



Analysis of Rock Climbing Sport in East Tanjung Jabung Regency

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Abstract

Rock climbing has significant potential for sports achievement, but athlete development in regional organizations faces challenges related to coaching, facilities, funding, and organizational management. This study aims to analyze the management of athlete development at the Indonesian Rock Climbing Federation (FPTI) of East Tanjung Jabung Regency and identify internal and external factors influencing its development. A qualitative descriptive approach was employed, involving ten purposively selected informants consisting of five administrators, one coach, and four athletes. Data were collected through in-depth interviews, observation, and documentation and analyzed using the Miles and Huberman model. Data credibility was strengthened through source and method triangulation. SWOT analysis was used to identify internal and external factors and formulate development strategies. The findings show that FPTI East Tanjung Jabung has achieved competitive results in regional and provincial championships, but continues to face limited licensed coaches, inadequate facilities, particularly the absence of a boulder wall, limited funding, low community participation, and organizational coordination challenges. The proposed strategies include strengthening coach capacity, improving facilities, expanding government and private-sector partnerships, developing individualized training programs, increasing public participation, and utilizing digital communication to improve organizational coordination.

Keywords: sport climbing; athlete development; regional sport organization; qualitative research; SWOT

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A. Introduction

Sports play a vital role in human life by not only supporting physical and mental health but also generating competitive achievement. Rock climbing is one such achievement sport that has gained increasing recognition in Indonesia. It is governed by the Indonesian Rock Climbing Federation (Federasi Panjat Tebing Indonesia/FPTI), which has branches at the district and city level across the country.

Based on Indonesia's Law No. 11 of 2022 on the National Sports System, sport is defined as a systematic activity aimed at fostering, developing, and building individual physical, mental, and social potential. Rock climbing, as an achievement sport, requires structured management to reach optimal results. As Azziz and Kumaat (2020) noted, sport achievement development must be planned, tiered, and continuous through competition in order to reach optimal outcomes.

Sports management constitutes a fundamental component of athletic achievement development because sustainable performance depends not only on athletes' technical abilities but also on effective planning, organizing, staffing, directing, and monitoring/evaluation. FPTI East Tanjung Jabung Regency was officially established in 2011 under KONI East Tanjung Jabung Regency and has

participated in various regional competitions, producing athletes who achieved podium finishes in events such as the 2013, 2018, 2019, 2022, 2023, and 2024 championships. However, despite these achievements, the development of rock climbing in the region continues to face challenges, including limited public awareness, difficulties in recruiting and retaining young athletes, limited facilities and funding, and constraints in coordination between administrators, coaches, and athletes. These conditions indicate the need to examine the management of athlete development more systematically. Therefore, this study focuses on analyzing the implementation of planning, organizing, staffing, directing, and monitoring/evaluation within FPTI East Tanjung Jabung Regency to identify how these management functions support athlete development and what factors hinder the sustainability of the coaching process.

Preliminary observations revealed several challenges, including suboptimal management and athlete development, limited funding and facilities, low public interest in rock climbing, and insufficient coordination among administrators, coaches, and athletes. Although FPTI East Tanjung Jabung Regency has achieved medals in several competitions, the

available performance data indicate fluctuations and a lack of consistent achievement between 2013 and 2024, suggesting that the existing management and athlete development system requires further evaluation and improvement.

This study aims to analyze the management of rock climbing athlete development at FPTI East Tanjung Jabung Regency through five management functions: planning, organizing, staffing, directing, and monitoring/evaluation. The study also compares the perspectives of key stakeholder groups, including administrators, coaches, and athletes, to identify similarities, differences, and gaps in the implementation of athlete development. Furthermore, the study uses evidence from these management dimensions and stakeholder perspectives to identify internal and external factors and formulate strategic alternatives through a SWOT analysis for improving organizational management and athlete development. Accordingly, the study addresses the following research questions: (1) How are planning, organizing, staffing, directing, and monitoring/evaluation implemented in athlete development at FPTI East Tanjung Jabung Regency? (2) How do administrators, coaches, and athletes perceive the implementation and effectiveness of these management functions?.

B. Methods

This study employed a qualitative descriptive research approach. According to Creswell (in Ardiansyah et al., 2023), qualitative research aims to obtain an in-depth understanding of social phenomena by interpreting the context, experiences, and perspectives of individuals involved. The descriptive approach was used to portray the management of rock climbing and athlete development at FPTI East Tanjung Jabung Regency as it actually occurs in the field. The study focused on five management functions: planning, organizing, staffing, directing, and monitoring/evaluation. Data were obtained from administrators, coaches, and athletes to compare perspectives among stakeholder groups and identify similarities and differences in the implementation of athlete development. The findings were subsequently analyzed to identify internal and external factors and formulate strategic alternatives using a SWOT framework.

