Multilateral Journal

1_24736-80840-1-CE Fakhri Fajrin Kurniawan 259_283

Cek Plagiasi

Document Details

Submission ID
trn:oid:::3618:144737584

Submission Date
Jul 2, 2026, 2:34 PM GMT+8

Download Date
Jul 2, 2026, 2:44 PM GMT+8

File Name
1_24736-80840-1-CE Fakhri Fajrin Kurniawan 259_283.docx

File Size
113.7 KB

17 Pages

5,750 Words

36,124 Characters

17% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text

Match Groups

66 Not Cited or Quoted 16%
Matches with neither in-text citation nor quotation marks

6 Missing Quotations 1%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

16% Internet sources
6% Publications
6% Submitted works (Student Papers)

Integrity Flags

0 Integrity Flags for Review

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **66** Not Cited or Quoted 16%
  Matches with neither in-text citation nor quotation marks
- **6** Missing Quotations 1%
  Matches that are still very similar to source material
- **0** Missing Citation 0%
  Matches that have quotation marks, but no in-text citation
- **0** Cited and Quoted 0%
  Matches with in-text citation present, but no quotation marks

Top Sources

16% Internet sources
6% Publications
6% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1	Internet	syekhnurjati.ac.id 8%
2	Internet	journal.rescollacomm.com 1%
3	Student papers	Universitas Sanata Dharma on 2022-09-03 <1%
4	Internet	ijc.ilearning.co <1%
5	Internet	pdfcoffee.com <1%
6	Internet	repository.usd.ac.id <1%
7	Student papers	East Carolina University on 2025-04-28 <1%
8	Student papers	Queensland University of Technology on 2026-05-14 <1%
9	Internet	jjer.com.ng <1%
10	Internet	cdr.aws.openrepository.com <1%

11	Internet	
conference.asia.ac.id		<1%
12	Internet	
digilib.iain-palangkaraya.ac.id		<1%
13	Internet	
www.frontiersin.org		<1%
14	Internet	
www.journal.lembagakita.org		<1%
15	Internet	
ejournal.unib.ac.id		<1%
16	Internet	
journal.iaincurup.ac.id		<1%
17	Internet	
jurnal.piksiinputserang.ac.id		<1%
18	Internet	
advancesinresearch.id		<1%
19	Internet	
oesr.thanhdo.edu.vn		<1%
20	Internet	
www.atlantis-press.com		<1%
21	Publication	
Hurriyati Ratih, Tjahjono Benny, GafarAbdullah Ade, Sulastri, Lisnawati. "Advance...		<1%
22	Internet	
ijmmu.com		<1%
23	Internet	
ir-library.mmust.ac.ke		<1%
24	Internet	
repository.uinsaizu.ac.id		<1%

25 Internet

syariah.jurnalikhac.ac.id <1%

26 Student papers

2U Simmons University-MSW on 2025-04-13 <1%

27 Internet

ebuah.uah.es <1%

28 Internet

fbsf.wyb.ac.lk <1%

29 Internet

gih.diva-portal.org <1%

30 Internet

journal.as-salafiyah.id <1%

31 Internet

pdfs.semanticscholar.org <1%

Analysis of coaching management and financial management in athlete development at a basketball academy

Fakhri Fajrin Kurniawan[1], Rinni Indriyani[2]
[1,2] Universitas Muhammadiyah Cirebon, Indonesia
Email: fakhry.fajrin@umc.ac.id[1], rinni.indriyani@umc.ac.id[2]

ABSTRACT

Background. Athlete development at basketball academies requires professional coaching and management to support the gradual and sustainable improvement of athletes' performance. In their operations, basketball academies still face challenges such as unstructured training programs, limited facilities, and inadequate financial management. **Objectives.** The purpose of this study is to analyze the influence of coaching management and financial management on athlete development at the Cirebon Region III basketball academy and to identify the management obstacles and solutions encountered in the development process. **Method.** The study employed a mixed-methods approach with a Sequential Explanatory design. Quantitative data were collected through a survey of 222 respondents and analyzed using multiple linear regression. Qualitative data were obtained through interviews and observations of 40 informants selected via purposive sampling. The analysis was conducted using SPSS 26. **Results.** The results of the quantitative data analysis using multiple linear regression in the "ANOVA" output yielded a Sig or p-value of 0.000 < 0.05, indicating that coaching management and financial management simultaneously have a significant effect on athlete development. In the "Coefficients" output, the sig. value of 0.238 > the probability of 0.05, indicating that coaching management has no partial effect on athlete development, whereas the sig. value of 0.000 < the probability of 0.05 indicates that financial management has a partial effect on athlete development. The qualitative data reveals the main obstacles to be limited facilities, a lack of standardized training evaluations, dependence on athlete dues, and low funding transparency. **Conclusion.** It is concluded that the professionalization of coaching, standardization of evaluations, and diversification of funding are essential to achieving more effective and performance-oriented athlete development. This study contributes to the development of an athlete development model based on professional coaching management and sustainable financial management at the Cirebon Region III basketball academy.

