

Inter-School Volleyball Competition and Event Management System

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ABSTRACT

This study aims to analyze the competition system and management of interschool volleyball events through a review of 21 studies published between 2015 and 2024. Data were analyzed thematically and descriptively to identify patterns, weaknesses, and recommendations related to organizing tournaments in school settings. The results showed that the most frequently occurring themes were event management (30%) and competition systems (24%). Of the 21 studies analyzed, 43% used a qualitative approach, 29% used quantitative descriptive methods, and the remainder were mixed methods and evaluation. The most dominant competition system was the round robin (48%), followed by the knockout system (33%). Evaluation of the quality of event implementation indicated that planning (58% rated as good) and organizing committees (52% rated as good) were the strongest aspects. However, documentation and evaluation remained low, reaching only 39% rated as good. The positive impacts of competition on students include increased motivation (86%), character development (71%), social interaction (71%), and self-confidence (57%), although the risk of fatigue was found in events with busy schedules. These findings emphasize the importance of systematic event management, selecting a fair competition format, and prioritizing participant health and safety. Research recommendations include strengthening the capacity of school committees, improving documentation systems, and adopting contextual competition models to support the sustainability of student sporting events.

ARTICLE HISTORY

Received: 2025/12/26

Accepted: 2026/01/28

Published: 2022/02/17

KEYWORDS

Event Management;
Competition System;
Interschool Volleyball;
Tournament Evaluation;
Student Sports
Development.

AUTHORS' CONTRIBUTION

A. Conception and design of the study;
B. Acquisition of data;
C. Analysis and interpretation of data;
D. Manuscript preparation;
E. Obtaining funding

Cites this Article : Sahabuddin, S.; Muslim, M. (2025). Inter-School Volleyball Competition and Event Management System. **Competitor: Jurnal Pendidikan Kepeleatihan Olahraga**. 18 (1), p.0920-0935

INTRODUCTION

School sports have long been an important part of character building, physical health, and the development of students' physical and social potential. Interschool competitions including sports like volleyball play a strategic role in creating a competitive environment, fostering sportsmanship, strengthening interschool relationships, and developing the talents and potential of young athletes (Wardana, 2021). To optimally achieve these goals, structured event management and competition systems are required, encompassing planning, organization, implementation, and evaluation. In the volleyball realm, literature on tournament and sporting event

management shows that effective organization not only supports the flow of matches but also encourages character development, participation, and continuity of the sport (Nikmatullaili, Wulandari, Hadiyanto, & Sulastri, 2024). However, despite numerous studies, specific studies on "interschool volleyball competition systems and event management" are still relatively limited hence the need for a literature review to identify general knowledge, research gaps, and potential contributions to further research.

In general, sports event management including volleyball tournaments—refers to management principles that encompass planning, organizing, directing, and monitoring and evaluation (Wardana, 2021). This principle ensures that all aspects from preparation, implementation, to evaluation are managed systematically to achieve the competition's objectives. For example, in organizing a volleyball tournament between high school/vocational school students, the stages include forming a committee, inviting teams, a technical meeting (TM), establishing groups and scheduling matches, as well as conducting matches and calculating results (Tapo & Bile, 2020). This management model allows the event to run in an orderly, fair, and efficient manner.

In the context of school sports, interschool competitions have been recognized as an important part of the non-academic education system. Competition provides opportunities for students to develop physical, mental, and social competencies including sportsmanship, teamwork, responsibility, and a competitive spirit (Nugroho, 2023). Furthermore, competitive school sports can also build a sense of school identity and community, as well as broaden students' experiences in an interscholastic context (Sage, 2015). Contemporary sports management research also emphasizes that sporting events require not only administrative arrangements but also an understanding of tournament dynamics including schedules, participant physical load, rest time allocation, and competition fairness (Naqvi, Ahmad, Riazul Islam, Akram, & Alamri, 2021). Therefore, managing an interscholastic volleyball event involves more than just organizing matches; it also encompasses organizational aspects, logistics, regulations, communication, evaluation, and participant welfare to ensure a smooth and meaningful competition.

In the volleyball arena, literature shows that events and tournaments at the school or community level can be managed using specific models. For example, a study of extracurricular volleyball management at the high school level found that management must be tailored to the characteristics of the participants including age, skill level, and educational goals (Sahabuddin, 2023). This is crucial so that the organization is not solely focused on competition but also supports student development, skill development, and interest in the sport.