The research was conducted at GOR Paduka Berhala, Parit Culum I Village, Muara Sabak Barat Sub-district, East Tanjung Jabung Regency, Jambi Province, Indonesia, from January 20 to 27, 2025. The participant pool consisted of 28 FPTI members: 15 athletes (8 male and 7 female), 12 administrators, and 1 coach.

Using purposive sampling, 10 informants were selected, comprising 5 administrators, 1 coach, and 4 athletes (2 male and 2 female). Informants were selected based on their active involvement in FPTI management, coaching, or athlete development, with athletes required to have participated in at least one official rock climbing competition within the previous year. The four athletes were selected to reflect variation in gender and competitive experience, while the remaining members were not interviewed because they did not meet the inclusion criteria or were not required to provide additional information relevant to the study.

Data were collected through semi-structured in-depth interviews, direct observation, and document analysis. Interviews with all 10 informants addressed five management functions—planning, organizing, staffing, directing, and monitoring/evaluation—as well as factors relevant to SWOT analysis. Observations focused on training activities, coach-athlete interactions, facilities, equipment, and organizational coordination, while documentary analysis covered organizational records, competition results, equipment inventories, and funding records. Data credibility was established through source

triangulation by comparing the perspectives of administrators, coaches, and athletes, and methodological triangulation by comparing interview, observation, and documentary evidence. These procedures enabled the study to identify consistent findings as well as differences among stakeholder perspectives regarding rock climbing management and athlete development at FPTI East Tanjung Jabung Regency.

Data analysis followed the interactive model of Miles and Huberman (in Wekke et al., 2020), comprising three concurrent stages: data reduction (selection and simplification of raw field notes), data presentation (organizing information into narrative text), and conclusion drawing with verification. SWOT analysis was applied as a structured framework to identify internal factors (Strengths and Weaknesses) and external factors (Opportunities and Threats) affecting FPTI's athlete development, and to generate strategic alternatives using the SO, ST, WO, and WT quadrant approach (Riyanto et al., 2021).

C. Result and Discussion

Result

1. Athlete Development Management

The findings indicate that FPTI East Tanjung Jabung Regency conducts regular

training sessions every Saturday and Sunday from 14:30 to 17:30, covering physical conditioning, technical skills, tactical preparation, and mental development. Coaches prepare both short-term daily training programs and long-term development plans, while training camps (TC) are organized before major competitions to intensify athletes' preparation and optimize performance..

The organization has demonstrated gradual progress, with athletes achieving medals in Provincial Championships (Kejurprov) and Provincial Sports Week (Porprov) competitions. However, despite these achievements, systemic challenges remain across five key management dimensions: planning, organizing, staffing, directing, and monitoring/evaluation:

The findings identified several management challenges at FPTI East Tanjung Jabung Regency. In terms of human resources, only two coaches held official licenses, limiting the capacity to provide individualized training, while most administrators had occupations outside FPTI, which restricted their availability for organizational duties. Regarding facilities, FPTI had lead and speed climbing walls, but no boulder wall, while several ropes, harnesses, and climbing shoes were reported to require replacement based on their condition and use. Training programs were conducted

regularly and covered physical, technical, tactical, and mental components; however, implementation was affected by weather conditions and the absence of a systematic athlete-progress evaluation system. Funding was primarily provided by KONI at approximately IDR 30 million annually, supplemented by support from PetroChina and local businesses, but remained limited for facility maintenance, equipment replacement, and competition participation. Internal coordination was mainly conducted through WhatsApp, while face-to-face meetings were limited by the different schedules of administrators, coaches, and athletes. These findings indicate that the main management issues concern human-resource capacity, facility and equipment conditions, program evaluation, financial capacity, and organizational coordination.

Based on triangulated interview, observation, and documentary evidence, the SWOT analysis identified six strengths: structured training programs, existing lead and speed walls, regular KONI support, a supportive organizational culture, athletes' competition experience and provincial achievements, and competition-related welfare support. The main weaknesses were limited licensed coaches, incomplete and aging facilities and equipment, limited administrator availability, insufficient systematic athlete

evaluation, limited youth participation, and weather-related interruptions. Relevant external opportunities included potential partnerships with government agencies, corporations, sponsors, and the provincial FPTI board; access to coach-development programs and competitions; and increasing public exposure to rock climbing through community and school activities. The main threats were competition from better-resourced FPTI branches, uncertainty in

supplementary sponsorship, limited public awareness of rock climbing, competing professional commitments among administrators, and weather conditions that may disrupt outdoor training. These SWOT factors were derived by comparing evidence from administrators, coaches, athletes, observations, and organizational documents, and were subsequently used as the basis for formulating TOWS strategic alternatives.

