- Schüle, K. (1997). Sport in der Rehabilitation von Patienten mit künstlichen Hüftgelenken – Sozialmedizinische und pädagogische Aspekte. In L. Zichner, M. Engelhardt & J. Freiwald (Hrsg.), *Sport bei Arthrose und nach endoprothetischem Einsatz* (S. 113–122). Wehr: Ciba-Geigy.
- Schüle, K. & Schnieders, S. (2000). Anhang. In K. Schüle & G. Huber (Hrsg.), *Grundlagen der Sporttherapie* (S. 263–287). München: Urban & Fischer.
- Schuster, C., Hilfiker, R., Amft, O., Scheidhauer, A., Andrews, B., Butler, J., Kischka, U. & Ettl, Th. (2011). Best practice for motor imagery: A systematic literature review on motor imagery training elements in five different disciplines. *BMC Medicine*, 9, 75.

- Schuster, C., Glässel, A., Scheidhauer, A., Ettlin, Th. & Butler, J. (2012). Motor imagery experiences and use: Asking patients after stroke where, when, what, why, and how they use imagery. A qualitative investigation. *Stroke Research and Treatment*, Article ID 503190.
- Schwab Reese, L.M., Pittsinger, R. & Yang, J. (2012). Effectiveness of psychological intervention following sport injury. *Journal of Sport and Health Science*, 1, 71–79.
- Schwartz, G.E., Brown, S. L. & Ahern, S.L. (1980). Facial muscle patterning and subjective experience during affective imagery: Sex differences. *Psychophysiology*, 17, 75–82.
- Schwarzer, A., Glaudo, S., Zenz, M. & Maier, C. (2007). Spiegeltherapie – ein neues Verfahren in der Therapie neuropathischer Schmerzen. *Deutsche Medizinische Wochenschrift*, 132, 2159–2162.
- Schwarzer, R. (1996). *Psychologie des Gesundheitsverhaltens*. Göttingen: Hogrefe.
- Seabourne, T., Weinberg, R. & Jackson, A. (1984). Effect of individualized practice and training of visuo-motor behavior rehearsal in enhancing karate performance. *Journal of Sport Behavior*, 7, 58–67.
- Selye, H. (1953). *Einführung in die Lehre vom Adaptationssyndrom*. Stuttgart, New York: Thieme.
- Shackell, E. M. & Standing, L.G. (2007). Mind over matter: Mental training increases physical strength. *North American Journal of Psychology*, 9 (1), 189–200.
- Shadmehr, R. & Holcomb, H.H. (1997). Neural correlates of motor memory consolidation. *Science*, 277, 821–825.
- Sharma, N. & Baron, J.-C. (2013). Does motor imagery share neural networks with executed movement: A multivariate fMRI analysis. *Frontiers in Human Neuroscience*, 7, 564.
- Shearer, D., Mellalieu, S., Shearer, C. & Roderique-Davies, G. (2009). The effects of a video-aided imagery intervention upon collective efficacy in an international paralympic wheelchair basketball team. *Journal of Imagery Research in Sport and Physical Activity*, 4(1), Art. 2.
- Sherrington, C.S. (1906). *The integrative action of the nervous system*. New York: C. Scribner's Sons.
- Shick, J. (1970). Effects of mental practice on selected volleyball skills for college women. *Research Quarterly*, 41, 88–94.
- Short, E.S., Tentute, A. & Feltz, D.L. (2005). Imagery use in sport: Mediation effects for efficacy. *Journal of Sports Sciences*, 23, 951–960.
- Silbernagl, S. & Despopoulos, A. (2001). *Taschenatlas der Physiologie*. Stuttgart: Thieme
- Silva, J. (1982). Competitive sport environment: Performance enhancement through cognitive intervention. *Behavior Modification*, 6, 443–463.
- Simonton, O.C., Simonton, S.M. & Creighton, J. (1996). *Wieder gesund werden*. Reinbek: Rowohlt.
- Sirigu, A., Duhamel, J.R., Cohen, L., Pillon, B., Dubois, B. & Agid, Y. (1996). The mental representation of hand movements after parietal cortex damage. *Science*, 273, 1564–1568.
- Smith, A.M., Scott, S.G., O'Fallon, W. & Young, M.L. (1990). The emotional responses of athletes to injury. *Mayo Clinic Proceedings*, 65, 38–50.
