

**PENGARUH METODE LATIHAN DAN TINGKAT KEMAMPUAN
KOGNISI TERHADAP PENGAMBILAN KEPUTUSAN WASIT**

DESERTASI

**Diajukan untuk memenuhi sebagian syarat untuk
memperoleh gelar Doktor Pendidikan Olahraga**



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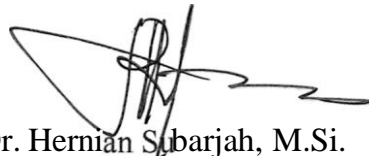
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Dengan ini saya menyatakan bahwa disertasi saya dengan judul " **Pengaruh Metode Latihan dan Tingkat Kemampuan Kognisi Terhadap Pengambilan Keputusan Wasit** " ini beserta seluruh isinya adalah benar-benar karya saya sendiri. Saya tidak melakukan penjiplakan atau pengutipan dengan cara-cara yang tidak sesuai dengan etika ilmu yang berlaku dalam masyarakat keilmuan. Atas pernyataan ini, saya siap menanggung risiko/sanksi apabila di kemudian hari ditemukan adanya pelanggaran etika keilmuan atau ada klaim dari pihak lain terhadap keaslian karya saya ini.

Bandung, Desember 2021
Yang membuat pernyataan,

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ABSTRAK

Pengaruh Metode Latihan dan Tingkat Kemampuan Kognisi Terhadap Pengambilan Keputusan Wasit

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Tujuan penelitian ini adalah untuk mengkaji pengaruh metode dan tingkat kemampuan kognisi terhadap pengambilan keputusan wasit sepakbola. Metode penelitian yang digunakan adalah metode eksperimen dengan desain penelitian (*factorial Design*) 2 x 2. Populasi dalam penelitian ini adalah wasit sepakbola Kota Bandung yang memiliki lisensi Nasional (C1) dengan usia antara 25-40 tahun, dan bertugas di pertandingan Nasional dengan jumlah 24 orang wasit. Dalam penentuan sampel menggunakan teknik total sampling atau seluruh populasi menjadi sampel. Instrumen untuk mengukur kemampuan kognisi menggunakan *Advanced Progressive Matrices (APM)* sedangkan instrumen untuk pengambilan keputusan wasit menggunakan *a conceptual model of decision-making for soccer referees*. Hasil penelitian ini adalah terdapat pengaruh yang signifikan antara metode *Psychological Skills Training (PST)* dan *Performance Training in Football Refereeing (PTFR)* terhadap pengambilan keputusan wasit, dengan peningkatan metode PST lebih baik dibandingkan dengan metode PTFR; terdapat interaksi metode latihan dengan tingkat kognisi terhadap pengambilan keputusan wasit; tidak terdapat pengaruh antara metode PST dan PTFR terhadap pengambilan keputusan wasit pada kelompok kemampuan kognisi tinggi, dengan metode PTFR lebih tinggi dibandingkan metode PST; dan terdapat perbedaan pengaruh antara metode PST dan PTFR terhadap pengambilan keputusan wasit pada kelompok kemampuan kognisi rendah, dengan metode PST lebih baik dibandingkan dengan metode PTFR. Kesimpulan bahwa metode PST memiliki pengaruh yang lebih baik dibandingkan dengan metode PTFR, serta adanya interaksi yang signifikan antara metode latihan dengan kemampuan kognisi dalam pengambilan keputusan wasit sepakbola; metode PST dan PTFR tidak berpengaruh untuk wasit yang memiliki kognisi tinggi, sedangkan untuk kognisi rendah metode PST berpengaruh signifikan dalam pengambilan keputusan wasit. Rekomendasi hasil penelitian ini, khususnya bagi wasit sepakbola diharapkan latihan psikologi dijadikan salah satu bentuk latihan yang harus dilatih, karena akan membantu wasit ketika mengambil keputusan dalam suatu pertandingan.

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ABSTRACT

The Effect of Training Methods and Cognitive Ability Levels in Referee Decision Making

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The purpose of this study was to determine the effect of the method and the level of cognition on football referee decision making. The research method used is an experimental method with a research design (factorial design) of 2 x 2. The population in this study is a football referee in the city of Bandung who has a national license (CI) with an age between 25-40 years, and serves in national matches with a total of 24 referee person. In determining the sample using a total sampling technique or the entire population as a sample. The instrument for measuring cognitive ability uses Advanced Progressive Matrices (APM) while the instrument for refereeing decision-making uses a conceptual model of decision-making for soccer referees. The results of this study are that there is a significant effect between the Psychological Skills Training (PST) dan Performance Training In Football Refereeing (PTFR) methods on referee decision making, with the improvement of the PST method being better than the PSFR method; there is an interaction between the training method and the level of cognition of the referee's decision making; there is no effect between the PST and PTFR methods on referee decision making in the high cognitive ability group, with the PTFR method being higher than the PST method; and there is a difference in the effect between the PST and PTFR methods on refereeing decision making in the low cognitive ability group, with the PST method being better than the PTFR method. The conclusion is that the PST method has a better effect than the PTFR method, and there is a significant interaction between the training method and cognitive abilities in football referee decision making; PST and PTFR methods have no effect for referees who have high cognition, while for low cognitions the PST method has a significant effect on referee decision making. The recommendation from this research, especially for football referees, is to make psychological training as a form of training that must be trained, because it will help referees when making decisions in a match.

