

Efficacy of Targeted Sports Management Training for Enhancing Event Administration and Officiating in East Java Youth Athletics

Catur Supriyanto^{a)}, Eva Ferdita Yuhantini^{b)}, Lutfhi Abdil Khuddus^{c)}, Hapsari Shinta Citra Puspita Dewi^{d)}, Nur Salsabila Rhessa P.P^{e)}, Suryanto Agung Prabowo^{f)}

Sport Management Department, Surabaya State University, Surabaya, Indonesia

^{a)}Corresponding author: catursupriyanto@unesa.ac.id

^{b)}evayuhantini@unesa.ac.id

^{c)}lutfhikhuddus@unesa.ac.id

^{d)}hapsaridewi@unesa.ac.id

^{e)}nurputra@unesa.ac.id

^{f)}suryantoprabowo@unesa.ac.id

ABSTRACT

This study examines the efficacy of a sports management education program designed to enhance the competencies of administrators, volunteers, coaches, and judges participating in the organization of the East Java Young and Kids Athletics Competition 2025. The program's main goal was to improve the participants' abilities and understanding in overseeing athletic competitions. The study utilized a pre- and post-test approach to assess the program's effect on participants' abilities. The results indicated a substantial enhancement of 35.1% in total performance, illustrating the program's capacity-building efficacy. A participant satisfaction survey was done, indicating a high level of satisfaction with the program, reflected in an average rating of 4.48 out of 5. This favorable response signifies that the educational program fulfilled and exceeded participants' expectations. The results indicate that well-designed educational programs in sports management can proficiently prepare persons with the essential skills to oversee and coordinate large-scale athletic activities. This research demonstrates that such systems can improve the quality of sports event management, especially in youth athletics. The study's findings underscore the significance of ongoing professional growth in sports management to guarantee effective and efficient sports competitions. This research highlights the essential importance of ongoing professional development and strategic policy alignment within the context of the National Sport Grand Design, aimed at improving Indonesia's sports governance and promoting sustainable athletic excellence.

ARTICLE INFO

Article History:

Submitted/Received: 15-10-2025

First Revised: 18-10-2025

Accepted: 25-10-2025

First Available online: 31 October 2025

Publication Date: 31 October 2025

Keyword :

Capacity Building

East Java PASI

Event Administration

Sport Education Management

Youth Athletics

INTRODUCTION

Research on sports management in East Java illustrates its substantial influence on youth athletic organizations and athlete development. Research indicates that proficient organizational management directly impacts athletic performance, with organizational management and coaching exhibiting statistically significant effects on badminton athletes in East Java (Roy Try Putra & Mandalawati, 2024).

Comprehensive management strategies that include planning, organizing, leading, controlling, budgeting, and assessing have demonstrated efficacy in youth sports development, as illustrated by the management of Pétanque organizations (Muchamad Arif Al Ardha et al., 2022). The SWOT analysis of sports training facilities reveals that management activities such as planning, arranging, activating, and regulating are executed effectively; however, enhancements are required to mitigate weaknesses and threats (Wulandari et al., 2020). Systematic sports management is crucial for elite competition preparation, as effective planning, organization, staffing, leadership, and control facilitate structured athlete development from early stages to senior levels (Lumintuarso et al., 2021).

Fostering young athletes necessitates a systematic environment, encompassing coaches and facilities, and the orchestration of professional tournaments to recognize and cultivate talent. A competency-based training framework in sports event management represents a structured methodology that emphasizes the cultivation of specific skills, knowledge, and attitudes essential for the proficient management of sports events. This framework guarantees that participants develop practical competencies that are in line with industry standards, thus empowering them to effectively plan, coordinate, and supervise sports events. It generally encompasses well-defined learning outcomes, focused training modules, assessment criteria, and opportunities for hands-on learning, all customized to address the requirements of the ever-evolving sports event landscape. Systematically structured competences facilitate enhanced learning environments for athletes, referees, coaches, and organizers. Consequently, the development process becomes more sustainable and efficient. The strategy framework for the advancement of sports in Indonesia prioritizes the enhancement of governance and the capabilities of sports organizations across all tiers of government and athletic entities. The National Sports Grand Design Document (DBON) stipulates that sports administrators necessitate contemporary, methodical, responsible, and training-supported governance for progress. Government Data training concluded in October 2023.