Keywords: Coaching management; finance; athlete development; basketball.

ARTICLE INFO

Article History:

Received : December 06th, 2026
Approved : June 30th, 2026
Available *Online* June 2026
Doi: http://dx.doi.org/10.20527/multilateral.v25i2.24736

Corresponding Author:

Fakhri Fajrin Kurniawan
Program Studi S1 Ilmu Keolahragaan, Fakultas Ilmu Kesehatan, Universitas Muhammadiyah Cirebon, Indonesia

INTRODUCTION

In this modern era, Sports Science and Technology have advanced significantly and is widely used by athletes, coaches, and the general public. The development of Sports Science and Technology plays a strategic role in supporting the specific needs of various sports disciplines and enhancing athlete performance through approaches such as athlete monitoring, training load management, wearable technology, and data-driven sports analytics (Bourdon et al., 2017; Vanrenterghem et al., 2017; Seshadri et al., 2019). Through various efforts in sports development and training, the hope is to contribute to improving athlete performance. Therefore, sports development and training can support national sports development through academies, particularly in basketball—which is currently one of the most popular sports. Training can be

conducted through basketball academies (Amaro et al., 2022; Goodyear et al., 2014; Liu, 2020; Mosleh et al., 2019).

Regardless of these disparities, in recent years, numerous basketball academies and clubs have emerged, whether their purpose is simply to promote health or to train athletes (Candra et al., 2017). Furthermore, owners of basketball academies have shown significant interest in the sport of basketball not only to promote athletic achievement but also to view it as a sports business, recognizing new opportunities in the field and leveraging them for long-term profitability through innovation, entrepreneurship, and the development of sports business models (Izadfar et al., 2020; Ratten, 2018; Chadwick, 2017). The development of sports—particularly basketball—has reached every region, as evidenced by the growing number of basketball academies (Jones et al., 2020; Lee et al., 2024). These basketball academies aim to support athletes in improving their performance and training their physical, technical, strategic, and mental abilities, both individually and as a team. In basketball, the techniques generally used are dribbling, passing, and shooting (Kurniawan, 2019). The proliferation of new basketball academies is not always accompanied by sound management—whether in coaching or financial matters—resulting in many basketball academies choosing to disband due to poor management.

The development of basketball academies in the era of globalization has undergone significant transformation, driven by increasing demands for professionalism, competitiveness, and modern management practices as part of the growing professionalization of sports organizations worldwide (Gammelsæter, 2020). Based on the researcher's observations, it was found that 1) the development of basketball academies in the era of globalization has led to increasingly higher barriers and challenges (Maula & Amrulloh, 2024). 2) Common problems faced in athlete development at basketball academies include a) unstructured training and b) a lack of athlete awareness (Abrar & Fithroni, 2021). Although basketball is a team sport, basketball athletes must also possess strong individual skills; therefore, athletes need to develop their potential within basketball academies (Awali, 2018; França et al., 2022; Gardner, 1979; Ortega et al., 2015).

Sports development is crucial for an athlete. Today, in the modern era, many academies have emerged that participate in sports development. Relying not only on school extracurricular programs, but basketball academies have also become an integral part of sports training as an effort to improve basketball performance. Since many high-performing athletes have emerged from these basketball academies, this is a matter that requires serious attention if basketball is to achieve success (Satoto & Wijanarko, 2018). The success of effective basketball development can be seen in the ability of the development system to produce athletes who demonstrate performance growth and achieve

results at various levels of competition (Wibowo et al., 2017; Güllich, 2017). Achievement refers to the results obtained by an individual because of effort, hard work, and dedication in reaching a goal or meeting certain standards (Hartanto et al., 2025).

Whether a basketball academy is considered good depends on many factors. These range from facilities and infrastructure, the quality of coaches, systematic training materials, financial management appropriate to its capacity, and effective development management—particularly in coaching management and financial management (Dhia et al., 2023; Pireva, 2019). A good basketball academy, of course, also has effective coaching management and financial management. A professional coaching system, organizational support, good governance, and financial resource management are key factors in the success of a sports organization (Moustakas et al., 2022). Specifically regarding coaching management, a basketball academy must provide licensed coaches with adequate coaching competencies and measurable training programs tailored to the academy's goals (Lara-Bercial & Mallett, 2016). A coach must be able to plan, implement, and maintain strategies and interventions to support skill-based performance in sports training (Nash et al., 2023).

