

Zusammenarbeit von Sports Vision und Neuroathletik

Vom visuellen Input zum motorischen Output

LITERATURVERZEICHNIS

- 1 Guo, Y., Yuan, T., Peng, J., Deng, L., Chen, C. (2024). Impact of Sports Vision Training on Visuomotor Skills and Shooting Performance in Elite Skeet Shooters. *Front. Hum. Neurosci.*, 18, 1476649.
- 2 Buscemi, A., Mondelli, F., Biagini, I., Gueli, S., D'Agostino, A., Coco, M. (2024). Role of Sport Vision in Performance: Systematic Review. *J. Funct. Morphol. Kinesiol.*, 9, 92.
- 3 Lochhead, L., Feng, J., Laby, D. M., Appelbaum, L. G. (2024). Training Vision in Athletes to Improve Sports Performance: A Systematic Review of the Literature. *Int. Rev. Sport Exerc. Psychol.*, 1–23.
- 4 Erickson, Graham B. (2007). *Sports Vision: Vision Care for the Enhancement of Sports Performance*; Butterworth-Heinemann/Elsevier: St. Louis, Missouri, USA, 2007.
- 5 Christenson, G. N., Winkelstein, A. M. (1988). Visual Skills of Athletes versus Nonathletes: Development of a Sports Vision Testing Battery. *J. Am. Optom. Assoc.*, 59, 666–675.
- 6 Sickenberger, P. W., Marx, D. S., Marx, P. W. S., Dr Sebastian. (2025). Sehen im Sport. *sportärztezeitung*, 2025.
- 7 Vision@Sports. <https://www.eah-jena.de/scitec/forschung/optometrie/visionsports>. Referencing: 17 August 2025.
- 8 Laby, D. M., Appelbaum, L. G. (2021). Review: Vision and On-Field Performance: A Critical Review of Visual Assessment and Training Studies with Athletes. *Optom. Vis. Sci.*, 98, 723–731.
- 9 Erickson, G. B. (2021). Review: Visual Performance Assessments for Sport. *Optom. Vis. Sci.*, 98, 672–680.
- 10 Zimmerman, A. B., Lust, K. L., Bullimore, M. A. (2011). Visual Acuity and Contrast Sensitivity Testing for Sports Vision. *Eye Contact Lens Sci. Clin. Pract.*, 37, 153–159.
- 11 Applegate, R. A., Applegate, R. A. (1992). Set Shot Shooting Performance and Visual Acuity in Basketball: *Optom. Vis. Sci.*, 69, 765–768.
- 12 Leivers, H. K., Allen, P. M., Timmis, M. A., Zenk, F., Uppal, J., Runswick, O. R. (2024). The Effects of Simulated Monocular and Binocular Vision Impairment on Football Penalty Kick Performance. *Eur. J. Sport Sci.*, 24, 918–929.
- 13 Barrett, B. T., Flavell, J. C., Bennett, S. J., Cruickshank, A. G., Mankowska, A., Harris, J. M., Buckley, J. G. (2017). Vision and Visual History in Elite/Near-Elite-Level Cricketers and Rugby-League Players. *Sports Med. - Open*, 3, 39.
- 14 Appelbaum, L. G., Erickson, G. (2018). Sports Vision Training: A Review of the State-of-the-Art in Digital Training Techniques. *Int. Rev. Sport Exerc. Psychol.*, 11, 160–189.
- 15 Hülndücker, T., Ostermann, M., Mierau, A. (2019). The Speed of Neural Visual Motion Perception and Processing Determines the Visuomotor Reaction Time of Young Elite Table Tennis Athletes. *Front. Behav. Neurosci.*, 13, 165.
- 16 Hülndücker, T., Strüder, H. K., Mierau, A. (2017). Visual Motion Processing Subverts Faster Visuomotor Reaction in Badminton Players. *Med. Sci. Sports Exerc.*, 49, 1097–1110.
- 17 Game changer in training: neuroathletics sets new standards. <https://www.ispo.com/en/health/neuroathletics-gamechanger-or-nonsense>. Referencing: 18 August 2025.
- 18 Judith, E., Isabel, S., Marilena, K. (2024). Neuroathletic Training in Stroke Rehabilitation? A Single-Blind Randomized Controlled Pilot Study on the Potential of Neuroathletic Training for Balance Ability in Stroke Outpatient Rehabilitation. *BMC Res. Notes*, 17, 358.
- 19 Cullen, K. E., Zobeiri, O. A. (2021). Proprioception and the Predictive Sensing of Active Self-Motion. *Curr. Opin. Physiol.*, 20, 29–38.
- 20 Soylu, C., Altundag, E. (2024). Rewiring for Victory: Neuro-Athletic Training Enhances Flexibility, Serve Speed, and Upper Limb Performance in Elite Volleyball Players—A Randomized Controlled Trial. *Appl. Sci.*, 14, 11102.
- 21 Bunnell, E., Stratton, M. T. (2024). The Impact of Functional Training on Balance and Vestibular Function: A Narrative Review. *J. Funct. Morphol. Kinesiol.*, 9, 251.
- 22 Li, T., Wang, X., Wu, Z., Liang, Y. (2024). The Effect of Stroboscopic Vision Training on the Performance of Elite Curling Athletes. *Sci. Rep.*, 14, 31730.
- 23 Winter, L., Huang, Q., Sertic, J. V. L., Konczak, J. (2022). The Effectiveness of Proprioceptive Training for Improving Motor Performance and Motor Dysfunction: A Systematic Review. *Front. Rehabil. Sci.*, 3, 830166.
- 24 Poltavski, D., Biberdorf, D., Praus Poltavski, C. (2021). Which Comes First in Sports Vision Training: The Software or the Hardware Update? Utility of Electrophysiological Measures in Monitoring Specialized Visual Training in Youth Athletes. *Front. Hum. Neurosci.*, 15, 732303.