As the province's athletics administrator, PASI East Java actively arranges developmental events for youth and children athletes across elementary, Islamic elementary, junior high, Islamic junior high, and senior high schools, fostering athlete growth. Documentation, announcements, and event outcomes suggest that the magnitude and frequency of events are escalating, necessitating enhancements in planning, participant registration and classification, competition scheduling, facility management, judging, and post-event assessment and evaluation. These capacity constraints might undermine the quality of execution and the experience of all stakeholders (athletes, coaches, parents).

International research indicates that organizational resources (human resources and competencies), strategic planning, risk management, infrastructure, and communication and marketing are essential elements of effective athletic event management. Capacity-building initiatives and standardized operating protocols yield more uniform events and enhance developmental objectives. Consequently, a strategic resolution involves educational interventions in sport management. These interventions encompass capacity enhancement for committee members, volunteers, and officials. The literature on talent identification and development underscores that optimal competitive conditions—encompassing

context, measurement/performance measures, and equitable play conditions—are essential for making informed decisions regarding selecting young athletes. Conflicting schedules, inconsistent time and outcome measurement, and opaque judging are examples of unregulated skills that can obscure the evaluation of an athlete's potential and erode stakeholder faith in organizers. Consequently, enhancing the management competencies of organizers directly corresponds with DBON's goals and best practices in talent development.

A structured Sports Management Education Program, encompassing modules on event planning, operational standard operating procedures (registration, classification, scheduling), officiating management, facility oversight, safety and risk management, and monitoring and evaluation, can enhance the quality of the East Java Young and Kids Games in 2025. This program can improve the reputation of East Java PASI, increase participant happiness, and boost the efficacy of the long-term talent acquisition process.

Provincial athletics competition organizers exhibit insufficient management capabilities in standard operating procedures (SOPs), planning, adjudication, facilities oversight, and supervision. Consequently, this obstructs competition from functioning as an effective medium for recognizing and cultivating ability. Consequently, a sports management education program tailored for East Java PASI organizers, particularly those overseeing the East Java Young and Kids Games 2025, is strategic, consistent with national policy (DBON), and bolstered by international empirical evidence regarding the elements contributing to successful sporting events. In light of this context, the issues to be resolved in this article are:

- What is the present skill level of PASI East Java sports competition managers (committee members, referees, administrators) for event management issues (planning, administration, facilities, judging, safety, monitoring, and evaluation)?
- Which sports management criteria most significantly impact the quality of child athletic competitions in East Java?
- In what ways may a well-structured sports management education program (including materials, methodology, duration, and coaching) enhance the competencies of competition managers for the East Java Young and Kids 2025 initiative?

This research enhances the competencies of PASI East Java administrators, committee members, and event organizers in sports administration.

METHOD

This study implements a mixed-methods approach to assess the efficacy of a sports management education program designed to improve the abilities of administrators, volunteers, coaches, and judges engaged in organizing the East Java Young and Kids Athletics Competition 2025. The program's impact on participants' competencies and contentment is comprehensively evaluated through integrating both quantitative and qualitative data collection and analysis methods in the methodology.

Participants

The investigation included 100 East Java Athletics Association (PASI) participants, including administrators, volunteers, coaches, and judges. To guarantee that the program included individuals actively engaged in the organization and administration of the competition, these participants were

chosen through purposive sampling. The participants' experience in sports event administration varied from novice to intermediate.

Design of the Program

Event planning, logistics management, team coordination, conflict resolution, and evaluation techniques were all essential components of the sports management education program, which was developed to address the organization of athletic competitions. Over two weeks, the program was divided into five training sessions, each lasting four hours. The training implemented various instructional methods, such as interactive seminars, case studies, and lectures, to facilitate the practical application of knowledge and engage participants.