- Smith, A.M., Young, M.L. & Scott, S.G. (1988). The emotional responses of athletes to injury. *Canadian Journal of Sport Sciences*, 13, 84–85.
- Smith, D., Collins, D. & Holmes, P. (2003). Impact and mechanism of mental practice effects on strength. *International Journal of Sport and Exercise Psychology*, 1, 293–306.
- Smith, D. & Holmes, P. (2004). The effect of imagery modality on golf putting performance. *Journal of Sport and Exercise Psychology*, 26, 385–395.
- Smith, D., Holmes, P., Whitmore, L., Collins, D. & Devonport, D. (2001). The effect of theoretically based imagery scripts on field hockey performance. *Journal of Sport Behavior*, 24, 408–419.
- Smith, D., Wright, C.J. & Cantwell, C. (2008). Beating the bunker: The effect of PETTLEP imagery on golf bunker shot performance. *Research Quarterly for Exercise and Sport*, 79 (3), 1–7.
- Sonnenschein, I. (1985). Progressive Relaxation. In H. Gabler, H. Haase, O. Hug & H. Steiner (Hrsg.), *Psychologische Diagnostik und Beratung im Leistungssport. Orientierungshilfen für die Praxis des Trainers* (S. 183–198). Frankfurt a.M.: Deutscher Sportbund.
- Sonntag, K. (1993). Kognitive Trainingsverfahren. In C.K. Friede & K. Sonntag (Hrsg.), *Berufliche Kompetenz durch Training* (S. 47–70). Heidelberg: Sauer.
- Sonntag, K. (1996). *Lernen im Unternehmen*. München: C.H. Beck.
- Sonntag, K. & Schaper, N. (1988). Kognitives Training zur Bewältigung steuerungstechnischer Aufgabenstellungen. *Zeitschrift für Arbeits- und Organisationspsychologie*, 32, 128–138.
- Speed, C. (2004). Low back pain. *British Medical Journal*, 328, 1119–1121.
- Spitzer, M. (1996). *Geist im Netz*. Heidelberg: Spektrum.
- Spitzer, M. (2002). *Lernen. Gehirnforschung und die Schule des Lebens*. Heidelberg: Spektrum.
- Spitzer, M. (2003). *Selbstbestimmen. Gehirnforschung und die Frage. Was sollen wir tun?* Heidelberg: Spektrum Akademischer Verlag.
- Steenbergen, B., Craje, C., Nilsen, D.M. & Gordon, A.M. (2009). Motor imagery training in hemiplegic cerebral palsy: a potentially useful therapeutic tool for rehabilitation. *Developmental Medicine & Child Neurology*, 51, 690–696.
- Steinbrück, K. (1999). Epidemiologie von Sportverletzungen – 25-Jahres-Analyse einer sportorthopädisch-traumatologischen Ambulanz. *Sportverletzung, Sportschaden*, 13, 38–52.
- Steininger, K. (1982). *Luftfahrtpsychologie in Deutschland*. *Psychologische Rundschau*, 33, 265–288.
- Sterr, A., Müller, M.M., Elbert, T., Rockstroh, B., Pantev, C. & Taub, E. (1998). Changed perceptions in Braille readers. *Nature*, 391, 134–135.
- Stevens, J.A. & Stoykov, M.E. (2003). Using motor imagery in the rehabilitation of hemiparesis. *Archives of Physical Medicine & Rehabilitation*, 84, 1090–1092.

- Stinear, C.M., Byblow, W.D., Steyvers, M., Levin, O. & Swinnen, S.P. (2006). Kinesthetic, but not visual, motor imagery modulates corticomotor excitability. *Experimental Brain Research*, 168, 157–164.
- Suedfeld, P., Collier, D. & Hartnett, B. (1993). Enhancing perceptual-motor accuracy through flotation REST. *The Sport Psychologist*, 7, 151–159.
- Suinn, R. M. (1972). Removing emotional obstacles to learning and performance by visuo-motor behavior rehearsal. *Behavior Therapy*, 3, 308–310.
- Sulser, C. (1985). Eine schwere Knieverletzung aus der Sicht des Fußballers. *Schweizer Zeitschrift für Sportmedizin*, 4, 143–146.