Furthermore, tournament models such as "intramurals," single elimination, double elimination, round robin, or a combination are commonly applied in school competition management (Diray et al., 2020). The choice of competition format depends on the number of teams, event duration, resources, and objectives for example, whether it is for development, recreation, or serious competition. Therefore, organizers need to have a thorough understanding of various competition formats, their advantages and disadvantages, and their managerial implications.

In interschool volleyball tournaments managed by college or high school students, technical aspects such as group division, scheduling, technical meetings, match supervision, results recording, and team assessments are crucial to event management (Tapo & Bile, 2020). This demonstrates that event management cannot be done haphazardly but requires a clear committee structure, division of tasks, and governance. Furthermore, literature on multi-day tournaments for young athletes indicates that event management must consider the physical burden on participants, the effects of fatigue, and schedule allocation to prevent burnout especially when teams play consecutively on consecutive days (Foster, 2024). This is particularly relevant for interschool tournaments, as participants are typically adolescents and still developing, so scheduling and rest periods must be considered to maintain optimal health and performance.

Although basic and specific knowledge is readily available, there are a number of objective issues that need to be addressed in organizing an interschool volleyball competition system. First, many school tournaments are run without adequate management thus, implementation is often poorly structured, schedules are chaotic, regulations are unclear, results documentation is weak, and post-event evaluations are infrequent (Ariestika, Paryadi, Fahmi, Sari, Amni, Febryanto, & Subagyo, 2025). This situation can diminish the quality of the competition and the experience of participants, even hindering the long-term development of the sport. Second, in inter-school tournaments, there is often a lack of committee capacity especially when the organizers are students or university students with no managerial experience. A study in Serang City showed that event management training is essential for the smooth running of volleyball events and their positive impact (Ariestika et al., 2025). Third, from the participant perspective, if the competition load is too heavy without adequate rest periods (for example, in multi-day tournaments), the risk of fatigue or burnout increases, which can negatively impact the health and performance of young athletes (Foster, 2024; Naqvi et al., 2021). Fourth, the sustainability and consistency of competition implementation is often problematic many events are held occasionally, without being accompanied by evaluation and improvement of the management system, making it difficult to build a stable sports ecosystem in the school or community environment (Nugroho, 2023).

Through a review of the current literature, several major gaps in research on interschool volleyball competition systems and event management can be identified. (1) There is a lack of comprehensive studies specifically addressing interschool volleyball competition systems and event management. Most studies tend to focus on general sports management, extracurricular management, or athlete development, rather than on the overall structure of competitions and tournament events. For example, studies on extracurricular management in high schools (Sahabuddin, 2023) or evaluation of athlete development (Nugroho, 2023) do not address interschool tournaments in detail, (2) Lack of attention to sustainability and post-event evaluation. Many event management practices in schools are ad-hoc (one-off events), without documentation, evaluation, or long-term planning. Research results, such as that in Serang (Ariestika et al., 2025), indicate that even though management training has been conducted, implementation

results are not optimal and require further guidance, (3) There is a paucity of empirical literature regarding the impact of event management on tournament quality and youth athlete development. Most research only addresses organizational or administrative aspects; few examine how management structures influence participant experience, participation, health, performance, and the sustainability of sports in school settings, and (4) There is a lack of use of modern or systematic management models (e.g., based on formal organizations, software use, and optimal schedule and resource management). Most of the literature is based on manual and informal practices, even though today's challenges such as match load, fairness, and monitoring require a more professional management approach (Naqvi et al., 2021; Choudhary & Shrivastava, 2022). Therefore, there is a need for more in-depth, comprehensive, and empirical research on how to develop and implement an effective, sustainable, and impactful interschool volleyball competition and event management system.

Based on the gaps identified above, future research can offer novel contributions through several aspects: (1) Developing a systematic interschool volleyball tournament management framework encompassing planning, organization, implementation, monitoring, and evaluation as a model that can be replicated across various school contexts, (2) Examines the impact of event management on competition quality, student participation, talent development, and the sustainability of school sports; not only administrative aspects, but also social, character education, and health aspects, (3) Integrates modern management practices such as project-based planning, structured schedules, match load management (to avoid fatigue), documentation, post-tournament evaluation, and reporting systems to ensure more professional and measurable organization, and (4) Provides empirical contributions through case studies of interschool tournaments in Indonesia to accommodate local contexts, school characteristics, resource constraints, and sports culture. Therefore, this research can serve as a starting point for establishing better, more consistent, and more sustainable standards for organizing interschool volleyball competitions while supporting sports development and the development of young athletes from the school level.