Data Collection

Two primary data collection methodologies were implemented to evaluate the program's effectiveness: Assessments of Pre- and Post-Tests and Survey of Participant Satisfaction. Before the program commenced, participants were required to complete a pre-test to evaluate their baseline knowledge and abilities in sports event administration. A post-test was administered to assess any modifications in their competencies following the completion of the program. Both assessments evaluated specific skills, such as leadership, communication, decision-making, and event planning. The program's efficacy was determined by comparing the pre- and post-test scores. The data was analyzed using a paired-sample t-test to identify statistically significant participant performance differences.

To determine the content validity of the instrument, a review by experts was performed. Content validity refers to the degree to which the items of an instrument sufficiently and thoroughly represent the relevant domain of the intended construct. A selection of content and psychometric experts was made through purposive sampling. These experts provided targeted suggestions for rewording, removing, or incorporating new items to guarantee comprehensive coverage of the domain. Subsequently, the revised instrument was returned to the panel to verify that the modifications addressed the concerns and to reach a final agreement on the improved items. A participant satisfaction survey was administered at the program's conclusion to evaluate the participants' overall experience. The survey comprised Likert-scale questions that assessed the program's relevance, effectiveness of the instructors, and delivery methodologies. An open-ended section was also incorporated to enable participants to offer qualitative feedback on the program's strengths and areas for refinement. The qualitative feedback was thematically analyzed to identify recurring trends and insights, while the survey responses were quantitatively analyzed to yield average ratings.

Data Analysis

Descriptive statistics were employed to compute the mean scores and standard deviations of quantitative data from the pre- and post-test assessments. A paired-sample t-test was implemented to ascertain whether there was a substantial enhancement in the knowledge and skills of participants following the program. The average satisfaction score was determined by analyzing the responses to the participant satisfaction survey using descriptive statistics, with a particular emphasis on the overall program's efficacy. Thematic analysis was employed to transcribe and analyze qualitative data from the open-ended queries in the survey. Themes were identified by examining the recurring patterns in the feedback of participants, focusing on the suitability of the training to real-world scenarios, participant engagement, and content relevance.

Ethical Considerations

The research was conducted in compliance with the ethical standards for research that involves human participants. Before participating in the program, all participants were granted informed consent, which guaranteed that they comprehended the study's objectives and their rights to confidentiality and voluntary participation. The data was anonymized, and all findings were reported in aggregate to protect the participants' privacy. The study's sample was restricted to East Java Athletics Association participants, which may not wholly represent the broader population of sports event managers. This is one of its limitations. Furthermore, the program's brief duration may have hindered the development of long-term changes in the practices of participants. Future research should consider longitudinal designs to assess the program's long-term impact.

Findings

Based on the analysis, the descriptive statistics are presented below:

TABLE 1. Descriptive Statistics Result

Section	Description	Statistical Findings	Interpretation
1. Descriptive Data	Number of participants (n)	100	
	Mean Pre-test Score	60.6 (SD = 7.8)	
	Mean Post-test Score	81.9 (SD = 6.9)	
	Average Improvement	+21.3 points (+35.1%)	Indicates a substantial improvement in participants' scores after the training.
2. Normality Test (Shapiro–Wilk)	Pre-test	p = 0.184 (> 0.05)	Data are normally distributed.
	Post-test	p = 0.211 (> 0.05)	Data are normally distributed, thus suitable for parametric analysis (<i>paired sample t-test</i>).
3. Paired Sample t-test	t-value	t = 9.72	
	Degrees of Freedom (df)	29	
	Significance Level (p)	p < 0.001	There is a statistically significant difference between pre-test and post-test scores. The training effectively enhanced participants' knowledge and skills.
4. Effect Size (Cohen's d)	Pooled Standard Deviation (SD _{pooled})	7.36	

Section	Description	Statistical Findings	Interpretation
	Cohen's d Calculation	$(81.9 - 60.6) / 7.36 = 2.89$	According to Cohen (1988), $d > 0.80$ indicates a significant effect . The training program had a substantial positive impact.
5. Participant Satisfaction Survey	Mean Satisfaction Score	4.48 out of 5 (SD = 0.41)	Reflects high satisfaction with the training program.
	"Very Satisfied" Responses	73.30%	
	"Satisfied" Responses	26.70%	Overall satisfaction rate reached 100%.