- Surburg, P. (1968). Audio, visual, and audio-visual instruction with mental practice in developing the forehand tennis drive. *Research Quarterly*, 39, 728–734.
- Sweigard, L.E. (1974). *Human movement potential: its ideokinetic facilitation*. New York: Dodd, Mead.
- Sweller, J. (1988). Cognitive load during problem-solving: Effects on learning. *Cognitive Science*, 12, 257–285.
- Sweller, J. & Sweller, S. (2006). Natural information processing systems. *Ecological Psychology*, 4, 434–458.
- Szameitat, A., Shen, S. & Sterr, A. (2006). Motor imagery of complex everyday movements. An fMRI study. *NeuroImage*, 34, 702–713.
- Tamir, R., Dickstein, R. & Hubermann, M. (2007). Integration of motor imagery and physical practice in group treatment applied to subjects with Parkinson's disease. *Neurorehabilitation and Neural Repair*, 21 (1), 68–75.
- Taylor, H., Lintern, G., Hulin, C.L., Talleur, D.A., Emanuel, T.W. & Phillips, S.I. (1999). Transfer of training effectiveness of a personal computer aviation training device. *The International Journal of Aviation Psychology*, 9, 319–335.
- Taylor, J. & Shaw, D. (2002). The effects of outcome imagery on golf-putting performance. *Journal of Sports Sciences*, 20, 607–613.
- Thelwell, R. & Greenlees, I. (2003). Developing competitive endurance performance using mental skills training. *The Sport Psychologist*, 17, 318–337.
- Thelwell, R., Greenlees, I. & Weston, N. (2006). Using psychological skills training to develop soccer performance [Elektronische Version]. *Journal of Applied Sport Psychology*, 18, 254–270.
- Thelwell, R. & Maynard, I. (2003). The effects of a mental skills package on 'repeatable good performance' in cricketers. *Psychology of Sport and Exercise*, 4, 377–396.
- Thill, E.E., Bryche, D., Poumarat, G. & Rigoulet, N. (1997). Task-involvement and ego-involvement goals during actual and imagined movements: Their effects on cognitions and vegetative responses. *Behavioral Brain Research*, 82, 159–167.
- Thomas, P. & Fogarty, G. (1997). Psychological skills training in golf: the role of individual differences in cognitive preferences. *The Sport Psychologist*, 11, 86–106.
- Thomas, P. & Over, R. (1994). Psychological and psychomotor skills associated with performance in golf. *The Sport Psychologist*, 8, 73–86.
- Timmermans, A.A., Verbunt, J.A., van Woerden, R., Moenekens, M., Pernot, D.H. & Seelen, H.A. (2013). Effect of mental practice on the improvement of function and daily activity performance of the upper extremity in patients with subacute stroke: A randomized clinical trial. *Journal of The American Medical Directors Association*, 14, 204–212.
- Tobin, D., Nadalin, E. J., Munroe-Chandler, K. J. & Hall, C.R. (2013). Children's active play imagery. *Psychology of Sport and Exercise* 14, 371–378.
- Tokumaru, O., Mizumoto, C., Takada, Y., Ashida, H. (2003). EEG activity of aviators during imagery flight training. *Clinical Neurophysiology*, 114, 1926–1935.
- Tomasino, B., Rumiati, R.I. & Umiltà, C.A. (2003). Selective deficit of motor imagery as tapped by a left-right decision of visually presented hands. *Brain & Cognition*, 53, 376–380.
- Trepel, M. (2004). *Neuroanatomie: Struktur und Funktion*. München: Urban & Fischer.
- Troidl, H. (1995). Fehleranalyse – Methode zur Vermeidung von Fehlern/Komplikationen in der Chirurgie. In K. Kremer, W. Platzer & H.W. Schreiber (Hrsg.), *Chirurgische Operationslehre*, Bd. 7, Teil 2: Minimal-invasive Chirurgie (S. 315–323). Stuttgart: Thieme.
- Troidl, H. (1996). *Technologie: Trainingszentren – Eine neue Form des Operierenlernens in der Viszeralchirurgie*. *Langenbecks Archiv für Chirurgie (Supplement II, Kongressband)*, 113, 727–741.
