

DAFTAR PUSTAKA

- Amara, S., Barbosa, T. M., Chortane, O. G., Hammami, R., Attia, A., Chortane, S. G., & van den Tillaar, R. (2022). Effect of Concurrent Resistance Training on Lower Body Strength, Leg Kick Swimming, and Sport-Specific Performance in Competitive Swimmers. *Biology*, 11(2). <https://doi.org/10.3390/biology11020299>
- Arima, P., & Aritonang, S. (2023). Kontribusi Latihan Flutter Kick Dan Latihan Resistance Band Terhadap Peningkatan Kecepatan Renang Gaya Punggung 50 Meter Atlet Putra Usia 13-14 Tahun Aquatic Swimming Club Medan. *Jurnal Dunia Pendidikan*, 4(1), 621–631.
- Aryo Raditya Ichwan, M., & Mahardika Pakarti, G. (2025). Pengaruh Latihan Flutter Kick terhadap Kecepatan Renang Gaya Bebas Pada Siswa Ekstrakurikuler di SD Al-Zahra Indonesia. *Jurnal Pendidikan Tambusai*, 9, 29241–29250.
- Atakan, M. M., Li, Y., Koşar, Ş. N., Turnagöl, H. H., & Yan, X. (2021). Evidence-based effects of high-intensity interval training on exercise capacity and health: A review with historical perspective. In *International Journal of Environmental Research and Public Health* (Vol. 18, Number 13). MDPI. <https://doi.org/10.3390/ijerph18137201>
- Ay, K. M. (2025). The Effectiveness of Mobile Learning via Smartphone in Facilitating the Acquisition of Preliminary Swimming Skills. *Modern Sport*, 24(2), 237–247. <https://doi.org/10.54702/2708-3454.2069>
- Badruzaman, B. (2019). The Increase of Swimming Distance Ability Using Tools for Flippers & Back Buoys and Kickboard on Freestyle Swimming Learning for Sports Science Students Beginners. *Atlantis Press*, 11(Icsshpe 2018), 352–358. <https://doi.org/10.2991/icsshpe-18.2019.97>
- Beethe, A. Z., Nagle, E. F., Lovalekar, M., Nagai, T., Nindl, B. C., & Cannaboy, C. (2018). Note . This article will be published in a forthcoming issue of the International Journal of Sports Physiology and Performance . The article appears here in its peer-reviewed and accepted form ; it has not been copyedited , proofread , or formatted by the. *International Journal*, 1–16.
- Bompa, T. O., & Buzzichelli, C. A. (2019). PeridizatiBompa, T. O., & Buzzichelli, C. A. (2019). Peridization: Theory and Methodology of Training. In Journal of Chemical Information and Modeling (Vol. 6, Issue 6).on: Theory and Methodology of Training. In *Journal of Chemical Information and Modeling* (Vol. 6, Number 6).
- Born, D. P., Stäcker, I., Romann, M., & Stöggel, T. (2022). Competition age: does it matter for swimmers? *BMC Research Notes*, 15(1), 1–7. <https://doi.org/10.1186/s13104-022-05969-6>

