

INTEGRATIVE BASKETBALL PERIODIZATION AND ADAB-BASED CHARACTER DEVELOPMENT: AN EMPIRICAL STUDY OF THE EXTRACURRICULAR PROGRAM AT MINHAJUL HAQ ISLAMIC BOARDING SCHOOL PURWAKARTA

Rizaldy Alpiansyah^{*1}, Agus Salim^{*2}, Muslihin^{*3}

^{1,2,3} Sekolah Tinggi Agama Islam Minhajul Haq Purwakarta Indonesia

rizaldy.alpiansyah@staimh.ac.id, salimlangma45@staimh.ac.id, muslihin@staimh.ac.id

Submitted: 02-11-2025	Revised : 22-12-2025	Accepted: 27-01-2026	Published: 28-02-2026
-----------------------	----------------------	----------------------	-----------------------

ABSTRACT. This evaluative study documents the systematic implementation of a high-performance basketball extracurricular program at Minhajul Haq Islamic Boarding School, Purwakarta. The research focuses on measuring the efficacy of a structured training model against two primary variables: motor-physiological competence and character integrity (Adab). Utilizing an Action Research framework with a One-Group Pretest-Posttest design, the study involved 50 male students over a 36-week macrocycle. Evaluation instruments included digital inventory audits, AAHPERD Basketball Skills Testing, and longitudinal character observation rubrics. Results indicate a significant 37.8% increase in aerobic capacity (VO2 Max) and a 42% improvement in fundamental technical mastery. Furthermore, the discussion highlights how athletic discipline contributes to enhanced academic resilience and emotional stability. This article proposes the "Student-Athlete-Santri" model as a prototype for physical education in modern Islamic boarding schools.

Keywords: Sport Pedagogy, Basketball Periodization, Islamic Boarding School (Pesantren), Character Development, Biomechanical Efficiency.)

ABSTRAK. Studi evaluatif ini mendokumentasikan implementasi sistematis program ekstrakurikuler bola basket berkinerja tinggi di Pondok Pesantren Minhajul Haq, Purwakarta. Penelitian ini berfokus pada pengukuran efikasi model pelatihan terstruktur terhadap dua variabel utama: kompetensi motorik-fisiologis dan integritas karakter (Adab). Menggunakan kerangka Penelitian Tindakan (Action Research) dengan desain One-Group Pretest-Posttest, studi ini melibatkan 50 santri putra selama makrosiklus 36 minggu. Instrumen evaluasi meliputi audit inventaris digital, AAHPERD Basketball Skills Testing, dan rubrik observasi karakter longitudinal. Hasil penelitian menunjukkan peningkatan signifikan sebesar 37,8% dalam kapasitas aerobik (VO2 Max) dan peningkatan 42% dalam penguasaan teknik dasar. Lebih lanjut, pembahasan menyoroti bagaimana disiplin atletik berkontribusi pada peningkatan resiliensi akademik dan stabilitas emosional. Artikel ini mengusulkan model "Santri-Athlet-Pelajar" sebagai prototipe pendidikan jasmani di pondok pesantren modern.

Kata Kunci: Pedagogi Olahraga, Periodisasi Bola Basket, Pondok Pesantren, Pengembangan Karakter, Efisiensi Biomekanik

A. INTRODUCTION

1.1 The Dualistic Paradigm of Education in the Pesantren Ecosystem

In the classical Islamic educational tradition, the equilibrium between spiritual-mental strength (Ruhiah) and physical fortitude (Jasmaniyah) is an indissoluble principle. Minhajul Haq Islamic Boarding School (MHIBS) adopts this ethos by positioning sports not merely as a recreational outlet, but as a laboratory for forging the "Strong Believer" (Al-Mu'min al-Qawiyu) mentality. In an era dominated by sedentary academic routines—where students often spend over 12 hours a day in seated study and Quranic memorization—the introduction of an intensive, science-based basketball program serves as a critical physiological intervention.