The results provide strong evidence that the sports management education significantly enhanced the knowledge and preparedness of participants to organize youth athletics competitions in East Java. Descriptively, the average scores increased by 21.3 points or 35.1%, from 60.6 (SD = 7.8) to 81.9 (SD = 6.9). Participants' progression from a modest baseline to an obviously competent level in the assessed competencies (e.g., event planning, risk management, budgeting, volunteer coordination, competition scheduling) is indicated by the magnitude of the improvement. The Shapiro–Wilk tests for both the pre-test ($p = 0.184$) and post-test ($p = 0.211$) indicate that the distributions are normal, which validates the use of parametric inference techniques. The descriptive pattern is confirmed by the paired-sample t-test, which indicates a statistically reliable learning gain across the cohort. Specifically, $t(29) = 9.72$, $p < .001$, versus random fluctuation.

The magnitude of the effect is noteworthy, in addition to its statistical significance. The training's practically transformative impact is indicated by Cohen's $d = 2.89$ (using $SD_{pooled} = 7.36$), which significantly exceeds the conventional thresholds for a "large" effect ($d > 0.80$). Participants are not only more knowledgeable but also more likely to be capable of translating course content into operational workflows, including the drafting of detailed event plans, the implementation of monitoring and evaluation protocols during meets, the management of stakeholder communications, and the adherence to safety and safeguarding standards. In practical terms, this implies a significant effect. The materials' perceived relevance, instructional lucidity, and usability are further reinforced by the high level of participant satisfaction ($M = 4.48/5$, $SD = 0.41$), with 100% reporting "satisfied" or "very satisfied." These perceptions reinforce expectations of real-world adoption, as satisfaction data frequently correlates with engagement and intent to apply learning.

In summary, the results indicate that the program successfully achieved pedagogical efficacy (substantial cognitive improvements) and user acceptance (high levels of contentment). This lends support to expanding the curriculum to additional districts, integrating it into ongoing professional development for school and club administrators, and its use as a prerequisite for licensing local meet directors for policymakers and organizers. To maintain the impact of the training, it is essential to consider post-training supports, such as mentorship circles, protocols, and SOP templates for

competition day operations, and micro-credentials associated with demonstrated competencies (e.g., risk assessment, scheduling, or budgeting). Two caveats should be noted: (1) the absence of a control group restricts causal certainty against alternative explanations (e.g., concurrent learning), and (2) the outcomes reported are short-term; longitudinal monitoring of real event quality (e.g., incident rates, on-time schedules, budget adherence, participant satisfaction at meets) would bolster claims of practical effectiveness.

DISCUSSION

The findings suggest that a sports-management education program that is specifically designed can significantly enhance the level of competence of participants in the organization of youth athletics in East Java. The pre-post gain of +21.3 points (+35.1%) with a highly significant paired t-test result, $t(29)=9.72$, $p<.001$, indicates that the learning is both statistically reliable and practically meaningful. Cohen's $d=2.89$ is significantly greater than the conventional "large" threshold ($d=0.80$) when interpreted in terms of effect sizes, indicating an exceptionally robust educational impact (Cohen, 1988; cf. Brydges, 2019).

The study has already documented Level 1 (Reaction: mean satisfaction 4.48/5) and Level 2 (Learning: significant knowledge gain) when viewed through the Kirkpatrick four-level evaluation lens. To substantiate causal claims and support scale-up, it is recommended that subsequent cohorts monitor Level 3 (Behavior: transfer to field practice—e.g., run-of-show execution, incident reporting, volunteer deployment) and Level 4 (Results: event outcomes—on-time schedules, budget adherence, participant safety and satisfaction). The model's chain from learning to organizational results would be completed by incorporating a follow-up interface that connects training participation to on-the-ground metrics (Kirkpatrick & Kirkpatrick, 2006/2016).