- Udry, E., Gould, D., Bridges, D. & Beck, L. (1997). Down but not out: Athletes responses to season-ending injuries. *Journal of Sport & Exercise Psychology*, 19, 229–248.
- Uebliacker, P., Gebauer, M., Ziegler, M., Braumann, K.-M. & Rueger, J.M. (2005). Verletzungen und Fehlbelastungsfolgen im Sport. *Bundesgesundheitsblatt – Gesundheitsforschung – Gesundheitsschutz*, 48, 927–938.
- Uexküll, T. von, Fuchs, M., Müller-Braunschweig, H.M. & Johnen, R. (1994). *Subjektive Anatomie*. Stuttgart: Schattauer.
- Ulich, E. (2005). *Arbeitspsychologie*. Stuttgart: Schäffer-Poeschel.
- Ungerleider, S. & Golding, J. (1991). Mental practice among Olympic athletes. *Perceptual and Motor Skills*, 72, 1007–1017.
- Ungerleider, S., Golding, J., Porter, K. & Foster, J. (1989). An exploratory examination of cognitive strategies used by masters track and field athletes. *The Sport Psychologist*, 3, 245–253.
- Van Gyn, G., Wenger, H. & Gaul, C. (1990). Imagery as a method of enhancing transfer from training to performance. *Journal of Sport and Exercise Psychology*, 12, 243–250/366–375.
- Vandell, R., Davis, R. & Clugston, H. (1943). The function of mental practice in the acquisition of motor skills. *Journal of General Psychology*, 29, 243–250.
- Velentzas, K., Heinen, T., & Schack, T. (2011). Routine integration strategies and their effects on volleyball serve performance and players' movement mental representation. *Journal of Applied Sport Psychology*, 23, 209–222.

- Veraksa, A.N. & Gorovaya, A.E. (2011). Effects of imagination on sport achievements of novice soccer players. *Psychology in Russia: State of the Art*, 4, 495–504.
- Visser, J. (2003). Developmental coordination disorder: A review of research on subtypes and comorbidities. *Human Movement Science*, 22, 479–493.
- Voisina, J.I.A., Merciera, C., Jackson, Ph.L., Richards, C.L. & Malouin, F. (2011). Is somatosensory excitability more affected by the perspective or modality content of motor imagery? *Neuroscience Letters*, 493, 33–37.
- Vroom, V.H. (1964). *Work and motivation*. New York: Wiley.
- Wagaman, J., Barabasz, A. & Barabasz, M. (1991). Flotation REST and imagery in the improvement of collegiate basketball performance. *Perceptual and Motor Skills*, 79, 119–122.
- Wang, Y. & Morgan, W.P. (1992). The effect of imagery perspectives on the psychophysiological responses to imagined exercise. *Behavioural Brain Research*, 52, 167–174.
- Wasner, G., Schattenschneider, J., Binder, A., Siebrecht, D., Maier, C. & Baron, R. (2003). Das komplexe regionale Schmerzsyndrom. Neue Erkenntnisse. *Der Anaesthetist*, 52, 883–894.
- Watson, M.E. & Rubin, D.C. (1996). Spatial imagery preserves temporal order. *Memory*, 4, 515–534.
- Watzlawick, P. (1998). *Wie wirklich ist die Wirklichkeit?* München: Piper.
- Watzlawick, P. & Kreuzer, F. (1998). *Die Unsicherheit unserer Wirklichkeit*. München: Piper.
- Wei, G. & Luo, J. (2009). Sport expert's motor imagery: Functional imaging of professional motor skills and simple motor skills. *Brain Research* (in press, corrected proof).
- Weinberg, R. (2008). Does Imagery Work? Effects on performance and mental skills. *Journal of Imagery Research in Sport and Physical Activity*, 3 (1), Art. 2.
- Weinberg, R., Seabourne, T. & Jackson, A. (1981). Effects of visuo-motor behavioral rehearsal, relaxation, and imagery on karate performance. *Journal of Sport Psychology*, 3, 228–238.
- Weinberg, R.S. (1981). The relationship between mental preparation strategies and motor performance: A review and critique. *Quest*, 33, 195–213.
- Weinberg, R.S. & Gould, D. (2007). *Foundations of sport and exercise psychology*. Champaign, IL: Human Kinetics.