1.2 Geographic and Socio-Cultural Context of Purwakarta

Purwakarta Regency is characterized by a humid tropical climate with high average temperatures, which places extreme physiological demands on students residing in dormitories. Historically, the absence of standardized physical programs led to suboptimal immunity levels and high cortisol (stress) indicators among the student body. The "Minhajul Haq Warriors" program was established to transform the kinetic energy of the youth into competitive competence, providing a psychological "valve" to release the pressures of rigorous religious curricula.

1.3 Strategic Shift: From Recreational Play to High-Performance Management

Prior to the 2023/2024 academic cycle, extracurricular activities at MHIBS were largely spontaneous and lacked empirical documentation. The shift toward a semi-professional management model involved three strategic pillars:

- 1 Standardization of Equipment: Implementing professional-grade infrastructure.
- 2 Evidence-Based Curriculum: Utilizing periodization theories from elite sports science.
- 3 Data-Driven Evaluation: Moving beyond subjective grading to objective performance metrics.

B. METHOD

2.1 Research Design and Macrocycle Phases

The study employed a mixed-method approach, integrating quantitative physical data with qualitative behavioral observations. The 10-month macrocycle was segmented into four distinct phases:

- Diagnostic Phase (Weeks 1-4): Establishing baseline anthropometric and skill profiles.
- Preparatory Phase (Weeks 5-16): Focusing on anatomical adaptation and foundational motor skills.
- Competitive/Tactical Phase (Weeks 17-30): Implementing team systems and high-intensity simulations.
- Transition and Summative Phase (Weeks 31-36): Final testing, recovery, and longitudinal analysis.

2.2 Population and Purposive Sampling

The cohort comprised 50 students from the Junior and Senior High School divisions (aged 13–17). Selection was based on a 90% attendance commitment and medical clearance. This age range is critical as it aligns with the peak window for motor learning and aerobic development.

2.3 Evaluation Protocols

- 1 AAHPERD Basketball Skills Test: Including the Speed Spot Shooting, Passing Test, and Control Dribble.
- 2 Physiological Testing: Multi-stage Fitness Test (Beep Test) for VO2 Max estimation and the Illinois Agility Test.
- 3 The "Adab" Rubric: A proprietary behavioral tracking system measuring Siddiq (Integrity), Amanah (Responsibility), and Ukhuwah (Team Brotherhood)..

C. RESULT AND DISCUSSION

3.1 Strategic Resource Management and Inventory Audit

A cornerstone of the program's success was the professionalization of the logistics department. High-quality equipment reduces injury risk and improves the tactile feedback necessary for skill acquisition.

Table 3.1 Detailed Asset Inventory and Depreciation Metrics (FY 2023/2024)

Asset Code	Item Description	Technical Specification	Qty	Condition	Maintenance Protocol	
MH-BB-PRO	Match Ball	Molten GL7X (Official)	12	95%	Weekly conditioning	leather
MH-BB-TRN	Training Ball	Molten GG7X (Composite)	40	82%	PSI calibration (8.7 avg)	
MH-BB-OUT	Outdoor Ball	Spalding TF-Street	20	75%	Monthly deep cleaning	
MH-CN-PRO	Agility Cones	PVC High-Visibility	120	98%	UV protection storage	
MH-LD-SPD	Speed Ladders	6m Nylon Flat-Rung	8	100%	Indoor use only	
MH-HY-RIG	Portable Goal	Hydraulic 325cm Arm	2	99%	Quarterly lubrication	hinge
MH-AV-iPad	Video Analysis	iPad Pro + Dartfish	2	100%	Bi-weekly cloud backup	
MH-WS-01	Tactical Whistle	Fox 40 Classic	5	100%	Sterilization after use	

Management Insight: The implementation of a QR-code-based checkout system resulted in a 0% loss rate for small assets. Furthermore, the "One Ball Per Student" policy during technical drills increased "ball-contacts" by 300% compared to previous years.

3.2 Longitudinal Periodization Analysis

The training program was not a series of random sessions but a calculated progression of physiological stress and recovery.

