

**Penerapan Media Latihan Berbasis Modul *Wifi* dalam Upaya Meningkatkan
Reaction dan *Accuracy Passing* dihubungkan dengan Metode Latihan Pada
Cabang Olahraga Bola Basket**

TESIS

diajukan untuk memenuhi sebagian syarat untuk memperoleh gelar
Magister Pendidikan Olahraga



Disusun Oleh :

Gilang Lazuardi Hibatullah
1706629

**PROGRAM STUDI PENDIDIKAN OLARHAGA
SEKOLAH PASCASARJANA
UNIVERSITAS PENDIDIKAN INDONESIA
2020**

Gilang Lazuardi Hibatullah, 2020

***PENERAPAN MEDIA LATIHAN BERBASIS MODUL WIFI DALAM UPAYA MENINGKATKAN REACTION
DAN ACCURACY PASSING DIHUBUNGAN DENGAN METODE LATIHAN PADA CABANG OLARHAGA
BOLA BASKET***

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

Penerapan Media Latihan Berbasis Modul *Wifi* dalam Upaya Meningkatkan *Reaction* dan *Accuracy Passing* dihubungkan dengan Metode Latihan Pada Cabang Olahraga Bola Basket

Oleh
Gilang Lazuardi Hibatullah

Universitas Pendidikan Indonesia, 2020

Sebuah Tesis yang diajukan untuk memenuhi salah satu syarat memperoleh gelar Magister Pendidikan (M.Pd.) pada Sekolah Pascasarjana

© Gilang Lazuardi Hibatullah 2020
Universitas Pendidikan Indonesia
Juli 2020

Hak Cipta dilindungi undang-undang.
Tesis ini tidak boleh diperbanyak seluruhnya atau sebagian,
dengan dicetak ulang, difoto kopi, atau cara lainnya tanpa ijin dari penulis.

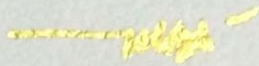
LEMBAR PENGESAHAN

GILANG LAZUARDI HIBATULLAH

**PENERAPAN MEDIA LATIHAN BERBASIS MODUL *WIFI* DALAM UPAYA
MENINGKATKAN *REACTION* DAN *ACCURACY PASSING* DIHUBUNGAN
DENGAN METODE LATIHAN PADA CABANG OLAHRAGA BOLA BASKET**

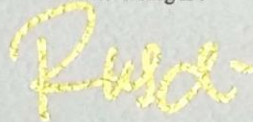
disetujui dan disahkan oleh pembimbing :

Pembimbing I :



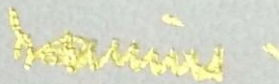
Dr. Nuryadi, M.Pd
NIP. 197101171998021001

Pembimbing II :



Agus Rusdiana, M.A., Ph.D
NIP. 197608122001121001

Mengetahui,
Ketua Prodi Pendidikan Olahraga SPS



Dr. H. Amung Ma'mun, M.Pd
NIP. 196001191986031002

ABSTRAK

Dalam dunia olahraga teknologi adalah sarana teknis yang digunakan pelatih dan atlet untuk meningkatkan pelatihan dan lingkungan kompetitif mereka, sehingga dapat meningkatkan performa mereka secara keseluruhan. Dalam olahraga bola basket media latihan yang berbasis teknologi sudah ada yaitu dapat hanya untuk melatih teknik dasar *shooting* saja, tetapi tidak untuk teknik dasar *dribble* dan *passing*. Tujuan dari penelitian ini untuk mengetahui apakah melalui sebuah media latihan berbasis modul *wifi* yang digunakan untuk pelatihan *reaction* dan *accuracy* dalam pelatihan bolabasket dapat menghasilkan peningkatan *reaction* dan *accuracy passing*. Metode yang digunakan dalam penelitian ini adalah metode penelitian *research and development*. Sampel dalam penelitian adalah mahasiswa yang tergabung dalam tim putra basket UPI. Hasil penelitian ini menunjukkan bahwa media latihan berbasis modul *wifi* telah layak digunakan dan terdapatnya peningkatan dari skor *pretest* dan *posttest* pada pelatihan *reaction* dengan hasil skor rata-rata *pretest* $.9500 > .6575$ skor rata-rata *posttest* dan nilai signifikansi $0,000 < 0,05$. Begitu juga pada skor *pretest* dan *posttest accuracy passing* dengan hasil skor rata-rata *pretest* $71.94 < 80.88$ skor rata-rata *posttest* dan nilai signifikansi $0,000 < 0,05$. Selanjutnya media latihan ini dapat digunakan untuk pelatihan *reaction* dan *accuracy passing* secara berkala.