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DAFTAR PUSTAKA

- Abbasi, B., Mirzakhany, N., Oshnari, L. A., Irani, A., Hosseinzadeh, S., Tabatabaei, S. M., & Haghghat, S. (2018). The effect of relaxation techniques on edema, anxiety and depression in post-mastectomy lymphedema patients undergoing comprehensive decongestive therapy: A clinical trial. *PLoS ONE*, *13*(1), 1–12. <https://doi.org/10.1371/journal.pone.0190231>
- Abd, Rachman Arief. (2005). *Pengantar Ilmu Perhotelan dan Restoran*. Yogyakarta : Graha Ilmu.
- Abdurrahman, M (2012). *Anak Berkesulitan Belajar*. Jakarta: Rineka Cipta
- AFC. (2020). *AFC Refereeing Fitness Training Guidelines*.
- Alperson-Afil, N., Goren-Inbar, N., Herzlinger, G., & Wynn, T. (2020). Expert Retrieval Structures and Prospective Memory in the Cognition of Acheulian Hominins. *Psychology*, *11*(01), 173–189. <https://doi.org/10.4236/psych.2020.111012>
- Anderson, K. J., & Pierce, D. A. (2009). Officiating bias: The effect of foul differential on foul calls in NCAA basketball. *Journal of Sports Sciences*, *27*(7), 687–694. <https://doi.org/10.1080/02640410902729733>
- Arum, D. (2017). *Ragam Model Penelitian & Pengolahannya dengan SPSS* (Giovany (ed.)). C.V ANDI OFFSET.
- Baghurst, T., Bradford, S., & Mulekar, M. (2012). The Effect of Feedback on Goal Setting and Performance in a Pushup Task. *Tahperd Journal, Summer issue*, 8–13.
- Baker, J., Cogley, S., & Schorer, J. (2013). Talent Identification and Development in Sport. *Talent Identification and Development in Sport*, *7*(1), 177–180. <https://doi.org/10.4324/9780203850312>
- Bar-Eli, M., Plessner, H., & Raab, M. (2011). Judgement, Decision Making and Success in Sport. In *Judgement, Decision Making and Success in Sport*. <https://doi.org/10.1002/9781119977032>
- Barnicle, S. P., & Burton, D. (2016). Enhancing collegiate women's soccer psychosocial and performance outcomes by promoting intrinsic sources of sport enjoyment. *Journal of Sports Science and Medicine*, *15*(4), 678–687.
- Barsalou, L. W. (2008). Grounded cognition. *Annual Review of Psychology*, *59*, 617–645. <https://doi.org/10.1146/annurev.psych.59.103006.093639>
- Beltrán-Esteve, M., & Picazo-Tadeo, A. J. (2017). Assessing environmental performance in the European Union: Eco-innovation versus catching-up. *Energy Policy*, *104*(January), 240–252. <https://doi.org/10.1016/j.enpol.2017.01.054>
- Boyko, R. H., Boyko, A. R., & Boyko, M. G. (2007). Referee bias contributes to home advantage in English Premiership football. *Journal of Sports Sciences*, *25*(11), 1185–1194. <https://doi.org/10.1080/02640410601038576>
- Buraimo, B., Forrest, D., & Simmons, R. (2010). The 12th man?: Refereeing bias in English and German soccer. *Journal of the Royal Statistical Society. Series A: Statistics in Society*, *173*(2), 431–449. <https://doi.org/10.1111/j.1467-985X.2009.00604.x>
- Burkhart, S., Ellis, C., Jones, C., Smurawa, T., & Polousky, J. (2020). Gender Differences in Reported Recovery Time From Sports-Related Concussion in