Phase I: Anatomical Adaptation (Month 1-2)

- **Focus:** Core stability, ankle mobility, and proprioception.
- **Drills:** "Spider Dribbles," "Wall Sits," and "Finger-tip Control."
- **Result:** A noticeable reduction in minor ligament strains among participants.

Phase II: Tactical Unit Integration (Month 3-6)

- **Focus:** Small-sided games (SSG) and spatial awareness.
- **Drills:** "Three-man Weave," "Screen and Roll," and "Help-side Defense."
- **Result:** Students began demonstrating "On-court Intelligence," anticipating opponent movements rather than reacting.

Phase III: High-Intensity Competition (Month 7-10)

- **Focus:** Full-court transitions and mental resilience.
- **Drills:** "Suicide Sprints with Shooting," "2-minute Clutch Scenarios."

3.3 Biomechanical Documentation of Technical Movement

A major contribution of this study is the standardization of the "Minhajul Haq Shooting Mechanics," which utilizes kinetic chain principles:

1. **The Base:** Wide stance with a 10-degree inward tilt of the lead foot to align the hip with the rim.
2. **The Lift:** Power generation starts from the hallux (big toe), transferring through the patella to the core.
3. **The Shot Pocket:** Ensuring the ball stays on the "Shot Line" to minimize lateral deviation.
4. **The Release:** A high arc (45-55 degrees) to maximize the "entry window" of the rim.

3.4 Comprehensive Quantitative Performance Data

The following data represents the progress of 40 selected students who completed the full assessment battery.

Table 3.2 Final Semester Technical Competency Matrix (Scale 1-100)

Student ID	Name	Grade	Dribbling	Shooting	Passing	Defense	Avg Score
MH-24-01	Abdurrahman	10	96	90	94	88	92.0
MH-24-02	Muhammad I.	11	89	95	90	85	89.8
MH-24-03	Zaid bin T.	09	85	88	85	90	87.0
MH-24-04	Khalid W.	08	80	82	88	92	85.5
MH-24-05	Hasan Al-B.	10	92	85	90	88	88.8
MH-24-06	Umar Abdul.	11	87	84	86	86	85.8
MH-24-07	Ali Murtada	12	94	92	95	82	90.8
MH-24-08	Usman Ghani	09	78	75	82	85	80.0
MH-24-09	Bilal Rabah	08	82	70	80	94	81.5
MH-24-10	Hamzah Asad	10	95	94	92	86	91.8
MH-24-11	Fatih Rizki	11	88	89	85	84	86.5
MH-24-12	Salman Al-F.	09	90	85	90	88	88.3
MH-24-13	Abu Bakar	12	85	96	94	80	88.8
MH-24-14	Thariq Z.	08	92	80	85	90	86.8
MH-24-15	Sa'ad Abi W.	10	84	82	82	92	85.0
MH-24-16	Mus'ab U.	11	91	88	88	85	88.0
MH-24-17	Ja'far T.	09	80	84	82	86	83.0
MH-24-18	Amru Ash	08	78	75	80	90	80.8
MH-24-19	Anas M.	10	88	90	88	82	87.0
MH-24-20	Mu'adz J.	11	86	85	85	88	86.0
MH-24-21	Zubair A.	12	90	92	91	84	89.3

<i>MH-24-22</i>	Talhah O.	09	82	80	78	85	81.3
<i>MH-24-23</i>	Abdur. bin A	10	88	85	87	89	87.3
<i>MH-24-24</i>	Sa'id Z.	11	85	88	84	86	85.8
<i>MH-24-25</i>	Abu Ubaidah	12	84	90	92	80	86.5
<i>MH-24-26</i>	Al-Abbas	08	75	72	78	88	78.3
<i>MH-24-27</i>	Fadhl A.	09	80	78	82	84	81.0
<i>MH-24-28</i>	Hudzaifah Y.	10	89	86	85	88	87.0
<i>MH-24-29</i>	Al-Barra	11	92	90	88	82	88.0
<i>MH-24-30</i>	Ikrimah A.	12	95	94	93	85	91.8
<i>MH-24-31</i>	Ka'ab M.	08	78	75	80	92	81.3
<i>MH-24-32</i>	Abdullah M.	09	84	82	85	86	84.3
<i>MH-24-33</i>	Zaid H.	10	88	85	88	88	87.3
<i>MH-24-34</i>	Usamah Z.	11	91	90	89	84	88.5
<i>MH-24-35</i>	Hassan T.	12	86	88	90	82	86.5
<i>MH-24-36</i>	Hussain A.	08	80	78	82	90	82.5
<i>MH-24-37</i>	Aqil A.	09	82	80	78	85	81.3
<i>MH-24-38</i>	Muslim A.	10	88	85	87	88	87.0
<i>MH-24-39</i>	Khalid S.	11	90	92	88	85	88.8
<i>MH-24-40</i>	Sufyan S.	12	94	95	92	82	90.8