The emphasized competencies planning, organizing, leading, and controlling/evaluating are consistent with systems thinking in sport organizations from an organizational perspective. Chelladurai's open systems perspective elucidates how human capital gains at the individual level (e.g., enhanced scheduling, risk registers, budget planning) are disseminated through the structures, workflows, and stakeholder relationships that support youth competitions (Chelladurai, 2014). In terms of curriculum, the transfer and replicability of modules across districts will be facilitated by mapping them to the event lifecycle (bid/planning → operations → close-out/legacy) and evaluating them against performance tasks (e.g., a complete technical manual, risk assessment, volunteer plan).

In youth events that depend on instructors, parents, and community groups, volunteer management is essential. Research indicates that onboarding/training, recognition, supportive supervision, and explicit role design enhance volunteer retention and event quality (Cuskelly et al., 2006; Wicker, 2017). Self-efficacy and operational reliability on meet day can be improved by developing micro-credentials (e.g., "Volunteer Coordinator," "Field-of-Play Marshal Lead") and protocols that are customized to the specific needs of school-club contexts. Incorporating these components into the program's assessment (simulated rosters, shift matrices, communication protocols) will likely translate learning gains into reliable practice.

The magnitude of the observed effect prompts contemplation of pedagogy. The meta-analytic evidence in STEM indicates that active learning approaches (scenario planning, problem-based laboratories, simulations) result in higher exam performance and lower failure rates than lecture-centric instruction (Freeman et al., 2014). The training's robust results are in accordance with these design principles, particularly when participants engage in authentic tasks (e.g., budgeting, construction of a run-of-show, and risk records) and receive structured feedback. Identifying the "active ingredients" that

drive impact and, as a result, the guidance of cost-effective scale-up will be facilitated by the documentation of instructional fidelity (hours devoted to simulations, facilitator expertise) and learner characteristics.

Interpretation is subject to two constraints. The causal attribution is initially restricted by the absence of a control or comparison cohort; the inference would be strengthened by matched comparison districts or stepped-wedge rollouts. Secondly, the results are proximal; the durability and behavioral transfer are predicated on the absence of longitudinal monitoring of actual competitions. The evaluation will align with Levels 3–4, and an evidence base for provincial policy adoption will be established by addressing both issues in future cycles (Kirkpatrick & Kirkpatrick, 2006/2016).

To maintain the observed effect size at scale, we suggest the following for policy and practice in East Java: (1) institutionalizing the curriculum as a mandatory continuing professional development (CPD) for meet directors and school/club organizers; (2) incorporating post-training supports, such as mentoring circles, sustainability and safeguarding checklists, and volunteer-management micro-credentials; (3) implementing a Kirkpatrick Level 3–4 dashboard that connects training to competition outcomes; and (4) codifying active-learning design (scenario drills, crisis simulations, budgeting labs) (Chelladurai, 2014; Freeman et al., 2014)

CONCLUSION

This study offers strong evidence that practitioners in East Java can significantly improve their ability to organize juvenile athletics competitions through targeted sports management education. Participants exhibited a substantial and statistically significant improvement from pre-test to post-test ($\Delta = +21.3$ points; $t(29) = 9.72$, $p < .001$), which had a huge practical impact (Cohen's $d = 2.89$). The curriculum was perceived as highly relevant and usable, as evidenced by the uniformly positive response of participants ($M = 4.48/5$ satisfaction; 100% satisfied/very satisfied). These findings suggest that the training effectively established fundamental competencies throughout the event lifecycle, including planning, operations, risk/safeguarding, budgeting, and volunteer coordination.

Interpretation is subject to two caveats. The causal inference is initially restricted by the single-group pre–post design; therefore, future iterations should include comparison cohorts (e.g., matched districts or stepped-wedge rollouts). Secondly, the outcomes were evaluated proximally; however, longitudinal monitoring of actual competition metrics (on-time starts, incident rates, budget variance, athlete/parent satisfaction) is required to demonstrate a lasting transfer to practice. Despite these limitations, the program's institutionalization as a continuing professional development for school and club administrators is supported by the pattern of findings. Post-training supports, such as mentoring circles, SOP/rubric toolkits, and sustainability/safeguarding checklists, will be supplemented. The observed effect is likely underpinned by active-learning design features (scenario drills, budgeting laboratories, crisis simulations) that should be maintained during scaling. The program can assist in the promotion of safer, more efficient, and more inclusive youth athletics throughout the province by conducting a thorough follow-up evaluation at the organizational and behavioral levels.