Kata Kunci: **Accuracy, Bola Basket, Media Latihan, Passing, Reaction, Teknologi.**

ABSTRACT

In the world of sports technology is a technical tool used by coaches and athletes to improve their training and competitive environment, so as to improve their overall performance. In basketball, technology-based training tool already exist that can only be used to train basic shooting techniques, but not for basic dribble and passing techniques. The purpose of this research is to find out whether through a wifi module-based training tool used for reaction and accuracy in basketball training can result in increased reaction and accuracy passing. The method used in this study is research and development methods. The sample in this study were students who were members of UPI men's basketball team. The results of this study indicate that the wifi module-based training tool is appropriate and there is an increase in the pretest and posttest scores in reaction training with the average pretest score of .9500 > .6575 average score of posttest and significance value of 0.000 <0.05. Likewise on the pretest and posttest accuracy passing scores with the average pretest score 71.94 <80.88 posttest average score and the significance value of 0,000 <0.05. Furthermore, this training tool can be used for periodic reaction and accuracy passing training.

Keywords: Accuracy, Basketball, Passing, Reaction, Technology, Training Tool.

DAFTAR ISI

BAB I	1
PENDAHULUAN	1
1.1 Latar Belakang Penelitian.....	1
1.2 Rumusan Masalah Penelitian	6
1.3 Tujuan Penelitian.....	6
1.4 Manfaat Penelitian.....	6
1.5 Struktur Organisasi Tesis	6
BAB II	9
KAJIAN PUSTAKA	9
2.1 Deskripsi Teori	9
2.1.1 Teknologi dalam Dunia Olahraga.....	9
2.1.2 Komponen Modul <i>Wifi</i>	11
2.1.3 <i>Reaction</i>	15
2.1.2 <i>Accuracy</i>	21
2.1.2 Metode Latihan.....	23
2.1.3 Bola Basket	24
2.1.3.1 Hakikat Bola Basket	27
2.1.3.2 Keterampilan Dasar <i>Passing</i>	28
2.2 Kerangka Pemikiran	33
2.3 Hipotesis Penelitian.....	39
BAB III	40
METODE PENELITIAN	40
3.1 Desain Penelitian	40
3.2 Populasi dan Sampel.....	41
3.3 Instrumen Penelitian.....	41
3.4 Prosedur Penelitian.....	44
3.5 Teknik Pengumpulan Data	44
3.6 Analisis Data	46
BAB IV	48
TEMUAN DAN PEMBAHASAN	48
4.1 Temuan.....	48
4.2 Hasil <i>Pre-test</i> dan <i>Post-test</i>	51
4.3 Pembahasan.....	54
BAB V	60
SIMPULAN DAN SARAN	60
5.1 Simpulan	60
5.1 Implikasi.....	60
5.2 Saran.....	61
DAFTAR PUSTAKA	70
LAMPIRAN-LAMPIRAN	75