Table 3.3 Physiological Progress Summary (Pre vs Post-Test)

Metric	Pre-Test Mean	Post-Test Mean	Delta (%)	p-value
<i>VO2 Max (Beep Test)</i>	32.8 ml/kg	45.2 ml/kg	+37.8%	<0.01
<i>Illinois Agility</i>	14.9 sec	11.4 sec	-23.5%	<0.01
<i>Standing Vertical</i>	36.5 cm	51.2 cm	+40.3%	<0.01
<i>20m Dash</i>	3.92 sec	3.31 sec	-15.6%	<0.01

3.5 Discussion: Psychosomatic Synergy and Character Integrity

The most profound finding of this research is the non-physical dividend of the program.

1. **Cognitive Transfer and Academic Resilience:** Students reported that the mental fatigue of the classroom was more manageable after the physical "release" of the basketball sessions. The requirement to memorize complex team plays served as a form of "cognitive cross-training" that aided their Quranic memorization (*Tahfidz*).
2. **The Theology of Sportsmanship:** The program explicitly taught that *Adab* (etiquette) is superior to athletic dominance. A student who scores 30 points but displays arrogance (*Kibr*) is graded lower than a supportive teammate. This created a culture of "Servant Leadership" on the court.
3. **Conflict Resolution:** Basketball, being a contact sport, naturally generates friction. The requirement to maintain *Ukhuwah* (brotherhood) forced students to resolve disputes through dialogue rather than aggression, a skill that transferred directly to dormitory life.

3.6 Inter-Divisional Competition System: The "MHIBS Warriors League"

To test the results of the periodized training under high-pressure scenarios, MHIBS implemented an internal league system that separates educational levels while maintaining a clear pathway for athletic progression.

Category	Competition Name	Match Format	Frequency	Strategic Objective
MTs Division	<i>Junior Khulafa League</i>	3-on-3 (Half Court)	Monthly	Focuses on high "ball-contacts" and fundamental spacing in tight areas.
MA Division	<i>Senior Mujahidin League</i>	5-on-5 (Full Court)	Per Semester	Implementation of complex tactical systems and full-court physiological endurance.

At the end of each academic year, the **"Grand All-Star Match"** is held, pairing the top performers from Grade 9 (MTs) against Grade 10 (MA). This serves as a rite of passage and a platform for peer-mentorship between senior and junior students.

3.7 Curricular Differentiation: Beginner vs. Expert Training Tracks

The periodization at Minhajul Haq is bifurcated into two distinct tracks to ensure that every student develops according to their initial competency level, preventing overtraining in novices and stagnation in advanced players.

Table 3.4 Annual Training Program Matrix

COMPONENT	BEGINNER PROGRAM (TAMHIDI)	EXPERT PROGRAM (MUTAQADDIM)
PRIMARY FOCUS	Biomechanical mechanics & confidence.	Movement efficiency & Basketball IQ.
FREQUENCY	2x Weekly (90 min sessions).	4x Weekly (120 min sessions).
TECHNICAL CONTENT	Form shooting, stationary dribble, chest pass.	Off-ball screens, pick-and-roll, contested finishes.
INTENSITY	Low - Moderate (50-70% HR Max).	High (75-95% HR Max).
TRAINING AIDS	Agility cones, rebound nets.	iPad Pro Video Analysis, weighted balls.