- Casado, A., González-Mohino, F., González-Ravé, J. M., & Foster, C. (2022). Training Periodization, Methods, Intensity Distribution, and Volume in Highly Trained and Elite Distance Runners: A Systematic Review. *International Journal of Sports Physiology and Performance*, 17(6), 820–833. <https://doi.org/10.1123/ijsp.2021-0435>
- Collins, S. P., Storrow, A., Liu, D., Jenkins, C. A., Miller, K. F., Kampe, C., & Butler, J. (2021). *Sport Coaching*.
- Dapp, L. C., Gashaj, V., & Roebbers, C. M. (2021). Physical activity and motor skills in children: A differentiated approach. *Psychology of Sport and Exercise*, 54. <https://doi.org/10.1016/j.psychsport.2021.101916>
- Dicki Fernandes, G., Donie, Midarman, & Denay, N. (2021). Analisis Keterampilan Gerak Teknik Renang Gaya Dada. *Jurnal Patriot*, 3, 95–106. <https://doi.org/10.24036/patriot.v%vi%i.717>
- Elvica Shanty, M., Ridwan, M., & Setiawan, Y. (2021). Kontribusi Kekuatan Otot Lengan, Kekuatan Otot Tungkai dan Kekuatan Otot Punggung terhadap Kecepatan Renang Gaya Bebas 50 Meter. *Jurnal Patriot*, 3, 179–191. <https://doi.org/10.24036/patriot.v%vi%i.703>
- Febrianti, A. T., Indah, P., & Rachman, A. (2024). Analisis Teknik Renang Gaya Dada Pada Atlet Pemula Tibra Banua Aquatik Club Kabupaten Banjar. 10(2), 560–567. <https://doi.org/10.31949/educatio.v10i2.8869>
- Fernandes, A., Goethel, M., Marinho, D. A., Mezêncio, B., Vilas-Boas, J. P., & Fernandes, R. J. (2022). Velocity Variability and Performance in Backstroke in Elite and Good-Level Swimmers. *International Journal of Environmental Research and Public Health*, 19(11). <https://doi.org/10.3390/ijerph19116744>
- Firdaus, M., Sukur, A., & Antoni, R. (2022). Pengembangan Model Latihan Keterampilan Renang Gaya Punggung Untuk Anak Usia 8-10 Tahun. *Jurnal Ilmu Keolahragaan*, 13(01), 1–14.
- França, E. F., Antunes, A., Silva, A. C. da, Guerra, M. L. M., Cossote, D. F., & Bonfim, J. C. O. (2022). Concepts and principles of sports training: A narrative review based on the classic literature of reference. *International Journal of Physical Education, Sports and Health*, 9(1), 214–217. <https://doi.org/10.22271/kheljournal.2022.v9.i1d.2369>
- Gandrapu, A., & Rakesh, K. R. (2024). Sports Psychology: Mental Skills Training and Performance Enhancement Strategies for Athletes. *Innovations in Sports Science*, 1(3), 1–4. <https://doi.org/10.36676/iss.v1.i3.13>
- Gonjo, T., Fernandes, R. J., Vilas-Boas, J. P., & Sanders, R. (2023). Differences in the rotational effect of buoyancy and trunk kinematics between front crawl and backstroke swimming. *Sports Biomechanics*, 22(12), 1590–1601. <https://doi.org/10.1080/14763141.2021.1921835>

- Gonjo, T., McCabe, C., Sousa, A., Ribeiro, J., Fernandes, R. J., Vilas-Boas, J. P., & Sanders, R. (2018). Differences in kinematics and energy cost between front crawl and backstroke below the anaerobic threshold. *European Journal of Applied Physiology*, 118(6), 1107–1118. <https://doi.org/10.1007/s00421-018-3841-z>
- González-Ravé, J. M., González-Mohino, F., Hermosilla Perona, F., Rodrigo-Carranza, V., Yustres, I., & Pyne, D. B. (2025). Biomechanical, Physiological and Anthropometric Determinants of Backstroke Swimming Performance: A Systematic Review. *Sports Medicine - Open*, 11(1). <https://doi.org/10.1186/s40798-025-00868-z>
- Haff, G. G. (2021). *The Essentials of Periodisation*.
- Harmoko, H., & Sovensi, E. (2021). Analisis Teknik Renang Gaya Bebas pada Atlet Renang. *Gelanggang Olahraga: Jurnal Pendidikan Jasmani Dan Olahraga (JPJO)*, 5(1), 22–28. <https://doi.org/10.31539/jpjo.v5i1.2859>
- Harsono. (2020). *Coaching and Sports Training: Prinsip-Prinsip Kepelatihan Olahraga*. Remaja Rosdakarya.
- Haryanto, J., Wijaya, A. S., Skevio, W. M., & Okilanda, A. (2021). Analisis Keterampilan Teknik Renang Gaya Dada Atlet Renang Golden Black Swimming Club Kota Padang. *Jurnal Pendidikan Kesehatan Rekreasi*, 7, 380–391.
- Hidayat Suharto, T., Rihatno, T., Hernawan, & Widiastuti. (2022). Model Latihan Renang Gaya Punggung Siswa Usia 9-10 Tahun. In *Eureka Media Aksara* (Number Mi). Eureka Media Aksara, Desember 2022 Anggota Ikapi Jawa Tengah NO. 225/JTE/2021.
- Hidayat, T., Taufik, S., Hernawan, R., & Dlis, W. F. (2022). *Model Latihan Renang Gaya Punggung Siswa Usia 9-10 Tahun*.
- Homoto, K., Gonjo, T., Takagi, H., Kudo, S., Sengoku, Y., Tsunokawa, T., Koga, D., & Homma, M. (2024). Does the flutter kick increase hand propulsion in front crawl swimming? *Sports Biomechanics*, 00(00), 1–14. <https://doi.org/10.1080/14763141.2024.2424386>
- Hui, L. (2021). *Progress Swim Equipment For Young Swimmers Industrial Design Thesis Report 2022*.
- Ixbal Spanton, P., Sudianto, A., Mukminin, S., & Ika Joesidawati, M. (2024). *Buku Ajar Renang*. Grup Penerbitan CV Budi Utama.
- Izquierdo Rodríguez, E., Galeano Virgen, J. D., Orejuela Aristizábal, D. F., López Ulchur, V. A., & Castro Rengifo, A. C. (2024). Modelos de periodización del entrenamiento empleados en la natación convencional y para natación: Una revisión sistemática. *MLS Sport Research*, 4(1). <https://doi.org/10.54716/mlssr.v4i1.2597>