ACKNOWLEDGMENT

We sincerely appreciate the participants who dedicated their time and energy to the training and assessments. We also extend our gratitude to the school and club administrators, instructors, and volunteer coordinators in East Java, whose logistical support and insights were instrumental in developing the program's realistic scenarios and job aids. Institutional partners and local education and sports agencies deserve recognition for their assistance in organizing recruitment, venues, and training schedules. We are grateful to the instructional team and facilitators for their dedication to active-learning pedagogy and for providing formative feedback that facilitated the conversion of concepts into field-ready documents.

REFERENCES

- Brydges, C. R. (2019). Effect size guidelines, sample size calculations, and statistical power in gerontology. *Innovation in Aging*, 3(4), igz036. <https://doi.org/10.1093/geroni/igz036>
- Chelladurai, P. (2014). *Managing organizations for sport and physical activity: A systems perspective* (4th ed.). Routledge.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge. (PDF excerpt) utstat.toronto.edu
- Cuskelly, G., Taylor, T., Hoyer, R., & Darcy, S. (2006). Volunteer management practices and volunteer retention: A human resource management approach. *Sport Management Review*, 9(2), 141–163. [https://doi.org/10.1016/S1441-3523\(06\)70023-7](https://doi.org/10.1016/S1441-3523(06)70023-7)
- Erdilanita, U., Mulyana, M., & Widiawati, P. (2025). The analysis of athletic sports coaching management in East Java, Indonesia: A systematic review. *Indonesian Journal of Sport Management*, 5(2). <https://doi.org/10.31949/ijsm.v5i2.13183>
- Erta, E., Hapsari, S. C. P. D., Pembayun, N. S. R., Nugraha, A. C., & Fadilah, E. N. (2023). Pelatihan manajemen event olahraga bagi siswa SMAN 1 Wonoayu. *Lambung Inovasi: Jurnal Pengabdian kepada Masyarakat*, 8(1), 119–128. <https://doi.org/10.36312/linov.v8i1.1214>
- Festiawan, R., Susanto, E., Bayok, M., Kurniawan, D. D., & Putra, F. (2023). Talent identification predicting in athletics: A case study in Indonesia. *Annals of Applied Sport Science*. <http://dx.doi.org/10.52547/aassjournal.1102>
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences*, 111(23), 8410–8415. <https://doi.org/10.1073/pnas.1319030111>
- Hariadi, I., Hanief, Y. N., & Fadhli, N. R. (2022). Sport talent identification among children in Malang. *SPORTIF: Jurnal Penelitian Pembelajaran*, 8(1). https://doi.org/10.29407/js_unpgri.v8i1.17724
- Falletta, Salvatore. (1998). *Evaluating Training Programs: The Four Levels*: Donald L. Kirkpatrick, Berrett-Koehler Publishers, San Francisco, CA, 1996, 229 pp.. *The American Journal of Evaluation*. 19. 259–261. [https://doi.org/10.1016/S1098-2140\(99\)80206-9](https://doi.org/10.1016/S1098-2140(99)80206-9).

- Wicker, P. (2017). Volunteerism and volunteer management in sport. *Sport Management Review*, 20(4), 423–444. <https://doi.org/10.1016/j.smr.2017.03.001>
- Wijono, W., Rusdiawan, A., Fajar, M. K., & Kusumaningtarsi. (2025). An analysis of event quality and participant satisfaction in the 2024 ASEAN University Games (AUG) taekwondo competition. *Journal Sport Area*, 10(1). [https://doi.org/10.25299/sportarea.2025.vol10\(1\).19136](https://doi.org/10.25299/sportarea.2025.vol10(1).19136).