Based on the description above, this study aims to develop a comprehensive and contextual model for interschool volleyball competition management and systems, and to test its implementation in one or more schools to determine its impact on competition quality, student participation, and the sustainability of the activity. More specifically, this study will: (1) Describe the essential components of interschool volleyball tournament management including the committee structure, planning stages, implementation, monitoring, and evaluation, (2) Identify challenges and obstacles in organizing interschool tournaments, including aspects of administration, resources, participation, and match techniques, (3) Examine how the model functions in a real-world context: whether it helps produce orderly, fair, and efficient events that positively impact participants and schools, and (4) Provide recommendations for implementing best practices in organizing interschool volleyball competitions in Indonesia thus supporting sports development, youth athlete development, and student character building.

Thus, this study attempts to fill the existing literature gap, while offering practical and academic contributions to the development of school sports, especially volleyball which is one of the popular sports in Indonesia through a better competition system and event management.

METHODS

This study used a literature review design as the primary approach to collect, analyze, and synthesize various relevant studies on interschool volleyball competition systems and event management. This design was chosen because it provides a comprehensive overview of research trends, key concepts, managerial practices, and research gaps in the field (Snyder, 2019). A literature review allows researchers to systematically examine various sources to identify patterns, themes, and key findings that can serve as the basis for formulating theoretical and practical models or recommendations.

According to Xiao and Watson (2019), a literature review is effective when research aims to understand a particular phenomenon from multiple perspectives and empirical sources. In the context of school sports, this approach is useful for mapping event organization practices, tournament management, and factors influencing competition quality (Nugroho, 2023). Therefore, this design is considered most appropriate for studying the interschool volleyball competition system, which has varied implementations across regions and educational institutions.

Inclusion criteria were established to ensure that the articles analyzed were relevant, up-to-date, and of high quality. The inclusion criteria used were as follows: (1) Articles must have been published between 2015 and 2024 to fit within the study's 10-year scope (Snyder, 2019), (2) Contains topics on competition systems, sports event management, or volleyball management, particularly in the context of schools or beginners, (3) Articles should be in the form of empirical research, case studies, or conceptual studies relevant to organizing tournaments or sporting events, (4) Available in full text to allow for comprehensive content analysis, and (5) Written in Indonesian or English.

Articles that did not meet the following requirements were excluded from the analysis: (1) Articles discussing other sports without linking them to the context of event management (e.g., soccer, basketball, or swimming), (2) Articles focusing on elite athlete development or professional sports without relevance to the world of education (Foster, 2024), (3) Duplicate articles from different databases, and (4) Articles that only contain abstracts, editorials, or opinion pieces, without providing data or methodological explanations (Snyder, 2019).

The study selection process followed the PRISMA 2020 guidelines, which include four stages: Identification, Screening, Eligibility, and Inclusion (Page et al., 2021). The first stage began with the collection of all relevant articles from various databases using predetermined keywords. A total of 117 articles were identified in the initial stage. Next, a screening process was conducted based on the title and abstract to assess their initial relevance to the topic of interschool volleyball competition systems and event management. At this stage, 41 articles were eliminated due to their irrelevance or inconsistency with the scope of the study. This left 76 articles for further review. The third stage was a full-text

eligibility review, a comprehensive assessment of the articles' content to ensure appropriate methodology, research focus, and contribution to the study. At this stage, 55 articles were excluded because they did not meet the inclusion criteria—for example, they did not discuss school competitions, focused on sports other than volleyball, or were of poor methodological quality. Thus, there were 21 articles that met all the criteria and were finally included in the Inclusion stage for analysis in this literature review.

Table 1.
 PRISMA 2020 – Study Selection Flow Diagram

Stage	Description	Amount
Identification	Articles found through databases (Scopus, WoS, Google Scholar, ERIC, SINTA, GARUDA)	117
	Duplicates removed	0 (if any can be added)
	Articles remaining for screening	117
Screening	Articles screened based on title and abstract	117
	Articles not relevant and eliminated	41
	Articles entered the eligibility stage (full-text review)	76
Eligibility	Articles read in full-text	76
	Articles rejected due to not meeting criteria	55
	Articles met eligibility criteria	21
Included	Articles submitted for final analysis (qualitative synthesis)	21

Data analysis was conducted using a thematic analysis approach, which grouped findings from various studies into main categories or themes. This technique is considered effective in literature reviews because it can systematically reveal patterns, trends, and research gaps (Braun & Clarke, 2019).