- Januar Abdilah Santoso, Wiranto, W., & Jeane Betty Kurnia Jusuf. (2024). Pengaruh Metode Part and Whole (PnW) terhadap Hasil Latihan Renang Gaya Bebas. *Jurnal Pendidikan Olahraga*, 14(2), 93–104. <https://doi.org/10.37630/jpo.v14i2.1682>
- Keiner, M., Wirth, K., Fuhrmann, S., Kunz, M., Hartmann, H., & Haff, G. G. (2021). The Influence of Upper-and Lower-Body Maximum Strength on Swim Block Start, Turn, and Overall Swim Performance in Sprint Swimming. *Journal of Strength and Conditioning Research*. www.nsca.com
- Khiyami, A., Nuhmani, S., Joseph, R., Abualait, T. S., & Muaidi, Q. (2022). Efficacy of Core Training in Swimming Performance and Neuromuscular Parameters of Young Swimmers: A Randomised Control Trial. *Journal of Clinical Medicine*, 11(11). <https://doi.org/10.3390/jcm11113198>
- Kistak Altan, B., Bul, K. E., & Pehlivan, A. (2023). Investigation of Freestyle Performance in Swimmers with Different Equipments. *International Journal of Recreation and Sports Science*. <https://doi.org/10.46463/ijrss.1363220>
- Knechtle, B., Andrade, M. S., Ahmad, W., Moreitz, S., Weiss, K., Vancini, R. L., Nikolaidis, P. T., Rosemann, T., Thuany, M., & Seffrin, A. (2025). The effects of age and sex on swimming time in master breaststroke swimmers. *Human Movement*, 26(2), 73–82. <https://doi.org/10.5114/hm/202459>
- Kováčová, N., & Broďáni, J. (2019). Swimming Performance to 25 Meters Backstroke Depends on Selected Factors of Explosive Strength of Lower Limbs. *Acta Facultatis Educationis Physicae Universitatis Comenianae*, 59(2), 203–213. <https://doi.org/10.2478/afepuc-2019-0018>
- Kusumawati, M. (2024). *Pengaruh Latihan Triceps Push Down Terhadap Flying Shoot Pada Atlet Handball Kota Bekasi*.
- Liu, Y., Lu, G., Chen, J., & Zhu, Q. (2021). Exploration of internal and external factors of swimmers' performance based on biofluid mechanics and computer simulation. *International Journal of Environmental Research and Public Health*, 18(12). <https://doi.org/10.3390/ijerph18126471>
- Maglischo, E. W. (2021). *Swimming Fastest (Revised Edition)*. *Human Kinetics*.
- Mccullough, A. S., Kraemer, W. J., Volek, J. S., Solomon-Hill, G. F., Hatfield, D. L., Vingren, J. L., Ho, J.-Y., Fragala, M. S., Thomas, G. A., Haˆkkinen, K., Haˆkkinen, H., & Maresh, C. M. (2020). Factors Affecting Flutter Kicking Speed In Recreational Swimmers. *Journal of Strength and Conditioning Research*. www.nsca-jscr.org
- Moura, O. M., Marinho, D. A., Forte, P., Faíl, L. B., & Neiva, H. P. (2021). School-based swimming lessons enhance specific skills and motor coordination in children: the comparison between two interventions. *Motricidade*, 17(4), 367–374. <https://doi.org/10.6063/motricidade.24557>