- Dual Gender Sports From 2012-2017. *Orthopaedic Journal of Sports Medicine*, 8(4_suppl3), 2325967120S0013. <https://doi.org/10.1177/2325967120s00139>
- Burns, N. R., Nettelbeck, T., & McPherson, J. (2009). Attention and Intelligence: A Factor Analytic Study. *Journal of Individual Differences*, 30(1), 44–57. <https://doi.org/10.1027/1614-0001.30.1.44>
- Burton, D., & Raedeke, T. D. (2009). Sport Psychology for Coaches. In *International Journal of Sports Science and Coaching* (Vol. 3, Issue 2).
- Campaign, R. (2015). *The English Football Association's Respect Campaign: the referees' view*. 1–21.
- Casajus, J. A., & Castagna, C. (2007). Aerobic fitness and field test performance in elite Spanish soccer referees of different ages. *Journal of Science and Medicine in Sport*, 10(6), 382–389. <https://doi.org/10.1016/j.jsams.2006.08.004>
- Castagna, C., Abt, G., & D'Ottavio, S. (2007). Physiological aspects of soccer refereeing performance and training. *Sports Medicine*, 37(7), 625–646. <https://doi.org/10.2165/00007256-200737070-00006>
- Castagna, C., & D'Ottavio, S. (2001). Effect of Maximal Aerobic Power on Match Performance in Elite Soccer Referees. *Journal of Strength and Conditioning Research*, 15(4), 420–425. [https://doi.org/10.1519/1533-4287\(2001\)015<0420:EOMAPO>2.0.CO;2](https://doi.org/10.1519/1533-4287(2001)015<0420:EOMAPO>2.0.CO;2)
- Castellani, J. W., & Tipton, M. J. (2016). Cold stress effects on exposure tolerance and exercise performance. *Comprehensive Physiology*, 6(1), 443–469. <https://doi.org/10.1002/cphy.c140081>
- Castillo, D., Cámara, J., Castellano, J., & Yanci, J. (2016). Football match officials do not attain maximal sprinting speed during matches. *Kinesiology*, 48(2), 207–212. <https://doi.org/10.26582/k.48.2.10>
- Chrisler, J. C., & Erchull, M. J. (2011). The Treatment of Evolutionary Psychology in Social Psychology Textbooks. *Sex Roles*, 64(9–10), 754–757. <https://doi.org/10.1007/s11199-010-9783-5>
- Cleary, T. J., & Zimmerman, B. J. (2001). Self-Regulation Differences during Athletic Practice by Experts, Non-Experts, and Novices. *Journal of Applied Sport Psychology*, 13(2), 185–206. <https://doi.org/10.1080/104132001753149883>
- Cox, R. H. (2012). Sport Psychology Concepts and Applications (Second Edition). In *Journal of Sport and Exercise Psychology* (Vol. 14, Issue 2). <https://doi.org/10.1123/jsep.14.2.222>
- Cumming, J., & Ramsey, R. (2009). *Imagery interventions in sport*. January, 4–36. <https://doi.org/10.13140/2.1.2619.2322>
- Cumming, J., & Williams, S. E. (2012). The Role of Imagery in Performance. *The Oxford Handbook of Sport and Performance Psychology*, June, 213–232. <https://doi.org/10.13140/2.1.3274.5925>
- Czech, D., Ploszay, A., & Burke, K. (2004). An Examination of the Maintenance of Preshot Routines in Basketball Free Throw Shooting. *Journal of Sport Behavior*, 27(4), 323.
- Davies, T., & Craig, T.K.J., (2009), ABC Kesehatan Mental, Alih Bahasa Alifa

- Dermawan, Rizky. (2004). *Pengambilan Keputusan Landasan Filosofis, Konsep, Dan Aplikasi*. Bandung: Alfabeta.
- Distaso, W., Leonida, L., Maimone Ansaldo Patti, D., & Navarra, P. (2012). Corruption and Referee Bias in Football: The Case of Calciopoli. *SSRN Electronic Journal*, 25–26. <https://doi.org/10.2139/ssrn.2004385>
- Dohmen, T. J. (2008). The influence of social forces: Evidence from the behavior of football referees. *Economic Inquiry*, 46(3), 411–424. <https://doi.org/10.1111/j.1465-7295.2007.00112.x>
- Emzir. (2008). *Metode Penelitian Pendidikan Kuantitatif & Kualitatif*. Jakarta: Rajawali Pers
- Ericsson, K. A., & Kintsch, W. (1995). Long-term working memory. *Psychological Review*, 102(2), 211–245. <https://doi.org/10.1037/0033-295x.102.2.211>
- Folkesson, P., Nyberg, C., Archer, T., & Norlander, T. (2002). Soccer Referees' Experience of Threat and Aggression: Effects of Age, Experience, and Life Orientation on Outcome of Coping Strategy. *Aggressive Behavior*, 28(4), 317–327. <https://doi.org/10.1002/ab.90028>
- Foster, D. J., Weigand, D. A., & Baines, D. (2006). The effect of removing superstitious behavior and introducing a pre-performance routine on basketball free-throw performance. *Journal of Applied Sport Psychology*, 18(2), 167–171. <https://doi.org/10.1080/10413200500471343>
- Fraenkel, J.R., Wallen, N.E., & Hyun, H.H (2012). *How To Design And Evaluate Research In Education*. Published by McGraw-Hill, a business unit of The McGraw-Hill Companies, Inc., 1221 Avenue of the Americas, New York, NY 10020
- Fritzsche, S. D. (2012). The power of positive thinking. *Plastic Surgical Nursing: Official Journal of the American Society of Plastic and Reconstructive Surgical Nurses*, 32(3), 93–94. <https://doi.org/10.7748/cnp.7.10.18.s21>
- Gill, D. (2000). *Psychological Dynamics of Sport and Exercise*, second edition, Champaign, Illinois: Human Kinetics.
- Giulianotti, R. & Robertson, R. (2009). Globalization and Football. London: Sage Publications. In *Globalization & Football* (Vol. 5, pp. 1–4).
- Gottfredson L.S. (1994). Mainstream Science on Intelligence: An Editorial With 52 Signatories, History, and Bibliography. *European Journal of Biochemistry*, 70(2), 377–383. <https://doi.org/10.1111/j.1432-1033.1976.tb11027.x>
- Guerriero, B. J. (2015). Psychological Skills Training Manual for a Youth Baseball Team. *Masters of Education in Human Movement, Sport, and Leisure Studies Graduate Projects*. 40.
- Guillen, F., and Bara, M. (2004). La ansiedad rasgo yestado entreárbitros de diferentes modalidades deportivas y no árbitros. *Revista De Entrenamiento Deportivo*, 148, 148–162.
- Guillén, F., & Feltz, D. L. (2011). A conceptual model of referee efficacy. *Frontiers in Psychology*, 2(FEB), 1–5. <https://doi.org/10.3389/fpsyg.2011.00025>
- Gulbin, J. P., Croser, M. J., Morley, E. J., & Weissensteiner, J. R. (2013). An integrated framework for the optimisation of sport and athlete development: A practitioner approach. *Journal of Sports Sciences*, 31(12), 1319–1331. <https://doi.org/10.1080/02640414.2013.781661>