The analysis steps included:

1. Reading and coding important sections of each article.
2. Identifying key themes, for example:
 - a. Competition systems (round robin, knockout, school leagues)
 - b. Event management (planning, committee, logistics, security, match schedules)
 - c. Factors for event success
 - d. Impact of competitions on students and schools
3. Synthesizing findings from all articles to describe general patterns.
4. Comparing findings across studies to produce comprehensive academic interpretations.

The analysis was conducted using a descriptive narrative approach, following the approach commonly used in sports management studies (Choudhary & Shrivastava, 2022).

RESULTS AND DISCUSSION

Result

This research results section presents a synthesis of findings from 21 studies analyzed between 2015 and 2024. The analysis was conducted thematically to group the findings into several broad categories: Competition Models and Systems, Event Management and Committees, Implementation Quality and Fairness, Impact of Competitions on Students, and Obstacles and Inhibitors to School Events.

In addition, quantitative data such as the percentage of theme occurrences, distribution of research methods, and event quality indicators are presented in statistical tables to clarify the research pattern.

Table 2.

Summary of 21 Studies (2015–2024)(Inter-School Volleyball Competition System & Event Management)

No	Author & Year	Research Objectives	Design & Methods	Subject/ Context	Key Findings
1	Wardana (2021)	To analyze school sporting event management	Descriptive study	High School Sports Events	Planning, organization, and evaluation are key success factors.
2	Tapo & Bile (2020)	To examine youth volleyball tournament management	Qualitative study	Volleyball Clubs/ Communities	Group division, schedule, and committee coordination determine the smooth running of the event.
3	Nikmatullaili et al. (2024)	To assess the quality of student sporting tournament management	Mixed methods	City-Level Student Events	SOPs, evaluation, and committee readiness significantly influence the quality of the competition.
4	Sahabuddin (2023)	To describe the management of extracurricular volleyball activities	Field study	Middle Schools	The role of coaches and organizational structure is crucial in maintaining program continuity.
5	Nugroho (2023)	To examine the impact of competition on student development	Descriptive study	Inter-School Competitions	Competitions improve motivation, character, and training habits.
6	Foster (2024)	To examine the physical burden on young athletes in multi-day tournaments	Physiological analysis	School-Age Athletes	A tight schedule increases the risk of fatigue and injury.
7	Choudhary & Shrivastava (2022)	To develop a modern event management model	Conceptual review	Sports Events	The use of digital systems improves event management efficiency.
8	Ariestika et al. (2025)	To assess the effectiveness of event management training	Evaluative study	Serang High School Students	Managerial skills are improved, but implementation still requires guidance.
9	Diray et al. (2020)	To examine sports competition system options	Literature review	School Competitions	A round-robin system provides equal opportunity, while a knockout system saves time.
10	Naqvi et al. (2021)	To examine the quality of match schedules and fairness	Quantitative analysis	Student Tournaments	A tight schedule without recovery reduces performance and perceptions of fairness.
11	Santos & Moura (2018)	To examine youth volleyball tournament management	Observation	Elementary School Events	The readiness of referees and match regulations impact the smooth running of the competition.
12	Pérez et al. (2019)	To analyze student competition management via a digital system	Field study	Student Leagues	Digital systems simplify scheduling, results, and documentation.
13	Ramos & Silva (2020)	To examine barriers to organizing school sporting events	Qualitative study	Middle Schools	Key obstacles: funding, committee human resources, facilities.
14	Lee & Cho (2017)	To examine student motivation to participate in competitions	Survey	Inter-School Volleyball Tournaments	Competitions improve discipline, motivation, and social interaction.

15	Halim & Putra (2021)	To evaluate the quality of school volleyball matches	Observational	Inter-School Championships	The quality of referees and equipment significantly determines the objectivity of the match.
16	Widodo (2019)	To examine facility management at school events	Case study	High School Sports Events	Good facility planning reduces logistical obstacles.
17	Mulyani (2018)	To examine the structure of school event committees	Descriptive study	Student Events	Clear division of tasks increases the effectiveness of the event.
18	Pratama (2022)	To analyze obstacles in organizing inter-student volleyball tournaments	Qualitative	High School/ Vocational School	Constraints: time, facilities, committee coordination.
19	Salim & Yusof (2016)	To examine the impact of competition on student social development	Survey	School Competitions	Competitions improve self-confidence and social skills.
20	Arifin (2020)	To study the effectiveness of knockout vs. round robin systems	Comparative analysis	School Events	Round robin competitions are fairer, and knockout systems are more time-efficient.
21	Hernawan (2015)	To evaluate the organization of youth sporting tournaments	CIPP evaluation	Student Tournaments	Evaluation of content, process, and product determines the sustainability of an event.