Additionally, financial management at a basketball academy must employ specific governance models to systematize athlete development, including targeted funding mechanisms and athlete development modeling, ensuring that funding aligns with its intended function of supporting athlete development (Barker-Ruchti et al., 2018). Therefore, effective management is required so that every element within the basketball academy can function optimally (Febrian et al., 2024). Professional basketball academies need to understand sound financial literacy, using general financial knowledge, financial saving and borrowing practices, financial protection through insurance, and development strategies through investment as benchmarks for financial literacy so that they can achieve good financial well-being thanks to a solid understanding of financial literacy (Jessica et al., 2021). In managing the finances of a basketball academy, funding sources should utilize donation-based crowdfunding as a form of financial diversification for sports organizations, particularly in budget planning to ensure the sustainability of athlete development programs at the basketball academy (Ivašković & Čater, 2018).

In several regions, including Region III Cirebon, challenges in coaching management and improving the quality of coaches—such as unstructured training sessions, low utilization of technology in learning, and non-transparent financial management—remain major obstacles that have the potential to reduce the effectiveness of governance, stakeholder trust, and organizational sustainability (Makinen et al., 2016; Sugden & Tomlinson, 2023). Furthermore, efforts to enhance coaches' competencies are also hindered by limited

coordination and resources. On the other hand, the uneven availability of sports facilities across some basketball academies also poses a challenge in optimizing basketball coaching. This situation underscores the importance of planned and sustained efforts to improve the quality of basketball coaching; beyond its impact on athletes' performance, this also concerns the development of healthy habits as a foundation for the future (Bafirman et al., 2024).

Effective coaching management involves not only designing and implementing training programs aligned with training periodization but also enhancing coaches' competencies and quality through improved adaptability, knowledge, decision-making, and continuous professional development to support optimal athlete development (Li et al., 2024; Barros et al., 2025). A sports coach's competencies are a key factor in an athlete's success in sports (Möhrle & Möhrle, 2024). A coach must be able to take responsibility for facilitating a supportive, safe, and challenging team environment for athletes and support the team to succeed both personally and professionally (Alexander et al., 2024). A coach must learn how to manage their team—from planning, organizing, directing, coordinating, and supervising all activities under the coach's responsibility (Wukir K., 2024). Meanwhile, optimal financial management is crucial to supporting the basketball academy's operations so that they can run smoothly. Adequate financial support enables sports organizations to provide suitable facilities, meet the needs for training equipment, and ensure the sustainability of athlete development programs (Parnell et al., 2018). Thus, effective coaching management and financial management will influence the achievement of overall sports development goals.

The Basketball Academy always offers a variety of training programs, including regular programs open to everyone and scholarship programs selected based on the academy's specific needs. For the scholarship program, athletes who qualify will be provided with free housing (dormitory), meals, and schooling. These programs must be managed properly—both in terms of coaching and financial management—to ensure that the expected achievements can be attained without any obstacles. With the advent of the modern era and the increasing number of competitions—from the regional to the national level—basketball academies must be able to face complex challenges in managing coaching performance and finances. Therefore, basketball academies must have sound coaching management and financial management systems.

This study aims to analyze coaching management and financial management, with a focus on obstacles and solutions in athlete development at basketball academies. Previous research has been limited in scope, examining only coach management and financial management in sports partially. Studies on sports policy highlight the importance of financial support, coaching provision, and organizational governance for sports performance (Parnell et al., 2018;

Valenti et al., 2020). However, research that simultaneously integrates technical training aspects with managerial budget aspects in the sports industry remains limited. Therefore, the novelty of this study lies in offering the industry under examination an analytical model that unifies technical aspects (training systems) and managerial aspects (budget management systems). The results of this study will enrich and advance existing athlete development systems to make them more optimal and can make a significant contribution to the management of more effective and efficient athlete development systems, as well as ensure the sustainability of the basketball academy through more professional management.

As discussed above, effective coaching management must include enhancing the competence and quality of coaches so they can provide optimal training, and optimal financial management is crucial to support the basketball academy's operations, thereby enabling sports development—as an effort to improve basketball performance—to be achieved. This forms the basis for further understanding how coaching management and financial management are implemented through an analysis of obstacles and financial management in relation to improving athlete development at the Cirebon Region III Basketball Academy.

METHOD

Participants

The population used in the quantitative method consisted of: all coaches working at the basketball academy that was the subject of the study; athletes registered at the basketball academy, at both the junior and senior levels; and administrative staff handling the academy's finances and operations. A total of 500 respondents were selected via random sampling to measure experience, satisfaction, and the management of coaching and financial operations, with a sample size of 222 determined using the Slovin formula. Meanwhile, the population used in the qualitative method consists of all those involved in management and financial administration at the basketball academy, selected via purposive sampling. The estimated sample size was 40 informants. The established sampling criteria were as follows: 1) Coaches (head coach, assistant coaches, specialist coaches) at the basketball academy; 2) Academy Management and Administrators (academy director, operations manager, financial manager); 3) Athletes (particularly those who have been in training for at least one year); 4) Parents/guardians of athletes involved in aspects of funding and external support; 5) Sports experts or academics (to provide perspectives on coaching and financial management).