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- Hall, C. R., Munroe-Chandler, K. J., Cumming, J., Law, B., Ramsey, R., & Murphy, L. (2009). Imagery and observational learning use and their relationship to sport confidence. *Journal of Sports Sciences*, 27(4), 327–337. <https://doi.org/10.1080/02640410802549769>
- Hardy, J. (2006). Speaking clearly: A critical review of the self-talk literature. *Psychology of Sport and Exercise*, 7(1), 81–97. <https://doi.org/10.1016/j.psychsport.2005.04.002>
- Hardy, J., Hall, C. R., Gibbs, C., & Greenslade, C. (2005). Self-Talk and Gross Motor Skill Performance: An Experimental Approach? *The Online Journal of Sport Psychology*, 7(2), 1–13.
- Hardy, J., Hall, C. R., & Hardy, L. (2004). A note on athletes' use of self-talk. *Journal of Applied Sport Psychology*, 16(3), 251–257. <https://doi.org/10.1080/10413200490498357>
- Hardy, J., Hall, C. R., & Hardy, L. (2005). Quantifying athlete self-talk. *Journal of Sports Sciences*, 23(9), 905–917. <https://doi.org/10.1080/02640410500130706>
- Hatzigeorgiadis, A., Zourbanos, N., Mpoupaki, S., & Theodorakis, Y. (2009). Mechanisms underlying the self-talk-performance relationship: The effects of motivational self-talk on self-confidence and anxiety. *Psychology of Sport and Exercise*, 10(1), 186–192. <https://doi.org/10.1016/j.psychsport.2008.07.009>
- Helsen, W., & Bultynck, J. B. (2004). Physical and perceptual-cognitive demands of top-class refereeing in association football. *Journal of Sports Sciences*, 22(2), 179–189. <https://doi.org/10.1080/02640410310001641502>
- Hidayat. Y. (2010). Imajeri mental dan keterampilan motorik. *Jurnal Olahraga Prestasi*, 6(1), 1–9.
- Hidayat, Y. (2011). Reviu Self-Talk: Konsep, Dimensi, Dan Perspektif Teori. *Jurnal Kepeleatihan Olahraga*, 3(1), 65–76.
- Hidayat. (2012). Pengaruh Goal Setting Dan Self-Monitoring Dalam Penguasaan Keterampilan Gerak Dan Motivasi Intrinsik Siswa Sekolah Dasar. *Cakrawala Pendidikan*, 31(3), 495–511. <https://doi.org/10.1097/00006247-197809000-00010>
- Holliday, B., Burton, D., Sun, G., Hammermeister, J., Naylor, S., & Freigang, D. (2008). Building the better mental training mousetrap: Is periodization a more systematic approach to promoting performance excellence? *Journal of Applied Sport Psychology*, 20(2), 199–219. <https://doi.org/10.1080/10413200701813889>
- Horn, T. S. (2002). Coaches' feedback and changes in children's perceptions of their physical competence. *Journal of Educational Psychology*, 77(2), 174–186. <https://doi.org/10.1037//0022-0663.77.2.174>
- Horn, T.S. (2002) Coaching Effectiveness in the Sport Domain. In: Horn, T.S., Ed., *Advances in Sport Psychology*, Human Kinetics, Champaign, IL, 309–354.
- Husdarta dan Nurlan (2010), *Pertumbuhan dan Perkembangan Peserta Didik*, Bandung: Alfabeta,
- IFAB. (2020). *Laws of the games 2020/2021*.
- J. Hardy, K. Gammage, C. H. (2001). A descriptive study of athlete self talk. *Human Kinetics Publishers, The Sport psychologist/15*, 306–318.