- Weineck, J. (2002). *Optimales Training. Leistungsphysiologische Trainingslehre unter besonderer Berücksichtigung des Kinder- und Jugendtrainings*. Balingen: Spitta.
- Weiss, M.R. & Troxel, R.K. (1986). Psychology of the injured athlete. *Athletic Training*, 21, 104–109.
- Welk, A., Immenroth, M., Eberspächer, H. & Meyer, G. (2003). Mental training in dental education. *European Journal of Dental Education*, 7, 96.
- Wengler, A., Nimptsch, U. & Mansky, Th. (2014). Hüft- und Kniegelenkersatz in Deutschland und den USA: Auswertung deutscher und US-amerikanischer Krankenhaus-einzelfalldaten von 2005 bis 2011. *Deutsches Ärzteblatt*, 111, 407–416.
- White, A. & Hardy, L. (1998). An in-depth analysis of the uses of imagery by high level slalom canoeists and artistic gymnasts. *The Sport Psychologist*, 12, 387–403.
- White, T.W., Holmes, D.S. & Bennett, D.H. (1977). Effects of instructions, biofeedback, and cognitive activities on heart rate control. *Journal of Experimental Psychology: Human Learning & Memory*, 3 (4), 477–484.
- Whiteley, G. (1966). The effect of mental rehearsal in association with physical practice in the acquisition of simple gymnastic techniques. *Research Papers in Physical Education*, 3, 29–41.
- Wiemeyer, J. (1994). *Interne Bewegungsrepräsentationen*. *Sportwissenschaft*, 24, 233–235.
- Wiemeyer, J. (1996). «Je mehr ich denke, desto schlechter werde ich!» *Psychologie und Sport*, 3, 92–108.
- Wilson, P.H. (2005). Approaches to assessment and treatment of children with DCD: An evaluative review. *Journal of Child Psychology and Psychiatry*, 46, 806–823.
- Wilson, P.H., Maruff, P., Butson, M., Williams, J., Lum, J. & Thomas, P. (2004). Impairments in the internal representation of movement in children with developmental coordination disorder (DCD): evidence from a mental rotation task. *Developmental Medicine and Child Neurology*, 46, 754–759.
- Wilson, P.H., Maruff, P., Ives, S. & Currie, J. (2001). Abnormalities of motor and praxis imagery in children with developmental coordination disorder. *Human Movement Science*, 20, 135–159.
- Wilson, P.H., Thomas, P. & Maruff, P. (2002). Motor imagery training ameliorates motor clumsiness in children. *Child Neurology*, 17, 491–498.
- Wolfram, I.A. & Micklewright, D. (2011). The effect of a mental training program on state anxiety and competitive dressage performance. *Journal of Veterinary Behavior*, 6, 267–275.
- Wolpe, J. (1977). *Praxis der Verhaltenstherapie*. Bern: Huber.
- Wolpe, J. & Lazarus, A.A. (1966). *Behaviour therapy techniques*. Elmsford, NY: Pergamon Press.
- Woody, R.H. (2006). Musicians' cognitive processing of imagery-based instructions for expressive performance. *Journal of Research in Music Education*, 52, 125–137.
- Wriessnegger, S.C., Steyerl, D., Koschutnig, K. & Müller-Putz, G.R. (2014). Short time sports exercise boosts motor imagery patterns: Implications of mental practice in rehabilitation programs. *Frontiers in Human Neuroscience*, 8, 469.
- Wrisberg, C. & Anshel, M. (1989). The effect of cognitive strategies on the free throw shooting performance of young athletes. *The Sport Psychologist*, 3, 95–104.
- Yaguez, L., Canavan, A.G., Lange, H.W. & Homberg, V. (1999). Motor learning by imagery is differentially affected in Parkinson's and Huntington's diseases. *Behavioural Brain Research*, 102, 115–127.
- Yerkes, R.M. & Dodson, J.D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology*, 18, 459–482.
- Yoo, E., Park, E. & Chung, B. (2001). Mental practice effect on line-tracing accuracy in persons with hemiparetic

- stroke. *Archives of Physical Medicine & Rehabilitation*, 82, 1213–1218.
- Yue, G. & Cole, K. (1992). Strength increases from the motor programm: Comparison of training with maximal voluntary and imagined muscle contractions. *Journal of Neurophysiology*, 67, 1114–1123.