Table 1. Mapping of research participants

Approach	Participants	Population	Sample	Sampling Technique	Instrument
Quantitative	Coaches, Athletes, Academy Administrative Staff	500	222	Random Sampling (Slovin's Formula)	Questionnaire
Qualitative	Trainer	-	6	Purposive Sampling	Interviews & Observations
Qualitative	Academy Management/Administrators	-	6	Purposive Sampling	Interview
Qualitative	Athletes	-	10	Purposive Sampling	Interview
Qualitative	Parents/Guardians of Athletes	-	10	Purposive Sampling	Interviews
Qualitative	Sports Experts/Academics	-	8	Purposive Sampling	Interview

The research respondents included various stakeholders involved in the development of basketball academy athletes to obtain a comprehensive perspective on coaching management and financial management.

Research Design

The research method and approach used by the author is a mixed-methods study combining quantitative and qualitative approaches through surveys and case studies (Kurniawati & Rindrayani, 2025). This study employs a sequential explanatory design, in which data collection and analysis begin with quantitative data, followed by qualitative data to deepen the findings. This " " approach was chosen to gain a deeper understanding of the outcomes of implementing coaching management and financial management in athlete development at the basketball academy.

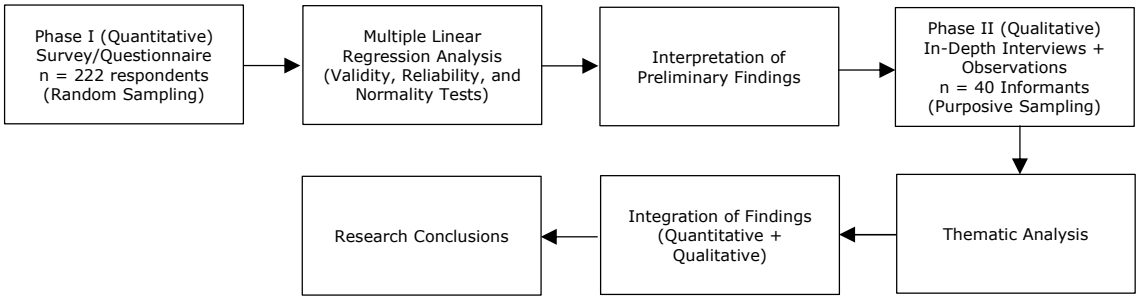

Figure 1. Sequential explanatory research design

The research was conducted from June to October 2025 at the Cirebon Region III Basketball Academy in West Java Province. Quantitative data were collected via a survey (questionnaire) to measure the effectiveness of coaching and financial management in athlete development at the basketball academy. Additionally, an analysis was conducted of the academy's financial reports, training programs, and management policies, while qualitative data was collected through in-depth interviews with coaches, academy management and administrators, athletes, parents/guardians of athletes, and sports experts or academics to understand the challenges and solutions related to coaching management and financial management. Furthermore, observations were conducted by directly observing the training process, coaching methods, and financial management of the basketball academy.

Research Data Analysis

Data analysis was conducted separately according to the research stages using both quantitative and qualitative approaches (mixed methods).

1. Quantitative Data

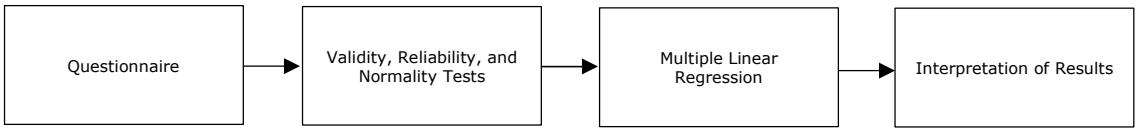

Figure 2. Quantitative data analysis

2. Qualitative Data

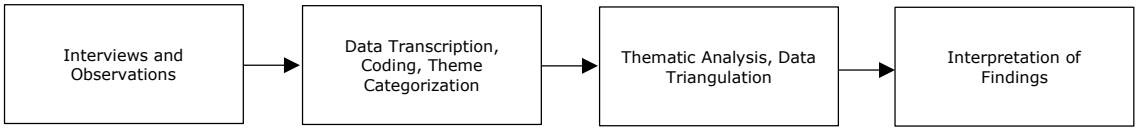

Figure 3. Qualitative data analysis

Quantitative data were analyzed using multiple linear regression to predict the effects of coaching and financial factors on athlete development outcomes. Qualitative data were analyzed thematically to identify patterns emerging from interviews and observations regarding barriers in coaching management, financial management, and the solutions implemented. To enhance the validity of the research findings, data triangulation was conducted by combining results from questionnaires, interviews, and observations.