Mochamad Yamin Saputra, 2022

PENGARUH METODE LATIHAN DAN TINGKAT KEMAMPUAN KOGNISI TERHADAP PENGAMBILAN KEPUTUSAN WASIT

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- Johansen, B. T., & Haugen, T. (2013). Anxiety level and decision-making among Norwegian top-class soccer referees. *International Journal of Sport and Exercise Psychology*, 11(2), 215–226. <https://doi.org/10.1080/1612197X.2013.773665>
- Johnson, D. W., Johnson, R. T., & Stanne, M. B. (2000). *EXHIBIT B – – Cooperative Learning Methods: A Meta Analysis Cooperative Learning Methods: A Meta-Analysis*.
- Johnson, J. G. (2006). Cognitive modeling of decision making in sports. *Psychology of Sport and Exercise*, 7(6), 631–652. <https://doi.org/10.1016/j.psychsport.2006.03.009>
- Jones, N., Cann, A., Almashhadi, S., & Popal, H. (2012). Assessment of soccer referee proficiency in time-sensitive decision-making. *2012 IEEE Systems and Information Engineering Design Symposium, SIEDS 2012*, 68–73. <https://doi.org/10.1109/SIEDS.2012.6215129>
- Jones, M. V., Paull, G. C., & Erskine, J. (2002). The impact of a team's aggressive reputation on the decisions of association football referees. *Journal of Sports Sciences*, 20(12), 991–1000. <https://doi.org/10.1080/026404102321011751>
- Kieran, K., Kingston, K. M., & Wilson, K. M. (2009). The application of goal setting in sport. In *Advances in applied sport psychology: A review* (Issue January 2009). <https://www.researchgate.net/publication/284771944>
- Kirschenbaum, D. (1997). *Kind matters: seven steps to smarter sport performance*. Carmel, IN: I.L. Cooper
- Komarudin. (2013). Psikologi Olahraga (Latihan Mental dalam Olahraga Kompetitif). Bandung: Remaja Rosdakarya
- Krustrup, P., & Bangsbo, J. (2001). Physiological demands of top-class soccer refereeing in relation to physical capacity: Effect of intense intermittent exercise training. *Journal of Sports Sciences*, 19(11), 881–891. <https://doi.org/10.1080/026404101753113831>
- Lane, A. M., Nevill, A. M., Ahmad, N. S., & Balmer, N. (2006). Soccer Referee Decision-Making: “shall I Blow the Whistle?”. *Journal of Sports Science & Medicine*, 5(2), 243–253. <http://www.ncbi.nlm.nih.gov/pubmed/24259997> <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC3827566>
- Lee, H., Hübscher, M., Moseley, G. L., Kamper, S. J., Traeger, A. C., Mansell, G., & McAuley, J. H. (2015). How does pain lead to disability? A systematic review and meta-analysis of mediation studies in people with back and neck pain. *Pain*, 156, 988–997. <https://doi.org/10.1097/j.pain.000000000000146>
- Lex, H., Pizzera, A., Kurtes, M., & Schack, T. (2015). Influence of players' vocalisations on soccer referees' decisions. *European Journal of Sport Science*, 15(5), 424–428. <https://doi.org/10.1080/17461391.2014.962620>
- Li, Y. (2013). Athlete's Psychological Barriers in Competition Cause Analysis and Countermeasures Research. *Proceedings of the 2013 International Workshop on Computer Science in Sports*, 77(Iwcss), 105–109. <https://doi.org/10.2991/iwcss-13.2013.28>
- Locke, E. A., & Latham, G. P. (2006). New directions in goal-setting theory. *Current Directions in Psychological Science*, 15(5), 265–268.