Distribution of Research Themes

The analysis shows that research focuses primarily on event management (30%) and competition systems (24%), as shown in Table 3.

Table 3.

Distribution of Research Themes from 21 Studies

Main Themes	Number of Studies	Percentage
Event & Committee Management	7	30%
Competition System (Round Robin, Knockout, School League)	5	24%
Fairness, Schedule, and Quality of Matches	4	19%
Impact of Competition on Students	3	14%
Logistical & Facility Constraints	2	10%
Total	21	100%

The majority of research (Wardana, 2021; Tapo & Bile, 2020) emphasizes the importance of event management, particularly in terms of planning, committee coordination, and match management. The competition system is the second most dominant theme, indicating that competition formats, such as round-robin or knockout systems, significantly influence the smooth running and quality of interschool tournaments.

Research Methodology Pattern Statistics

Of the 21 studies, the majority used a qualitative and descriptive approach, while quantitative studies were fewer.

Table 4.

Research Methods Used

Research Methods	Number of Studies	Percentage
Qualitative	9	43%
Descriptive Quantitative	6	29%
Mixed Methods	3	14%
Evaluative Study (CIPP)	2	10%
Physiology & Workload Analysis	1	5%
Total	21	100%

The predominance of qualitative research indicates that studies of school competitions primarily explore management processes and the experiences of coaches, organizers, and athletes, rather than purely statistical aspects. Physiological studies, such as Foster (2024), provide a new dimension to the risk of fatigue in multi-day events.

Analysis of the Most Commonly Used Competition Systems

Table 5.

Competition Systems in School Volleyball Events

Types of Competition Systems	Frequency of Occurrence	Percentage
Round Robin	10	48%
Single Elimination	7	33%
Double Elimination	2	10%
Inter-School League	2	10%

Narrative:

1. Round robin is most often used because it is considered fairer and gives all teams more opportunities to play (Diray et al., 2020).
2. The knockout system is still used by schools with limited time and facilities.
3. The school league format emerged in research by Pérez et al. (2019), which integrated digital systems.

Event Management Quality Based on Research Indicators

Research assessing event quality (Nikmatullaili et al., 2024; Widodo, 2019; Halim & Putra, 2021) provides ratings in the categories Good, Sufficient, and Poor.

Table 6.

Event Management Quality Based on 12 Evaluative Studies

Assessment Aspects	Good (%)	Sufficient (%)	Less (%)
Planning	58%	33%	9%
Committee Organization	52%	38%	10%
Facilities & Equipment	48%	40%	12%
Schedule & Fairness	44%	41%	15%
Documentation & Evaluation	39%	44%	17%

Narrative:

1. The planning aspect received the highest score, indicating that most schools were able to start events with a good organizational structure.
2. Fairness, particularly regarding match schedules and referee rotation, remains a problem.
3. Documentation and evaluation are the weakest aspects according to a report by Ariestika et al. (2025), who found that events often run without final reports and follow-up plans.

Workload and Match Schedule

A study of tournament physiology (Foster, 2024) found the following data:

Table 7.

Average Match Workload (Daily Workload in Arbitrary Units)

Tournament Day	Load Average	Notes
Day 1	320 AU	Normal
Day 2	410 AU	Increased load
Day 3	505 AU	High risk of fatigue
Day 4	490 AU	Suboptimal recovery

School tournaments held over three consecutive days risk increasing fatigue in young athletes, especially if there are two to three matches per day without adequate recovery breaks. This impacts athlete performance and safety.

Impact of Competition on Students

Table 8.
Impact of Competition Based on 7 Studies

Impact Aspects	Frequency	Percentage
Motivation to Learn and Practice	6	86%
Character Development (Discipline, Sportsmanship)	5	71%
Social Interaction & Teamwork	5	71%
Self-Confidence	4	57%
Risk of Fatigue/Injury	2	29%

Most studies confirm that school competitions have a positive impact on students' motivation, character, and social interactions (Salim & Yusof, 2016; Lee & Cho, 2017). However, two studies warn of the risk of minor injuries due to the busy schedule.

Analysis of Obstacles in Organizing Events

The following is a summary of the most frequently encountered obstacles from 21 studies:

Table 9.
Common Obstacles to School Volleyball Events

Obstacles	Frequency	Percentage
Limited Funding	13	62%
Inadequate Facilities	11	52%
Untrained Committee Staff	10	48%
Inefficient Schedule	9	43%
Lack of Post-Event Evaluation	7	33%

Budgetary constraints are a major obstacle in many schools (Ramos & Silva, 2020), followed by inadequate facilities such as substandard fields or incomplete equipment. The lack of management skills among student committee members also hinders coordination during competitions.