FINDINGS AND DISCUSSIONS

Findings

1. Validity and Reliability Tests

This test was conducted using statistical analysis, specifically the Pearson Product-Moment Correlation Coefficient test, with data processed using SPSS. All data can be considered valid if the significance level is below 0.05.

Table 2. Validity test

Statement Item	Variable	Correlation Coefficient	Table r Value (n=20)	Notes
Statement 1	Training Management	0.852	0.4444	Appropriate/Valid
Statement 2		0.874		Correct/Valid
Statement 3		0.847		Correct/Valid
Statement 4		0.802		Correct/Valid
Statement 5		0.816		Correct/Valid
Statement 1	Financial Management	0.820	0.444	Accurate/Valid
Statement 2		0.862		Agrees/Valid
Statement 3		0.830		Correct/Valid
Statement 4		0.782		Correct/Valid
Statement 5		0.872		Correct/Valid
Statement 1	Athlete Development at the Basketball Academy	0.765	0.444	Appropriate/Valid
Statement 2		0.710		Agrees/Valid
Statement 3		0.903		Correct/Valid
Statement 4		0.785		Accurate/Valid
Statement 5		0.772		Conforming/Valid

As shown in the table above, the table r value for N = 20 with a 5% significance level is 0.444. This is compared with the calculated r values derived from the SPSS output. Since all calculated r values are greater than 0.4444—in accordance with the decision-making criteria—it can be concluded that all statement items are **valid**.

Table 3. Reliability test

Variable	Number of Items	Reliability Coefficient (*Cronbach's Alpha*)	Description
Coaching Management	5	0.814	Reliable
Financial Management	5	0.813	Reliable
Athlete Development at a Basketball Academy	5	0.802	Reliable

Based on the table above, there are 15 items with Cronbach's alpha values all greater than 0.60. In accordance with the decision-making criteria, it can be concluded that all items are deemed **reliable**.

2. Normality Test

Table 4. Normality test of coaching management and athlete development at the basketball academy

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		222
Normal Parameters [a, b]	Mean	.0000000
	Standard Deviation	2.25890286
Most Extreme Differences	Absolute	.051
	Positive	.051
	Negative	-.039
Test Statistic		.051
Asymptotic Significance (2-tailed)		.200[c,d]

a. The test distribution is normal.
b. Calculated from the data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

As shown in the table above, the test statistic is 0.051, which matches the result obtained manually. Furthermore, the Asymp. Sig. (2-tailed) is 0.200 > 0.05, so H_0 is accepted. Therefore, coaching management for athlete development at the Basketball Academy follows a normal distribution.

Table 5. Normality test of financial management in relation to athlete development at the basketball academy

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		222
Normal Parameters [a, b]	Mean	.0000000
	Standard Deviation	2.25842183
	Absolute	.052
	Positive	.052
	Negative	-.039
Test Statistic		.052
Asymptotic Significance (2-tailed)		.200[c,d]

a. The test distribution is normal.
b. Calculated from the data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

As shown in the table above, the test statistic is 0.052, which matches the result calculated manually. Furthermore, the Asymp. Sig. (2-tailed) is 0.200 > 0.05, so H0 is accepted. Therefore, financial management for athlete development at the Basketball Academy follows a normal distribution.

3. Multiple Linear Regression Test

Table 6. Multiple linear regression test: model summary output

Model	Summary R	R-Square	Adjusted R-Square	Standard Error of the Estimate
1	1.000[a]	.999	.999	.067

a. Predictors: (Constant), Financial Management (X2), Coaching Management (X1)

Based on the SPSS "Model Summary" output table, the coefficient of determination, or R-squared, is 0.999, which is equivalent to 99.9%. This means that the variables Coaching Management and Financial Management, in, together account for 99.9% of the variation in the Athlete Development variable. The remaining 0.1% (100% - 99.9% = 0.1%) is influenced by other variables not examined in this study.

Table 7. Multiple linear regression test: anova output

Model		ANOVA[a] Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1136.128	2	568.064	125,769.297	.000[b]
	Residual	.989	219	.005		
	Total	1,137.117	221			

a. Dependent Variable: Athlete Development (Y)
b. Predictors: (Constant), Financial Management (X2), Coaching Management (X1)

As shown in the "ANOVA" output table, the significance value (Sig.) in the F-test is 0.000 < 0.05. Based on the decision criteria for the F-test, it is concluded that Coaching Management and Financial Management together have a significant effect on Athlete Development. Thus, the requirements for interpreting the coefficient of determination in multiple linear regression analysis have been met.