Mochamad Yamin Saputra, 2022

PENGARUH METODE LATIHAN DAN TINGKAT KEMAMPUAN KOGNISI TERHADAP PENGAMBILAN KEPUTUSAN WASIT

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- <https://doi.org/10.1111/j.1467-8721.2006.00449.x>
- MacMahon, C., Mascarenhas, D., Plessner, H., Pizzera, A., Oudejans, R. and Raab, M. (2015). *Sports officials and Officiating*.
- Mahoney, M. J., & Avenier, M. (1977). Psychology of the elite athlete: An exploratory study. *Cognitive Therapy and Research*, 1(2), 135–141. <https://doi.org/10.1007/BF01173634>
- Mallo, A. J., Navarro, E., Carda Aranda, J. M., & Helsen, W. (2009). Refereeing during High-standard Matches. *International Journal of Sports Medicine*, 1(30), 331–336. http://oa.upm.es/5261/2/INVE_MEM_2009_67973.pdf
- Mallo, J., Navarro, E., Garcia Aranda, J. M., & Helsen, W. (2009). Physical demands of top-class soccer assistant refereeing during high-standard matches. *International Journal of Sports Medicine*, 30(5), 331–336. <https://doi.org/10.1055/s-0029-1202339>
- Mallo, Javier, Frutos, P. G., Juárez, D., & Navarro, E. (2012). Effect of positioning on the accuracy of decision making of association football top-class referees and assistant referees during competitive matches. *Journal of Sports Sciences*, 30(13), 1437–1445. <https://doi.org/10.1080/02640414.2012.711485>
- Mascarenhas, D., O’Hare, D., & Plessner, H. (2006). The psychological and performance demands of association football refereeing. *International Journal of Sport Psychology*, 37(2–3), 99–120.
- Mathers and Brodie. (2014). Elite Refereeing in Professional Soccer: A Case Study of Mental Skills Support. *School of Sport, University of Stirling, Stirling, Scotland, United Kingdom*, 1–23.
- Mellick, M., Fleming, S., Bull, P., & Laugharne, E. (2005). Identifying best practice for referee decision communication in association and rugby union football. *Football Studies*, 8(1), 42–57.
- Milkman, K. L., Chugh, D., & Bazerman, M. H. (2009). How Can Decision Making Be Improved? *Perspectives on Psychological Science*, 4(4), 379–383. <https://doi.org/10.1111/j.1745-6924.2009.01142.x>
- Miller, P. S., & Kerr, G. A. (2002). Conceptualizing excellence: Past, present, and future. *Journal of Applied Sport Psychology*, 14(3), 140–153. <https://doi.org/10.1080/10413200290103464>
- Miltenberger, R. G. (2005). The role of automatic negative reinforcement in clinical problems. *International Journal of Behavioral Consultation and Therapy*, 1(1), 1–11. <https://doi.org/10.1037/h0100729>
- Moore, Z. E. (2009). Theoretical and empirical developments of the mindfulness-acceptance-commitment (MAC) approach to performance enhancement. *Journal of Clinical Sport Psychology*, 3(4), 291–302. <https://doi.org/10.1123/jcsp.3.4.291>
- Moran, A. (2004). Sport and Exercise Psychology. In *Sport and Exercise Psychology*. <https://doi.org/10.4324/9780203380246>
- Nevill, A. M., Balmer, N. J., & Mark Williams, A. (2002). The influence of crowd noise and experience upon refereeing decisions in football. *Psychology of Sport and Exercise*, 3(4), 261–272. [https://doi.org/10.1016/S1469-0292\(01\)00033-4](https://doi.org/10.1016/S1469-0292(01)00033-4)

Newburg, D., Kimiecik, J., Durand-Bush, N., & Doell, K. (2002). The role of

Mochamad Yamin Saputra, 2022

PENGARUH METODE LATIHAN DAN TINGKAT KEMAMPUAN KOGNISI TERHADAP PENGAMBILAN KEPUTUSAN WASIT

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- resonance in performance excellence and life engagement. *Journal of Applied Sport Psychology*, 14(4), 249–267. <https://doi.org/10.1080/10413200290103545>
- Nordin, S. M., & Cumming, J. (2008). Exploring common ground: Comparing the imagery of dancers and aesthetic sport performers. *Journal of Applied Sport Psychology*, 20(4), 375–391. <https://doi.org/10.1080/10413200802210795>
- Nurchahya, Y., Kusumah, W., Mulyana, D., & Kodrat, H. (2021). Analysis of Football Referee Satisfaction in Making Decision Based on Experience Levels. *Jurnal Pendidikan Jasmani Dan Olahraga*, 6(1), 110–114. <https://doi.org/10.17509/jpjo.v6i1.30133>
- Okan Miçoogullari, B., & Kirazci, S. (2016). Effects of 6 Weeks Psychological Skill Training on Team Cohesion, Self-confidence & Anxiety: A Case of Youth Basketball Players. *Universal Journal of Educational Research*, 4(12), 2761–2768. <https://doi.org/10.13189/ujer.2016.041210>
- Orlick, T. (2008). In pursuit of excellence. In *Emergency Nurse* (Vol. 21, Issue 7). Human Kinetics. <https://doi.org/10.7748/en2013.11.21.7.11.s16>
- Page, K., & Page, L. (2010). Alone against the crowd: Individual differences in referees' ability to cope under pressure. *Journal of Economic Psychology*, 31(2), 192–199. <https://doi.org/10.1016/j.joep.2009.08.007>
- Pattinson, E., & Cotterill, S. (2017). Barriers and facilitators to overcoming mental block in springboard and highboard diving. *Journal of Qualitative Research in Sports Studies*, 11(1), 1–14.
- Plessner, H., & MacMahon, C. (2014). The sport official in research and practice. In *Paper Knowledge . Toward a Media History of Documents*.
- Plessner, H., & Haar, T. (2006). Sports performance judgments from a social cognitive perspective. *Psychology of Sport and Exercise*, 7(6), 555–575. <https://doi.org/10.1016/j.psychsport.2006.03.007>
- Plessner, H. (2005). Positive and negative effects of prior knowledge on referee decisions in sports. In T. Betsch and S. Haberstroh (eds), *The Routines of Decision Making* (pp. 311–324). Hillsdale, MI: Lawrence Erlbaum
- PSSI (2010). *Kriteria dan Syarat-syarat Wasit Sepakbola*. Jakarta
- PSSI (2019). *Program Kerja Bidang Pengembangan Wasit PSSI*. Jakarta
- Raven, J., Raven, J. C., & Court, J. H. (1998). *Raven Manual: Section 4, Advanced Progressive Matrices, 1998 Edition*. Oxford, UK: Oxford Psychologists Press Ltd
- Reason, James. 1990. *Human Error*. Ashgate. ISBN I-84014-104-2
- Refereeing the Beautiful Games. <https://larbitre.wordpress.com/tag/2013/>
- Reilly, T., & Gregson, W. (2006). Special populations: The referee and assistant referee. *Journal of Sports Sciences*, 24(7), 795–801. <https://doi.org/10.1080/02640410500483089>
- Rodgers, W. M., Blanchard, C. M., Hall, C. R., & Munroe, K. J. (2001). Prediction of obligatory exercise by exercise-related imagery. *Psychology of Addictive Behaviors*, 15(2), 152–154. <https://doi.org/10.1037/0893-164X.15.2.152>
- Rushall, B. S. (2008). Mental skill straining for sports. *Sports Science Associates*.
- Samuel, R. D. (2015). A Psychological Preparation Framework for Elite Soccer Referees: A Practitioner's Perspective. *Journal of Sport Psychology in Action*,