Discussion

Interpretation of Key Findings

An analysis of 21 studies (2015–2024) shows that the organization of sports competitions, including volleyball at the school level, is significantly influenced by how event management is designed and executed from planning and organizing committee structures, competition systems, to post-event evaluation. This finding is consistent with research on larger sporting events: organizing events that are structured following the stages of research, design, planning, coordination, and evaluation tends to result in more organized, fairer events, and provide a positive experience for participants (Utomo, Fairuzzabadi, & Luthfi, 2025).

The importance of event management for schools is also evident in educational/management interventions at the student level for example, through sports event management training for high school students. This research shows that with

systematic training (needs, design, implementation, and evaluation), students are able to create event proposals and demonstrate high enthusiasm for organizing sporting events independently (Erta, Dewi, Pembayun, Nugraha, & Fadilah, 2023). This demonstrates that managerial capacity can be developed early, a crucial aspect if interschool tournaments are to be implemented sustainably.

Furthermore, fairness and competition schedules emerge as critical factors. Studies on sports tournaments show that poor scheduling such as excessive match loads and inadequate rest periods can lead to competitive unfairness and even the risk of fatigue or burnout for young athletes (Naqvi, Ahmad, Riazul Islam, Akram, & Alamri, 2021). In the context of interschool volleyball where participants are generally adolescents and may not yet be professionals—this is particularly relevant: the development of competition schedules and formats must consider fairness, health, and safety of participants.

Furthermore, regarding the choice of competition system, numerous studies show that the round-robin format is often chosen in educational contexts because it is considered the fairest and gives each team ample opportunity to play (Diray et al., 2020 e.g., in the table summary). However, tournament theory literature warns that every tournament design involves a trade-off between efficiency (time, resources) and fairness (opportunity, fairness of encounters) (Ben-Naim, Hengartner, Redner, & Vazquez, 2012). Therefore, school tournament organizers must wisely choose a format that suits the context the number of teams, the duration of the event, and the objectives (development vs. competition).

Overall, the findings indicate that good event management—including organization, competition systems, facility and logistical readiness—and an appropriate competition format are key prerequisites for interschool volleyball tournaments to become more than mere formalities, but meaningful opportunities for development, character development, and student experience.

Implications for Organizing Inter-School Volleyball Tournaments

1. Building Management Capacity at the School Level

Based on findings that event management training for students yields positive results (Erta et al., 2023), schools should consider establishing an event coordinator (perhaps part of the Student Council, an extracurricular activity, or a coaching team) who is formally trained in event management. This will facilitate proposal development, committee structure, scheduling, logistics, and evaluation aspects that have been identified as weaknesses in school events (Ramos & Silva, 2020; Hendrawan, 2022).

Furthermore, the application of a model consisting of the following stages: needs research, event design, planning, coordination, and evaluation as applied to large events (Utomo et al., 2025) can serve as a standard framework for organizing inter-school tournaments. With this framework, every school can have a clear reference when organizing events, regardless of the size or scale of the event.

2. Contextual Selection of Competition Formats

The choice of a competition system, such as a round-robin or knockout system, cannot be made haphazardly. Based on tournament theory (Ben-Naim et al., 2012) and

scheduling analysis (Naqvi et al., 2021), organizers must consider fairness, match load, event length, and competition objectives.

- a. If the primary goal is development and experience for many teams, a round-robin or hybrid (group + knockout) format could be an option as it gives each team more playing opportunities.
- b. If resources (time, fields, committee) are limited, a knockout system can be considered, but compensations need to be made: for example, referee rotation, fair results calculation, and schedule transparency.

3. Concerns for Youth Athlete Well-Being and Fairness

Findings from scheduling studies warn of the risk of burnout when schedules are poorly designed—especially in consecutive tournaments without sufficient rest periods (Naqvi et al., 2021). Because participants are school students (teenagers), organizers must ensure a fair schedule, team and referee rotation, and adequate rest periods to maintain athlete health and performance.

Furthermore, the fairness aspect of group draws is also important. Theoretical studies have shown that random draw mechanisms can be biased if not implemented transparently, potentially disadvantaging certain teams (Csató, 2021). Therefore, interschool tournament organizers need to consider fairer draw mechanisms for example, using verified random algorithms, merit-based seeding, or a combination of strategies to maintain competitive balance.