Table 8. Multiple linear regression test: coefficients output

Model		Coefficients [a] Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	T	Sig.
1	(Constant)	-.052	.056		-.932	.352
	Coaching Management (X1)	.002	.001	.002	1,184	.238
	Financial Management (X2)	1,000	.002	1,000	499,696	.000

a. Dependent Variable: Athlete Development (Y)

The results of the regression equation reveal the following findings:

1. As shown in the "Coefficients" output table, the significance value (Sig.) for the Coaching Management variable is 0.238 > the probability of 0.05; therefore, it can be concluded that H1 (the first hypothesis) is rejected. This means that Coaching Management has no effect on Athlete Development.
2. As shown in the "Coefficients" output table, the significance value (Sig.) for the Coaching Management variable is 0.000 < the probability of 0.05; therefore, it can be concluded that H2 (the second hypothesis) is accepted. This means that Financial Management has an effect on Athlete Development.
3. The "Coefficients" table provides information about the regression equation and examines whether the variables of coaching management and financial management, individually, have an effect on the athlete development variable.

4. Results of Observations and Interviews

Observations and interviews were conducted with 1) Coaches (head coach, assistant coaches, specialist coaches) at the basketball academy; 2) Management and Administration of the Academy (academy director, operations manager, finance manager) ; 3) Athletes (primarily those who have been in training for at least one year); 4) Parents/guardians of athletes regarding funding and external support; 5) Sports experts or academics (to provide perspectives on coaching and financial management) from October 1 to 31, 2025. The following data was obtained:

1. Informant 1 – Coaches (head coach, assistant coaches, specialist coaches) at the basketball academy

   Based on the results of observations and interviews conducted from October 1–11, 2025, involving 6 (six) representatives of coaches (head coaches, assistant coaches, specialist coaches) at basketball academies in Region III Cirebon, such as: GMC Cirebon, Sagara Basketball Academy, Ranggajati Basketball Academy, Blluser Basketball Club, BMS Majalengka, LDA Indramayu, the researcher found that several informants explained that the coaching management already has an organizational structure, but it is not yet functioning optimally. Furthermore, coordination among coaches is often spontaneous and not based on a structured training program. Training programs are designed based on ability and age groups, but they do not yet fully implement sport science-based training periodization. Athlete evaluations are still conducted through direct observation without standardized instruments. In addition, the most significant obstacles cited were limited facilities, varying levels of commitment to training among

athletes, and a lack of financial support from management. Nevertheless, coaches are striving to adapt to these conditions and hope for improvements in infrastructure and coaching training so that athlete development can be conducted more professionally.

2. Informant 2 – Academy Management and Administrators (academy director, operations manager, finance manager)
   Based on the results of observations and interviews conducted from October 12–22, 2025, involving 6 (six) representatives of the Academy Management and Administrators (academy director, operations manager, finance manager) at the Cirebon Region III Basketball Academy, including: GMC Cirebon, Sagara Basketball Academy, Ranggajati Basketball Academy, Blluser Basketball Club, BMS Majalengka, and LDA Indramayu. The researcher obtained information from several informants that academy management and administrators explained that training planning is fully coordinated with the coaches, while management focuses on its assigned tasks, such as administration, financing, and communication with parents. However, synchronization between the technical and administrative sides is still not functioning optimally. Basketball academies remain heavily reliant on athlete tuition fees, which is why their financial conditions remain unstable. Financial reporting is conducted only internally and is not yet routinely provided to parents in a formal manner. Management emphasizes that collaboration with sponsors is essential for the sustainability of the basketball academy so that it can support athletic achievements in line with the academy's goals.
3. Informant 3 – Athletes (primarily those who have participated in training for at least one year)
   Based on the results of observations and interviews conducted from October 24–31, 2025, involving 10 athlete representatives (primarily those who have been in training for at least one year) at basketball academies in Region III Cirebon, such as: GMC Cirebon, Sagara Basketball Academy, Ranggajati Basketball Academy, Blluser Basketball Club, BMS Majalengka, LDA Indramayu, the researcher found that several informants explained that athletes felt the training provided was quite helpful for developing their playing techniques, but physical and mental training had not yet become a primary focus. Coaches often provided feedback only after games or when mistakes were made. The obstacles faced by athletes included limited availability of facilities and equipment, as well as a lack of competitions as opportunities for self-development. Athletes hoped for a more structured training system and open dialogue between athletes and coaches regarding performance progress.