DAFTAR PUSTAKA

- Ahmed, T. (2013). The Effect of Upper Extremity Fatigue on Grip Strength and Passing Accuracy in Junior Basketball Players, *37*(June), 71–79. <https://doi.org/10.2478/hukin-2013-0027>
- Anam, K. (2013). Pengembangan Latihan Ketepatan Tendangan dalam Sepakbola untuk Anak Kelompok Umur 13-14 Tahun. *Jurnal Media Ilmu Keolahragaan Indonesia*, *3*(2).
- Atan, T., & Akyol, P. (2014). Reaction times of different branch athletes and correlation between reaction time parameters. *Procedia - Social and Behavioral Sciences*, *116*, 2886–2889. <https://doi.org/10.1016/j.sbspro.2014.01.674>
- Bach, G. (2007). *Coaching Basketball*. Hoboken: Wiley Publishing, Inc.
- Bompa, O. T., & Haff, G. G. (2009). *Periodization_ Theory and Methodology of Training. Fifth Edition (Human Kinetics)*.
- Brown, E. L., & Ferrigno, A. V. (2005). Training for Speed, Agility, and Quickness_ Special Book DVD Package (PDFDrive.com).pdf.
- Chandra, A. M., Ghosh, S., Barman, S., Iqbal, R., & Sadhu, N. (2016). Effect of Exercise and Heat-Load on Simple Reaction Time of University Students Effect of Exercise and Heat-Load on Simple Reaction Time of University Students. *International Journal Of Occupational Safety And Ergonomics*, *16*(4), 497–505. <https://doi.org/10.1080/10803548.2010.11076862>
- Crawford, J. D., Medendorp, W. P., & Marotta, J. J. (2004). Spatial Transformations for Eye-Hand Coordination. *Journal Of Neurophysiology*, *92*, 10–19. <https://doi.org/10.1152/jn.00117.2004>
- Cuniffe, B., Proctor, W., Baker, J. S., & Davies, B. (2009). An Evaluation Of The Physiological Demands Of Elite Rugby Union Using Global Positioning System Tracking Software. *Journal Of Strength And Conditioning Research*, *23*(4), 1195–1203.
- Davranche, K., & Audiffren, M. (2007). Facilitating Effects Of Exercise On Information Processing. *Journal Of Sport Sciences*, *22*(5), 419–428. <https://doi.org/10.1080/02640410410001675289>
- Dean, H. L., Martí, D., Tsui, E., Rinzel, J., & Pesaran, B. (2011). Reaction Time Correlations during Eye – Hand Coordination : Behavior and Modeling. *The Journal Of Neuroscience*, *31*(7), 2399–2412. <https://doi.org/10.1523/JNEUROSCI.4591-10.2011>

Gilang Lazuardi Hibatullah, 2020

PENERAPAN MEDIA LATIHAN BERBASIS MODUL WIFI DALAM UPAYA MENINGKATKAN REACTION DAN ACCURACY PASSING DIHUBUNGKAN DENGAN METODE LATIHAN PADA CABANG OLAHRAGA BOLA BASKET

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

- Dyer, B. (2015). The controversy of sports technology : a systematic review. *SpringerPlus*. <https://doi.org/10.1186/s40064-015-1331-x>
- Etnyre, B., Kinugasa, T., Etnyre, B., & Kinugasa, T. (2013). Research Quarterly for Exercise and Sport Postcontraction Influences on Reaction Time Postcontraction Influences on Reaction Time, (August 2015). <https://doi.org/10.1080/02701367.2002.10609020>
- Farrow, D., & Reid, M. (2010). The effect of equipment scaling on the skill acquisition of beginning tennis players. *Journal of Sports Sciences*, 28:7, 723-732.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to Design and Evaluate Research in Education. Climate Change 2013 - The Physical Science Basis* (8 editions). New York: The McGraw-Hill Companies, Inc. <https://doi.org/10.1017/CBO9781107415324.004>
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How To Design And Evaluate Research In Education* (Eighth Edi). New York, Americas: The McGraw-Hill Companies.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2013). *Bibliyografisi Bulunacak. Climate Change 2013 - The Physical Science Basis* (Vol. 53). <https://doi.org/10.1017/CBO9781107415324.004>
- Gandolfi, G. (2010). *The Complete Book of Offensive Basketball Drills*. New York: TjeMc Graw-Hill Com[anies].
- Ghuntla, T. P., Mehta, H. B., Gokhale, P. A., & Shah, C. J. (2014). Influence Of Practice On Visual Reaction Time. *Journal Of Mahatma Gandhi Institute Of Medical Sciences*, 19(2), 120–122.
- Giblin, G., Tor, E., & Parrington, L. (2016). The Impact Of Technology On Elite Sports Performance. *Sensoria: A Journal Of Mind, Brain & Culture*, (November), 2–9. <https://doi.org/10.7790/sa.v12i2.436>
- Gierczuk, D., & Bujak, Z. (2014). Reliability And Accuracy Of Batak Lite Tests Used For Assessing Coordination Motor Abilities In Wrestlers. *Pol. J. Sport Tourism*, 21, 72–76. <https://doi.org/10.2478/pjst-2014-0007>
- Hamalik. (1995). *Proses Belajar Mengajar*. Bandung : Bumi Aksara.
- Harsono. (2016). *Latihan Kondisi Fisik (untuk atlet dan kesehatan)*. Universitas Pendidikan Indonesia, Bandung.
- Hwang, E. J., Hauschild, M., Wilke, M., & Andersen, R. A. (2014). Spatial and Temporal Eye-Hand Coordination Relies on the Parietal Reach Region. *The Journal Of Neuroscience*, 34(38), 12884–12892.