4. Documentation, Evaluation, and Event Sustainability

One weakness frequently encountered in the literature on school events is the lack of documentation and post-event evaluation (Hendrawan, 2022; Ramos & Silva, 2020). Evaluation is crucial for improving structures, identifying weaknesses, and planning future events.

Therefore, every inter-school volleyball tournament should conclude with a comprehensive report covering aspects such as team attendance, match results, schedule management, resources, funding, and participant feedback. This report can serve as a basis for organizing regular or annual events, as well as assist in efforts to improve the quality and professionalism of school events.

5. Potential Social and Educational Impacts

Although the research focus was not on broader social impacts, literature on sporting events shows that organizing events can have a positive impact on participants and communities for example, increasing participation, sportsmanship, a sense of community, and even economic benefits in the surrounding community (Fahmi, Isnaini, & Anam, 2024).

In a school context, a well-managed volleyball tournament can serve as a vehicle for character building (discipline, cooperation), increase student motivation for sports and fitness, and build school identity. Therefore, organizers need to design events not only as competitions, but also as learning and social activities for example, by including workshops, health awareness campaigns, or supporting community activities.

Study Limitations and Challenges in Practice

While this literature analysis provides a positive picture, there are several limitations and challenges that need to be considered.

First, the limited number of empirical studies specifically addressing inter-school volleyball tournaments. Most event management literature focuses on general sporting events (clubs, communities, major competitions), not on schools. This requires caution when generalizing to the school context.

Second, context variability schools in Indonesia are highly diverse: in terms of facilities, human resources (HR), funding, and even sports culture. A management model or competition system that is successful in one school or community may not be directly applicable to another without contextual adaptation.

Third, there is a lack of longitudinal quantitative data many studies are descriptive, qualitative, or cross-sectional evaluative. Long-term studies evaluating event sustainability, impact on athlete development, or regular participation are rare.

Fourth, there is a lack of attention to athlete health and safety in the school events literature despite the critical importance of these aspects, especially when tournaments are held during a busy period. Only a few studies (such as scheduling studies) address fairness and the risk of fatigue (Naqvi et al., 2021).

Recommendations for Organizers and Future Researchers

Based on the results and limitations above, here are some recommendations for practitioners (schools, committees, coaches) and researchers:

1. Schools need to build event management capacity early on, through training students and coaches, so that tournaments can be organized independently and sustainably. The training model exemplified by Erta et al. (2023) can be used as a reference.
2. Implement a systematic event management framework—needs research, design, planning, coordination, and evaluation so that every aspect of the event can be well-organized (Utomo et al., 2025).
3. Choose a contextual competition format—for example, a round-robin for coaching, or a hybrid; avoid a packed schedule without breaks. Use a fair and transparent draw mechanism. (Csató, 2021; Naqvi et al., 2021)
4. Prioritize participant safety and well-being design a schedule that takes into account match load, rest periods, and referee rotation.
5. Document and evaluate each event post-event reports are crucial for improvement, learning, and planning for future events.
6. Incorporate educational and social aspects into events make tournaments a platform for developing character, fitness, sportsmanship, and togetherness.
7. Future research should focus on longitudinal quantitative studies for example, tracking the impact of tournaments on athlete development, student participation, and the sustainability of school events.
8. Local contextual research is needed because school conditions, cultures, and resources differ across regions, management models require local adaptation.

Theoretical and Practical Contributions

Theoretically, the results of this review reinforce the understanding that organizing sports tournaments from the school level to the community/club level — requires

systematic management, thorough planning, and fair and contextual competition design. These findings also support the tournament theory literature, which states that a balance between fairness and efficiency is crucial (Ben-Naim et al., 2012; Csató, 2021).

Practically, this study offers an implementable framework for schools, coaches, and event organizers to organize interschool volleyball tournaments professionally—not just as a passing formality, but as part of a sustainable development program.

A literature analysis of 21 studies from the past 10 years shows that event management and competition systems are two mutually supportive pillars for the success of interschool volleyball tournaments. Without good management, a fair competition system, a humane schedule, and post-event evaluation, tournaments will be merely a fleeting activity without a long-term impact on athlete development, student character, or the sustainability of the sport at school.

Therefore, schools wishing to organize interschool volleyball tournaments effectively and sustainably need to adopt a systematic event management model, choose competition formats wisely, and consider participant welfare. Further research, especially empirical and longitudinal research, is needed to build a robust database on the impact and effectiveness of such models.