4. Informant 4 – Parents/guardians of athletes regarding funding and external support.
   Based on the results of observations and interviews conducted from October 24–31, 2025, involving 10 athlete representatives (primarily those who have participated in training for at least one year) at basketball academies in Region III Cirebon, such as: GMC Cirebon, Sagara Basketball Academy, Ranggajati Basketball Academy, Blluser Basketball Club, BMS Majalengka, LDA Indramayu. Researchers found that several informants explained that parents considered communication regarding membership fees to be clear, but the use of funds lacked transparency due to the absence of periodic reports. They felt their children's progress was satisfactory but hoped for scheduled reports on the athletes' performance. According to them, the main obstacle was a lack of facilities and external support, leading parents to hope for the involvement of sponsors or the government to help alleviate the financial burden.
5. Informant 5 – Sports expert or academic (to provide perspectives on coaching and financial management)
   Based on the results of observations and interviews conducted from November 1–7, 2025, involving 8 (eight) sports experts or academics (to provide perspectives on coaching and financial management) at basketball academies in Region III Cirebon, such as: Faculty members from Muhammadiyah University of Cirebon, CIC University, Kuningan University, Swadaya Gunung Jati University, Majalengka University, Muhammadiyah Kuningan University, 17 August 1945 University of Cirebon, and Nahdlatul Ulama University of Cirebon, the researchers found that several informants explained that the experts assessed that coaching management at regional-level sports academies has not yet implemented scientific training standards. Coaches must be provided with tiered competencies and certifications appropriate to player categories. From a financial perspective, academies need to implement transparency and accountability as the foundation for building public trust and attracting sponsors. Experts recommend the implementation of the LTAD model and report-based financial governance.

Table 9. Synthesis of major barriers

Dimension	Main Obstacles
Coaching	Limited facilities, lack of coordination among coaches; performance evaluations lack standardization
Athletes	Motivation and consistency in training vary; access to competitions is limited
Finances	Depends on membership fees; minimal sponsorship; financial reports lack transparency
Management	Structure is not yet solid; policy communication is often undocumented

External Support	Parent and external stakeholder involvement remains low

Table 10. Recommended Solutions

Indicator	Solution
Coaching Management	LTAD-based programs; coach certification; performance evaluation SOPs
Facilities & Equipment	Collaboration with schools/communities for access to fields
Funding	Local sponsorships; internal championship events; community crowdfunding
Transparency	Regular reporting for parents (performance & financial dashboard)
Athlete Development	Sports psychology, strength and conditioning, performance data

21 Based on the results of interviews with stakeholders involved in athlete development at the basketball academy, it can be concluded that coaching management and financial management are in place but are not yet professionally structured. A formal organizational structure exists, but coordination among coaches and communication with management remain informal, often leading to inconsistencies in policies and the implementation of training programs.

The training programs provided have taken into account the athletes' age and ability levels. However, they are not yet grounded in systematic periodization and sports science, so the evaluation of athlete performance in coaching practice is largely conducted through subjective observation and is not supported by standardized instruments (Saw et al., 2016; Jokuschies et al., 2017). These conditions are further exacerbated by limited training facilities, a lack of supporting equipment, and few opportunities to participate in competitions, all of which affect the overall quality of athletes' skill development. Academy funding still relies on athlete dues as the primary source of revenue. This makes the academy's financial stability vulnerable to disruption when payments are delayed. Transparency in financial management is considered suboptimal because there is no documented reporting mechanism that is routinely communicated to parents or external parties. A professional approach to financial management has not been fully implemented, thereby hindering efforts to secure sponsorship and collaboration from other parties.

The role and involvement of parents and external stakeholders in the development process are still perceived as minimal, so emotional, psychological, social, non-financial, and motivational support has not been fully utilized (Harwood & Knight, 2016; Tamminen & Holt, 2020; Knight et al., 2018). Nevertheless, the potential for the academy's development is considered to remain wide open if efforts are made to strengthen coaches' capacity, improve facilities, and enhance financial management tailored to the academy's

sustainability. Overall, the interview results indicate that the main challenges that must be addressed immediately are the professionalization of coaching, the standardization of athlete evaluations, and the improvement of transparency and diversification of funding sources. If these strategic steps are implemented, it is hoped that the athlete development system in basketball academies will become more effective, sustainable, and capable of producing better athletic achievements at the regional and national levels.

Discussion

Based on the quantitative data, it was concluded that Coaching Management and Financial Management jointly have a significant impact on athlete development. Meanwhile, the qualitative data—based on the analysis of observations and interviews—indicates that the main challenges that must be addressed immediately are the professionalization of coaching, the standardization of athlete evaluation, and the improvement of transparency and diversification of funding sources. If these strategic steps are implemented, it is expected that the athlete development system at the basketball academy will become more effective, sustainable, and capable of producing better athletic achievements at the regional and national levels.