Gilang Lazuardi Hibatullah, 2020

PENERAPAN MEDIA LATIHAN BERBASIS MODUL WIFI DALAM UPAYA MENINGKATKAN REACTION DAN ACCURACY PASSING DIHUBUNGKAN DENGAN METODE LATIHAN PADA CABANG OLAHRAGA BOLA BASKET

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

<https://doi.org/10.1523/JNEUROSCI.3719-13.2014>

- Johnson, R. B., & Christensen, L. (2014). *Educational research: Quantitative, qualitative, and mixed approaches* (Fifth edit). California: SAGE Publications, Inc.
- Ketut, N., Permatasari, N., Rusdiana, A., Ruhayati, Y., Pendidikan, D., Pendidikan, F., ... Bandung, N. (2016). Pengembangan Alat Ukur Waktu Reaksi Berbasis Microcontroller. *Jurnal Terapan Ilmu Keolahragaan*, 1(2), 13–17.
- Klusemann, M. J., Pyne, D. B., Foster, C., & Drinkwater, E. J. (2012). Optimising Technical Skills And Physical Loading In Small-Sided Basketball Games. *Journal of Sports Sciences*, 30(14), 1463–1471. <https://doi.org/10.1080/02640414.2012.712714>
- Koning, J. J. De. (2010). World Records : How Much Athlete ? How Much Technology ?, 262–267.
- Kos, A., Wei, Y., Tomazič, S., & Umek, A. (2018). The Role Of Science And Technology In Sport. *Procedia Computer Science*, 129, 489–495. <https://doi.org/10.1016/j.procs.2018.03.029>
- Liebermann, D. G., Katz, L., Hughes, M. D., Bartlett, R. M., & Franks, I. M. (2010). Advances In The Application Of Information Technology To Sport Performance. *Journal Of Sport Sciences*, 20(10), 755–769. <https://doi.org/10.1080/026404102320675611>
- Lubay, L. H. (2015). *Pembelajaran Permainan Bolabasket*. Bandung: CV. Bintang WarliArtika.
- Mahendra, A., Nuryadi. (2013). *Teori Mengajar Motorik*. Redpoint: Bandung.
- Meredith, D. G., Joyce, P. G., & Walter, R. B. (2006). Educational Research, An Introduction.pdf.
- Morgado, F. F. R., Meireles, J. F. F., Neves, C. M., Amaral, A. C. S., & Ferreira, M. E. C. (2017). Scale development: ten main limitations and recommendations to improve future research practices. *Psicologia: Reflexão E Crítica*, 30(3), 1–20. <https://doi.org/10.1186/s41155-016-0057-1>
- Neumann, D. L., & Hohnke, E. (2018). Practice using performance goals enhances basketball free throw accuracy when tested under competition in elite players. *Journal Of Human Sport & Exercise*, 13(2), 296–304. <https://doi.org/10.14198/jhse.2018.132.05>
- Passfield, L., & Hopker, J. G. (2017). A Mine of Information : Can Sports Analytics Provide Wisdom From Your Data ? *International Journal Of Sport*

Gilang Lazuardi Hibatullah, 2020

PENERAPAN MEDIA LATIHAN BERBASIS MODUL WIFI DALAM UPAYA MENINGKATKAN REACTION DAN ACCURACY PASSING DIHUBUNGKAN DENGAN METODE LATIHAN PADA CABANG OLAHRAGA BOLA BASKET

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

Physiology And Performance, 12(7), 851–855.