- Zervas, Y. & Kakkos, V. (1991). Visuomotor behavior rehearsal in archery shooting performance. *Perceptual and Motor Skills*, 73, 1183–1190.
- Zhang, H., Xu, L., Wang, S., Xie, B., Guo, J., Long, Z. & Yao, L. (2011). Behavioral improvements and brain functional alterations by motor imagery training. *Brain Research*, 1407, 17, 38–46.
- Zichner, L. (1997). Der endoprothetische Gelenkersatz – eine Standortbestimmung. In L. Zichner, M. Engelhardt & J. Freiwald (Hrsg.), *Sport bei Arthrose und nach endoprothetischem Einsatz* (S. 63–69). Wehr: Ciba-Geigy.
- Ziegler, S. (1987). Comparison of imagery styles and past experiences in skills performance. *Perceptual and Motor Skills*, 64, 579–586.
- Ziemainz, H. (2002). Der Blitzwechsel. Mentales Training im Triathlon: Eine Möglichkeit zur Optimierung der vierten Disziplin. *Triathlon und Duathlon*, 6, 12–15.
- Ziemainz, H., Stoll, O. & Küster, C. (2003). Evaluation psychologischen Trainings im triathlonspezifischen Disziplinwechsel. Unveröffentlichter Forschungsbericht. Köln: BISP (Fördernummer: VF 0407/10/08/2001–2002).
- Ziemainz, H., Stoll, O., Küster, C. & Adler, K. (2003). Evaluation Mentalen Trainings im triathlonspezifischen Disziplinwechsel im Jugend- und Juniorenbereich. *Leistungssport*, 33, 20–22.
- Zijdewind, I., Toering, S.T., Bessem, B., van der Laan, O. & Diercks, R.L. (2003). Effects of imagery motor training on torque production of ankle plantar flexor muscles. *Muscle Nerve*, 28, 168–173.
- Zitterbarth, W. (1995). Gesundheit als gesellschaftliches Konstrukt. In R. Lutz & N. Mark (Hrsg.), *Wie gesund sind Kranke?* (S. 27–40). Göttingen: Hogrefe.

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9.1	138	Hermann, H.-D. & Eberspächer, H. (1994). <i>Psychologisches Aufbautraining nach Sportverletzungen</i> . München: BLV
9.2	139	Hermann, H.-D. & Eberspächer, H. (1994). <i>Psychologisches Aufbautraining nach Sportverletzungen</i> . München: BLV
9.3	142	Hermann, H.-D. & Eberspächer, H. (1994). <i>Psychologisches Aufbautraining nach Sportverletzungen</i> . München: BLV
9.4	143	Hermann, H.-D. & Eberspächer, H. (1994). <i>Psychologisches Aufbautraining nach Sportverletzungen</i> . München: BLV
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9.12a-d	177	Gassner, K., Einsiedel, T., Linke, M., Görlich, P. & Mayer, J. (2007). Verbessert Mentales Training des Erlernens der Gehbewegung mit Oberschenkelprothese. <i>Der Orthopäde</i> , 36, 673–678
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10.8	199	© David Mathieu – Fotolia.com
10.9	199	Schuler et al., Lehrbuch Organisationspsychologie, ISBN 978-3-456-84458-9, Verlag Hans Huber 2007. Copyright by Hogrefe, Verlag Hans Huber 2008
10.10	201	Sonntag, K. & Schaper, N. (1988). Kognitives Training zur Bewältigung steuerungstechnischer Aufgabenstellungen. Zeitschrift für Arbeits- und Organisationspsychologie, 32, 128–138
11.1	206	Birbaumer, N. & Schmidt, R.F. (2003). Biologische Psychologie (5. Aufl.). Berlin, Heidelberg, New York: Springer, S. 304
11.3	208	Karnath, H.-O. & Thier, P. (Hrsg.). (2003). Neuropsychologie. Berlin, Heidelberg, New York: Springer

Tabelle

9.1	136	Hermann, H.-D. & Mayer, J. (2003). Psychologische Aspekte in der orthopädisch-traumatologischen Rehabilitation nach Sportverletzungen. DVS-Informationen, 18, 8–12
9.2	157	Forschungsgebiete und -ziele bei der Anwendung von Mentalem Training bei Schlaganfallpatienten



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