Athlete development involves nurturing athletic talent through structured training programs aimed at improving the athletes' performance, particularly in basketball. The management of basketball academies is crucial, especially regarding coaching management and financial management, as this ensures that athlete development is properly managed and that athletes can improve their performance in line with expected targets (Kariyawasam et al., 2019; Ochoa Martínez et al., 2014). Athlete development within basketball academies faces various challenges and solutions in their management. To maximize athlete development, it is essential to design an effective management system for basketball academies. Effective basketball academy management—as seen through coaching and financial management—ensures that the quality of athlete development and the growing demands for professionalism within the academy can be optimized (Russo et al., 2023). Planning, organizing, implementing, and evaluating are four key components that must be implemented synergistically to produce high-quality development (Naja & Priyanto, 2025).

Athlete development is a key element that is absolutely essential for all sports, particularly basketball. Coaching management and financial management are determining factors for improving athlete development in basketball academies (Lo et al., 2023). Although coaching management and financial management are indirect factors, the presence of coaching management and financial management in basketball academies is beneficial in ensuring that activities are carried out in a more focused manner. Coaching management and financial management require a combination of core

competencies, such as strategic planning, resource organization, team leadership, operational control, budget management, and performance evaluation (Ma et al., 2023; Owoeye, 2010).

Coaching management is evolving in Europe through the use of data analytics and machine learning in performance evaluation, GPS-based monitoring, biometrics, and video analysis, as well as evidence-based training programs to support performance optimization and coaching decision-making (Bunker & Susnjak, 2022; Cummins et al., 2016; Claudino et al., 2019; Gerke et al., 2022). Sports clubs are now managed like revenue-generating enterprises—through broadcasting rights, sponsorships, merchandise, and ticketing—making sports finance an integral part of the sports industry system (Abdullah & Abdullah, 2025; Custodio et al., 2024; Haïdara et al., 2023; Pelamonia & Puriana, 2023). In Indonesia, however, coaching management remains suboptimal, with training methods that lack variety, insufficient integration of sports science, and an inconsistent development system (Alim, 2020). Furthermore, sports financial management in Indonesia still relies on the national and regional budgets (APBN/APBD) and limited sponsorships (Perdana et al., 2018).

Currently, coaching management and financial management in Region III Cirebon have not yet been fully implemented to their full potential; however, with coaching and financial management that meet expectations, this will lead to improved performance at the Basketball Academy in the development of high-performing athletes. Every basketball academy has a program designed to improve its athletes' performance. This demonstrates that coaching management and financial management are critical needs within basketball academies.

Limitations

As indicated by the findings of this study and corroborated by other research, an in-depth examination of coaching management and financial management in athlete development at basketball academies must be addressed immediately through the professionalization of coaching, the standardization of athlete evaluations, and increased transparency and diversification of funding sources. These findings are highly beneficial for stakeholders involved in athlete development at basketball academies, as they can help make the athlete development system at these academies more effective, sustainable, and capable of producing better athletic achievements at the regional and national levels. However, this study still has limitations that must be noted, including: (1) This study was conducted within a limited geographical scope, specifically at the " " Basketball Academy in Region III Cirebon; research results in other regions may differ due to varying characteristics. (2) The variables in this study

were limited to coaching management and financial management; other influencing factors—such as athletes' psychological aspects, family support, competition quality, and sports organization policies—have not been analyzed in depth (Schinke et al., 2018; Gucciardi et al., 2017; Maciel et al., 2021). Therefore, future research is expected to expand the scope of the study and include additional variables to provide a more comprehensive picture of athlete development at basketball academies in Indonesia.

CONCLUSION

Based on the results of this study, it is concluded that coaching management and financial management jointly have a significant impact on athlete development. If addressed through the professionalization of coaching, standardization of athlete evaluation, and increased transparency and diversification of funding sources, the athlete development system at basketball academies can become more effective, sustainable, and capable of producing better athletic achievements. The implementation of these research findings can serve as a foundation for developing athlete development policies based on professional governance management at basketball academies. Furthermore, this study contributes to the advancement of sports management research, particularly regarding the integration of coaching management and financial management to support successful athlete development. It is therefore recommended that coaching management and financial management be prioritized in the administration of athlete development programs at basketball academies.

ACKNOWLEDGMENTS

Thank you to everyone who assisted with this research. Thank you to Universitas Muhammadiyah Cirebon for its support.

AUTHOR CONTRIBUTION STATEMENT

FK is fully responsible for the manuscript, data analysis, literature review, study conception and design, and data acquisition; RI is responsible for data analysis and interpretation, manuscript preparation, and securing funding.

AI DISCLOSURE STATEMENT

Not using AI in the process.

CONFLICTS OF INTERES

Have no conflict of interest.