Mochamad Yamin Saputra, 2022

PENGARUH METODE LATIHAN DAN TINGKAT KEMAMPUAN KOGNISI TERHADAP PENGAMBILAN KEPUTUSAN WASIT

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- 6(3), 170–187. <https://doi.org/10.1080/21520704.2015.1065938>
- Samuel, R. D., Tenenbaum, G., & Galily, Y. (2020). An integrated conceptual framework of decision-making in soccer refereeing. *International Journal of Sport and Exercise Psychology*, 0(0), 1–23. <https://doi.org/10.1080/1612197X.2020.1766539>
- Saputra, M. (2015). STATISTIK PERTANDINGAN ISL (INDONESIA SUPER LEAGE) TAHUN 2014/2015. *JPJO*, 13(3), 1576–1580.
- Sari, A. D. K., & Subandi. (2015). Pelatihan teknik relaksasi untuk menurunkan kecemasan pada primary caregiver penderita kanker payudara. *Gadjah Mada Journal of Professional Psychology*, 1(3), 173–192.
- Schaffer, H. (2014). Social Cognition. *Key Concepts in Developmental Psychology*, 123–152. <https://doi.org/10.4135/9781446278826.n7>
- Schermerhorn, R., John, Hunt, G., James and Richard, N., Osborn. (2007). *Managing Organization Behavior*. New York: John Publishing Inc
- Schnyder, U., & Hossner, E.-J. (2016). Psychological issues in football officiating: An interview study with top-level referees. *Current Issues in Sport Science (CISS)*, 1, 1–14. https://doi.org/10.15203/ciss_2016.004
- Selk. (2009). *Toughness the Mental-Training Program for Winning Before the Game Begins*.
- Setyobroto, S. (2001). *Mental Training*. Jakarta: Percetakan Solo
- Slack, L. A., Maynard, I. W., Butt, J., & Olusoga, P. (2013). Factors Underpinning Football Officiating Excellence: Perceptions of English Premier League Referees. *Journal of Applied Sport Psychology*, 25(3), 298–315. <https://doi.org/10.1080/10413200.2012.726935>
- Smith, D., Wright, C., Allsopp, A., & Westhead, H. (2007). It's all in the mind: PETTLEP-based imagery and sports performance. *Journal of Applied Sport Psychology*, 19(1), 80–92. <https://doi.org/10.1080/10413200600944132>
- 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), 385–391. <https://doi.org/10.1080/02701367.2008.10599502>
- Solomon, A. V., Paik, C., Alhauili, A., & Phan, T. (2011). A decision support system for the professional soccer referee in time-sensitive operations. *2011 IEEE Systems and Information Engineering Design Symposium, SIEDS 2011 - Conference Proceedings*, 35–40. <https://doi.org/10.1109/SIEDS.2011.5876851>
- Sproles, G. B., & Kendall, E. L. (2019). A methodology for profiling consumers' decision-marking styles. *Journal Of Consumer Affairs*, 20(2), 267.
- Sugiono. (2013). *Metode Penelitian Kuantitatif Kualitatif Dan R&D*. ALFABETA. CV.
- Suharnan, 2005. *Psikologi Kognitif*, Surabaya: Srikandi.
- Surujlal, J., & Nguyen, S. (2011). Coping under pressure: Strategies for maintaining confidence amongst South African soccer coaches. *Health SA Gesondheid*, 16(1). <https://doi.org/10.4102/hsag.v16i1.537>
- Szameitat, A. J., Shen, S., & Sterr, A. (2007). Motor imagery of complex everyday movements. An fMRI study. *NeuroImage*, 34(2), 702–713.