- Ng, F., Wen Yam, J., Lum, D., & Barbosa, T. M. (2020). Human thrust in aquatic environment: The effect of post-activation potentiation on flutter kick. *Journal of Advanced Research*, 21, 65–70. <https://doi.org/10.1016/j.jare.2019.10.001>
- Nurmukhanbetova, D., Gussakov, I., & Yermakhanova, A. (2023). The influence of the low-volume high-intensity method training on the indicators of speed and strength qualities of young high skill level swimmers. *Federación Española de Asociaciones de Docentes de Educación Física*, i, 446–455.
- Peter, M., Martina, M., & Romana, P. (2020). The impact of special strength intervention in water on the flutter kicking performance in swimming. *Journal of Physical Education and Sport*, 20(1), 108–115. <https://doi.org/10.7752/jpes.2020.01014>
- Pradana, V. O., Hermawan, I., & Marani, I. N. (2018). Model latihan core stability cabang olahraga renang gaya kupu-kupu untuk usia 9-10 tahun. *Jurnal Keolahragaan*, 6(1), 60–68. <https://doi.org/10.21831/jk.v6i1.19951>
- Rahayu, T. W., Margono, A., & Satyawan, B. (2021). Penerapan Video Modeling dan Video-Feedback Training Dalam Mata Kuliah Renang Gaya Punggung. *Jurnal Olahraga*.
- Ramadhani, S. (2020). Development of the Butterfly Style Swim Handbook for Age Group Athletes-III. *Atlantis Press*, 23.
- Rejman, M., Rudnik, D., Seidel, W., & Siermontowski, P. (2023). Searching in Justification for the Intensification of Upward-Kicking in Dolphin Swimming. *Polish Hyperbaric Research*, 82(1), 77–86. <https://doi.org/10.2478/phr-2023-0004>
- Ruiz-Navarro, J. J., Santos, C. C., Born, D. P., López-Belmonte, Ó., Cuenca-Fernández, F., Sanders, R. H., & Arellano, R. (2025). Factors Relating to Sprint Swimming Performance: A Systematic Review. In *Sports Medicine* (Vol. 55, Number 4, pp. 899–922). Springer Science and Business Media Deutschland GmbH. <https://doi.org/10.1007/s40279-024-02172-4>
- Sepdanius, E., Rifki M., & Anton, K. (2019). *Tes dan Pengukuran Olahraga*.
- Singh Baghel, B., & B. Patel, Dr. C. (2025). Impact of Sports Training On Physical and Psychological Development in Male Athlete. *International Journal of Scientific Research in Science, Engineering and Technology*, 12(2), 198–205. <https://doi.org/10.32628/ijrsrset25122116>
- Solihin, A. O. (2022). *Pintar Belajar Renang*.
- Stan, A. E., Dima, M. D., & Dominteanu, T. (2025). Predictions on the Effects of Using Backstroke Leg Training for Freestyle Improvement: A Follow Up Case Study in Cadet Swimmers. *Preprints.Org*. <https://doi.org/10.20944/preprints202509.1267.v1>

- Stan, E. A., Dima, M. D., Dominteanu, T., & Țărtăreanu, C. (2025). Effects of Backstroke Leg Training for Freestyle Improvement: A Case Study in Cadet Swimmers. *Gymnasium*, 26(1), 143–159. <https://doi.org/10.29081/gsjesh.2025.26.1.13>
- Staunton, C. A., Romann, M., Björklund, G., & Born, D. P. (2024). Streamlining performance prediction: data-driven KPIs in all swimming strokes. *BMC Research Notes*, 17(1), 1–7. <https://doi.org/10.1186/s13104-024-06714-x>
- Strzała, M., Stanula, A., Kręzałek, P., Rejdych, W., Karpiński, J., Maciejczyk, M., & Radecki-Pawlik, A. (2021). Specific and Holistic Predictors of Sprint Front Crawl Swimming Performance. *Journal of Human Kinetics*, 78(1), 197–207. <https://doi.org/10.2478/hukin-2021-0058>
- Sugiyono. (2021). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Surahman, F. (2018). Analisis Gerak Teknik Renang Gaya Punggung Pada Mahasiswa Jurusan Kepelatihan Olahraga FIK UNP. *Journal Sport Area*, 3(1), 14–27. [https://doi.org/10.25299/sportarea.2018.vol3\(1\).1309](https://doi.org/10.25299/sportarea.2018.vol3(1).1309). *Journal Sport Area*, 3.
- Syafruddin. (2021). *Ilmu Kepelatihan Olahraga*. Universitas Negeri Yogyakarta Press.
- Tahapary, J. M., & Syaranamual, J. (2020). Latihan Teknik Dasar Dapat Meningkatkan Hasil Renang Gaya Bebas. In *Journal Science of Sport and Health E* (Vol. 1, Number 1).
- Tangkudung, J.; P. W. (2020). *Kepelatihan Olahraga: Teori dan Aplikasinya*. Rajawali Press.
- Thomas, D. G. (2016). *Renang Tingkat Mahir: Langkah-langkah menuju Keberhasilan*.
- Triyani. (2016). *Renang Gaya Punggung*. Penerbit Nobel Edumedia.
- Vasile, L., Ticala, L., Radulescu, A., Mujea, M. A., Matei, C., Brenet, C., Onoiu, L. C., Gheoghea, N., & Balan, V. (2023). A ludic history of swimming – a systematic review. *Discobolul – Physical Education, Sport and Kinetotherapy Journal*, 189–207. <https://doi.org/10.35189/dpeskj.2023.62.2.7>
- Xu, B. (2023). Analysis of physical training of swimmers at the competitive level. *Revista Brasileira de Medicina Do Esporte*, 29. https://doi.org/10.1590/1517-8692202329012023_0082