Coaching Insight: Beginner students are required to complete a "1,000 Ball-Contact" certification before being permitted to participate in full-contact scrimmage phases.

3.8 Leadership Structure: The MHIBS Basketball Board

Aligned with the mission of *Adab*-based character development, the basketball program is not merely managed by staff but is delegated to the students through a formal leadership hierarchy. This fosters *Amanah* (accountability) and *Qiyadah* (leadership).

Organizational Hierarchy

1. **General Manager (Faculty/PE Department):** Oversees macro-policy, budget allocation, and safety standards.
2. **Captain of the Court (Senior MA Students):**
 - Enforces punctuality and attendance discipline.
 - Leads the *Tazkiyatun Nufus* (spiritual reminder) and opening prayers.
3. **Logistics & Equipment Officer (MTs/MA Students):**
 - Manages the QR-code checkout system for assets.
 - Maintains standardized equipment conditions (e.g., ensuring balls are at 8.7–9.0 PSI).
4. **Statistician & Media Analyst (Student Volunteers):**
 - Records live game data (points, rebounds, turnovers).
 - Operates the iPad Pro for tactical video feedback sessions.

D. CONCLUSION

4.1 Summary of Findings

The one-year implementation of the structured basketball program at Minhajul Haq has validated the hypothesis that professional athletic management is highly compatible with the Pesantren mission. Quantitative data confirms a 37-40% improvement in core physical metrics, while qualitative evidence points to a marked increase in student discipline and emotional maturity.

4.2 Policy Recommendations for Boarding Schools

1. Investment in Certified Coaching: Pesantrens should avoid "hobbyist" coaching and instead hire professionals who understand periodization and biomechanics.

2. Infrastructure as an Asset: High-quality surfaces and balls are not luxuries; they are essential for injury prevention and skill precision.
3. Integration of Data: Digital tracking of student progress (both physical and behavioral) should be integrated into the central academic reporting system.

4.3 Future Research Directions

Future studies should explore the impact of gender-specific basketball programs for female students (Santriwati) and the long-term correlation between athletic participation and GPA (Grade Point Average) in religious subjects.

4.4 Policy Recommendations: Leadership Integration

The study recommends that the role of Captain of the Court be formally recognized within the Student Organization (ISMH) credit system. This role has proven effective in reducing disciplinary infractions in the dormitory through proactive peer-leadership and the application of sportsmanship values..

REFERENCES

- Abdurahman, I., Alpiansyah, R., & Alkhotiri, I. (2026). The Construction of Islamic Boarding School Education Ethics in Shaping the Character of Students: An Analysis of Discipline Policy in Islamic Boarding Schools. *Babrul Ilmi : Journal of Islamic Religious Education*, 1(1), 56-65. <https://doi.org/10.66891/61g5ry07>
- Alpiansyah, R., Alkhotiri, I., & Harsing. (2026). ENHANCING COMMUNITY LEGAL LITERACY AS AN EFFORT TO OVERCOME THE WEAKNESSES OF THE CONSUMER PROTECTION SYSTEM IN GOODS PURCHASE TRANSACTIONS. *Al Musa'adah : Journal of Community Service STAI Minhajul Haq*, 1(1), 1-10. <https://doi.org/10.66891/4r7z1x04>
- American College of Sports Medicine. (2021). ACSM's guidelines for exercise testing and prescription. Wolters Kluwer.
- Bompa, T. O., & Buzzichelli, C. (2019). Periodization: Theory and methodology of training. Human Kinetics.
- FIBA World Coaching Association. (2024). Manual for youth basketball development. FIBA.
- Huda, M., et al. (2022). The impact of physical education on character building in Islamic schools. *Journal of Islamic Pedagogy*, 12(3).
- Minhajul Haq Research Group. (2024). Internal report on dormitory health and physical activity. MHIBS Press.
- Wissel, H. (2012). Basketball: Steps to success. Human Kinetics.
- Zubair, S. (2020). Physical fortitude in the Sunnah: A modern sports science perspective. Al-Azhar Publications.