Tabel 1. SWOT Matrix of FPTI East Tanjung Jabung Regency

Internal / External	Strengths (S)	Weaknesses (W)	Notes
Opportunities (O)	S-O Strategy: Leverage strengths to capitalize on opportunities expand coach training, strengthen external partnerships, improve infrastructure and individualized training programs.	W-O Strategy: Address weaknesses by exploiting opportunities increase licensed coaches, add boulder wall, diversify funding, and use digital tools for coordination.	Growth strategy
Threats (T)	S-T Strategy: Use strengths to counter threats strengthen inter-agency networks, increase sponsor partnerships for stable funding, and intensify competition preparation.	W-T Strategy: Minimize weaknesses to avoid threats add licensed coaches, diversify funding sources, run youth outreach programs, build indoor facilities.	Defensive strategy

Source: Research data, 2025

Discussion

The findings of this study are consistent with previous research on the management of achievement-oriented sports in regional Indonesian organizations while providing a more specific description of how management functions interact with athlete development at the local level. Regarding

human resources, the shortage of licensed coaches at FPTI East Tanjung Jabung Regency is consistent with Saputro and Nurrachmad (2023), who identified similar limitations in rock climbing development in Banjarnegara Regency. Nadeak (2019) also emphasized the importance of human resources in organizational development. In

the present context, the findings indicate that increasing the number and competence of coaches should be accompanied by clearer allocation of coaching responsibilities and more systematic athlete development. Regarding facilities, the absence of a boulder wall and the condition of some equipment limit the comprehensiveness of training. Rather than assuming that all three wall types are mandatory for every regional organization, the findings should be interpreted in relation to the competition disciplines targeted by FPTI and the applicable technical standards. This supports the findings of Santoso and Rahayu (2023) that adequate sports facilities and infrastructure are important supporting factors in athlete development.

The funding limitations, particularly the approximately IDR 30 million annual KONI allocation, are also consistent with previous studies identifying financial capacity as an important factor in regional sports development. Indonesia's Law No. 11 of 2022 recognizes shared responsibility among government, business entities, and the community in supporting sports development. However, alternative funding mechanisms such as sponsorship or crowdfunding should be considered as potential strategies rather than established solutions, as their feasibility and accountability requirements were not

directly examined in this study. The SWOT analysis further indicates that FPTI East Tanjung Jabung Regency possesses internal strengths and weaknesses as well as external opportunities and threats that should be addressed simultaneously. Because the present study did not apply quantitative weighting or stakeholder prioritization, the identified SO strategies—including coach development, multi-stakeholder partnerships, infrastructure improvement, and individualized training—should be interpreted as strategic alternatives rather than as a ranked or superior strategy. The study's contribution lies in linking these SWOT factors directly to five management functions—planning, organizing, staffing, directing, and monitoring/evaluation—thereby providing a more operational framework for understanding athlete development in a regional rock climbing organization. In addition, the findings suggest that community engagement through school outreach and introductory climbing activities may help address limited public awareness and youth participation, although the effectiveness of such interventions requires further evaluation.

D. Conclusion

This study concludes that FPTI East Tanjung Jabung Regency has established an ongoing athlete development

system and has achieved measurable results through medals at provincial-level competitions. However, the findings also identify persistent management challenges across planning, organizing, staffing, directing, and monitoring/evaluation, particularly the limited number of licensed coaches, inadequate and aging equipment, limited funding, low youth participation, and constraints in organizational coordination. The main contribution of this study is the integration of these management dimensions with SWOT analysis to provide an evidence-based description of the organizational conditions affecting athlete development at the regional level. The SWOT findings identify internal strengths and weaknesses as well as external opportunities and threats; however, because the factors were not quantitatively weighted, the study does not establish a priority ranking among the resulting strategies.

Based on the findings, the recommended strategic directions are translated into four implementation areas: (1) human-resource development, through coach licensing and continuous training, coordinated by FPTI management within the short-to-medium term; (2) facility and equipment improvement, particularly the assessment, replacement, and addition of training equipment and facilities, supported

by FPTI, KONI, and potential partners within the medium term; (3) organizational coordination and athlete development, through clearer communication procedures, individualized training plans, and systematic athlete-progress evaluation, led by administrators and coaches on an ongoing basis; and (4) athlete recruitment and financial sustainability, through school/community outreach and the development of accountable partnerships with government and private-sector stakeholders. These actions should be monitored using indicators such as the number of licensed coaches, equipment condition, athlete retention, training participation, competition participation and results, funding sources, and completion of athlete evaluations. The study is limited by its small purposive sample of 10 informants, its one-week fieldwork period, and its reliance on participants directly involved in FPTI, which may introduce insider or selection bias. Therefore, the findings should be interpreted within the context of FPTI East Tanjung Jabung Regency and should not be assumed to represent all FPTI branches. Future research could include parents, community members, and other external stakeholders and employ IFE/EFE matrices or other participatory prioritization methods to quantitatively assess and prioritize strategic

factors.

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F. Conflict of Interest

The authors declare no conflict of interest in the conduct or reporting of this research.

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