Mochamad Yamin Saputra, 2022

PENGARUH METODE LATIHAN DAN TINGKAT KEMAMPUAN KOGNISI TERHADAP PENGAMBILAN KEPUTUSAN WASIT

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

<https://doi.org/10.1016/j.neuroimage.2006.09.033>

- Terry, George R. (2003). Prinsip-prinsip Manajemen. Jakarta: Bumi Aksara.
- Thelwell, R. C., Greenlees, I. A., & Weston, N. J. V. (2006). Using psychological skills training to develop soccer performance. *Journal of Applied Sport Psychology*, 18(3), 254–270. <https://doi.org/10.1080/10413200600830323>
- Theodorakis, Y., Weinberg, R., Natsis, P., Douma, I., & Kazakas, P. (2000). The effects of motivational versus instructional self-talk on improving motor performance. *The Sport Psychologist*, 14(3), 253–271.
- Titlebaum, P. J., Haberlin, N., & Titlebaum, G. (2009). Recruitment and Retention of Sports Officials. *Recreational Sports Journal*, 33(2), 102–108. <https://doi.org/10.1123/rsj.33.2.102>
- Tsitsi, T., Charalambous, A., Papastavrou, E., & Raftopoulos, V. (2017). Effectiveness of a relaxation intervention (progressive muscle relaxation and guided imagery techniques) to reduce anxiety and improve mood of parents of hospitalized children with malignancies: A randomized controlled trial in Republic of Cyprus and Greece. *European Journal of Oncology Nursing*, 26, 9–18. <https://doi.org/10.1016/j.ejon.2016.10.007>
- Tuero, C., Taberero, B., Guillén, F., & Márquez, S. (2002). Análisis de los factores que influyen en la práctica del arbitraje. In *Revista Scape* (Vol. 1, Issue 1, pp. 7–16).
- UEFA. (2016). *Performance Training in Football Refereeing Weekly Training Plan*. *Performance Training in Football Refereeing Weekly Training Plan*. 1(3), 1–5.
- Unkelbach, C., & Memmert, D. (2008). Game management, context effects, and calibration: The case of yellow cards in soccer. *Journal of Sport and Exercise Psychology*, 30(1), 95–109. <https://doi.org/10.1123/jsep.30.1.95>
- Vaeyens, R., Lenoir, M., Williams, A. M., Mazyn, L., & Philippaerts, R. M. (2007). The effects of task constraints on visual search behavior and decision-making skill in youth soccer players. *Journal of Sport and Exercise Psychology*, 29(2), 147–169. <https://doi.org/10.1123/jsep.29.2.147>
- Vealey, R. S., & Greenleaf, C. (2006). Seeing Is Believing: Understanding and Using Imagery in Sports. In J. M. Williams (Ed.), *Applied Sport Psychology: Personal Growth to Peak Performance* (pp. 306–348). Boston, MA: McGraw-Hill.
- Vealey, R. S. (2012). Mental Skills Training in Sport. *Handbook of Sport Psychology: Third Edition*, 285–309. <https://doi.org/10.1002/9781118270011.ch13>
- Voight, M. (2009). Sources of stress and coping strategies of US soccer officials. *Stress and Health*, 25(1), 91–101. <https://doi.org/10.1002/smi.1231>
- Walton, C. C., Keegan, R. J., Martin, M., & Hallock, H. (2018). The potential role for cognitive training in sport: More research needed. *Frontiers in Psychology*, 9(JUL), 1–7. <https://doi.org/10.3389/fpsyg.2018.01121>
- Wang, Y., & Ruhe, G. (2007). The Cognitive Process of Decision Making. *International Journal of Cognitive Informatics and Natural Intelligence (IJCINI)*, 1(2), 73–85. <https://doi.org/10.4018/jcini.2007040105>
- Watson, N. J., & Nesti, M. (2005). The role of spirituality in sport psychology

Mochamad Yamin Saputra, 2022

PENGARUH METODE LATIHAN DAN TINGKAT KEMAMPUAN KOGNISI TERHADAP PENGAMBILAN KEPUTUSAN WASIT

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- consulting: An analysis and integrative review of literature. *Journal of Applied Sport Psychology*, 17(3), 228–239.
<https://doi.org/10.1080/10413200591010102>
- Weinberg, R., & Daniel, G. (2019). *Foundations of Sport and Exercise Psychology 7th Ed.*
- Weston, M., Castagna, C., Impellizzeri, F. M., Rampinini, E., & Breivik, S. (2010). Ageing and physical match performance in English Premier League soccer referees. *Journal of Science and Medicine in Sport*, 13(1), 96–100.
<https://doi.org/10.1016/j.jsams.2008.07.009>
- Williams, A. M., & Ward, P. (2021). Anticipation and decision-making in sport. *Visual Perception and Action in Sport*, 113–160.
<https://doi.org/10.4324/9780203979952-10>
- Williams, A. M., Ward, P., Smeeton, N. J., & Allen, D. (2004). Developing anticipation skills in tennis using on-court instruction: Perception versus perception and action. *Journal of Applied Sport Psychology*, 16(4), 350–360.
<https://doi.org/10.1080/10413200490518002>
- Williams, M. ., & Krane, V. (2015). Applied Sport Psychology: Personal Growth to Peak Performance. In *The Sport Psychologist* (Vol. 1, Issue 1).
<https://doi.org/10.1123/tsp.1.1.83>
- Wolfson, S., & Neave, N. (2007). Coping under pressure: cognitive strategies for maintaining confidence among soccer referees. *Journal of Sport Behavior*, 30(2), 232-247.
- Zetou, E., Vernadakis, N., Bebetos, E., & Makraki, E. (2012). The effect of self-talk in learning the volleyball service skill and self-efficacy improvement. *Journal of Human Sport and Exercise*, 7(4), 794–805.
<https://doi.org/10.4100/jhse.2012.74.07>