- Redden, W. L. (2013). Visual Skills In Basketball. *Strategies: A Journal For Physical And Sport Educators*, 7(5), 22–25. <https://doi.org/10.1080/08924562.1994.10591981>
- Ride, J., Ringuet, C., Rowlands, D., & Lee, J. (2013). A Sports Technology Needs Assessment For Performance Monitoring In Swimming. *Procedia Engineering*, 60, 442–447. <https://doi.org/10.1016/j.proeng.2013.07.072>
- Ringuet-riot, C. J., Hahn, A., & James, D. A. (2014). A Structured Approach For Technology Innovation In Sport. *Sport Technology*, 6(3), 137–149. <https://doi.org/10.1080/19346182.2013.868468>
- Saal, C., Zinner, J., Fiedler, H., Ralf, L., & Krug, J. (2018). Reliability And Validity Of A Soccer Passing Test Using The Footonaut. *German Journal Of Exercise And Sport Research*, 2018(March). <https://doi.org/10.1007/s12662-018-0511-6>
- Sadiman. (2008). Pembelajaran Pendidikan Jasmani Olahraga dan Kesehatan (SD/MI). Jakarta : Litera
- Sajoto. (1988). *Pembinaan Kondisi Fisik dalam Olahraga*. Jakarta: Depdikbud Dikti P2LPTK.
- Sanjaya, W. (2008). *Strategi Pembelajaran*. Jakarta: Kencana Prenada Media Group.
- Sari, R. A. (2012). *Teori Belajar, Prinsip-Prinsip Belajar, Dan Media Pembelajaran*. Yogyakarta: UNY Press.
- Schmidt, R. A., & Lee, T. D. (2014). *Motor Learning and Performance 5E - from Principle to Application*.
- Shadmehr, A., Ghotbi, N., & Moghadam, B. A. (2013). European Journal of Sport Science Reaction time and anticipatory skill of athletes in open and closed skill-dominated sport, (December 2016). <https://doi.org/10.1080/17461391.2012.738712>
- Sriwahyuniati, F. (2017). *Belajar Motorik*. Yogyakarta: UNY Press.
- Sugiyono. (2012). *Metode penelitian kuantitatif kualitatif dan R&D*. Bandung : Alfabeta.
- Thomas, S. V., & Gilbert, J. E. (2016). Integrating Technology to Enhance Athlete Development : A Literature Review. *Journal Of Higher Education Athletics & Innovation*, 1(1), 73–84.

Gilang Lazuardi Hibatullah, 2020

PENERAPAN MEDIA LATIHAN BERBASIS MODUL WIFI DALAM UPAYA MENINGKATKAN REACTION DAN ACCURACY PASSING DIHUBUNGKAN DENGAN METODE LATIHAN PADA CABANG OLAHRAGA BOLA BASKET

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

Tsetseli, M., Malliou, V., Zetou, E., Michalopoulou, M., & Kambas, A. (2010). The Effect Of A Coordination Training Program On The Development Of Tennis Service Technique. *Journal Biology Of Exercise*, 6(1), 30–36.

Undang-Undang Republik Indonesia Nomor 18 Tentang Sistem Nasional Penelitian, Pengembangan, dan Penerapan Ilmu Pengetahuan dan Teknologi. (2002).

Yuningsih, A. (2011). *Penerapan Teori Belajar Behavioristik Dalam Pembelajaran*. Pekanbaru: UIN.

Zambova, D., & Macura, P. (2013). The Effect Of Programme On The Accuracy Of Basketball Shooting.