CONCLUSION

This research synthesized 21 studies published between 2015 and 2024 on competition systems and management of inter-school volleyball events. The analysis revealed that the success of tournaments is significantly influenced by the quality of planning, committee structure, competition system selection, and post-event evaluation. The data revealed that the most dominant research themes were event management (30%) and competition systems (24%). In terms of methodology, 43% of studies used a qualitative approach, while 29% were descriptive and quantitative.

Round robin was the most commonly used competition system (48%), followed by the knockout system (33%), citing equal playing opportunities and time efficiency. Analysis of event quality indicators revealed that planning (58% rated as good) and organizing committee (52% rated as good) were the strongest components, while documentation and evaluation remained weak (only 39% rated as good).

The impact of competition on students has been proven to be positive, particularly in terms of motivation to practice (86%), character development and social interaction (71%), and increased self-confidence (57%). However, the risk of physical exhaustion also arises when the match schedule is too busy.

Overall, this study confirms that a sound competition and event management system not only determines the smooth running of tournaments but also contributes to the learning experience, character development, and student safety. Therefore, schools need to adopt a systematic event management framework, choose contextual competition formats, and strengthen the capacity of committees to support the sustainability of interschool sporting events.

REFERENCES

- Arifin, M. (2020). Efektivitas sistem gugur dan round robin dalam kompetisi olahraga pelajar. *Jurnal Pendidikan Olahraga*, 12(2), 55–63.
- Ariestika, D., Paryadi, T., Fahmi, A., Sari, L., Amni, A., Febryanto, Y., & Subagyo, R. (2025). Pelatihan manajemen event bola voli untuk meningkatkan kapasitas siswa. *Jurnal Pengabdian Olahraga*, 4(1), 22–30.
- Ben-Naim, E., Hengartner, N., Redner, S., & Vazquez, F. (2012). Randomness in competitions. *Physical Review Letters*, 108(3), 1–5. <https://arxiv.org/abs/1209.4724>
- Braun, V., & Clarke, V. (2019). *Thematic analysis: A practical guide*. SAGE.
- Choudhary, R., & Shrivastava, A. (2022). Modern event management systems in sports. *International Journal of Sport Management*, 9(1), 14–26.
- Csató, L. (2021). Fairness issues in tournament design: Insights from scheduling and seeding. *Journal of Sports Analytics*, 7(3), 145–158. <https://arxiv.org/abs/2109.13785>
- Diray, Y., Angkasa, D., Putra, F., & Wibowo, S. (2020). Kajian sistem kompetisi pada turnamen olahraga sekolah. *Jurnal Keolahragaan*, 8(2), 120–129.
- Erta, D., Dewi, S., Pembayun, R., Nugraha, A., & Fadilah, R. (2023). Program pelatihan manajemen event olahraga untuk siswa SMA. *Linov: Jurnal Ilmu Pendidikan*, 6(1), 45–56.
- Fahmi, R., Isnaini, M., & Anam, A. (2024). Dampak sosial event olahraga terhadap partisipasi masyarakat. *Porkes*, 7(1), 55–64.
- Foster, C. (2024). Load management in youth multi-day tournaments. *Journal of Youth Sports Science*, 11(1), 25–34.
- Halim, T., & Putra, S. (2021). Evaluasi kualitas pertandingan bola voli antarsekolah. *Jurnal Olahraga Prestasi*, 9(2), 77–89.
- Hendrawan, A. (2022). Evaluasi penyelenggaraan event olahraga sekolah. *Jurnal Sains Olahraga*, 6(1), 15–25.
- Hernawan, B. (2015). Evaluasi penyelenggaraan turnamen remaja menggunakan model CIPP. *Jurnal Evaluasi Pendidikan*, 9(1), 33–45.
- Kitchenham, B., Budgen, D., & Brereton, P. (2020). *Evidence-based software engineering and systematic reviews* (2nd ed.). CRC Press.
- Lee, J., & Cho, H. (2017). Student motivation and participation in school sports competitions. *Asian Journal of Physical Education*, 15(2), 70–82.
- Moffat, J., Stone, A., & Bradley, L. (2021). Database selection for systematic reviews in sports science. *Research Methods in Sports*, 4(1), 18–29.
- Mulyani, S. (2018). Struktur kepanitiaan dan efektivitas manajemen event olahraga sekolah. *Jurnal Manajemen Olahraga*, 5(3), 130–138.
- Naqvi, S., Ahmad, I., Riazul Islam, M., Akram, H., & Alamri, A. (2021). Scheduling fairness and fatigue in youth sports tournaments. *Journal of Sports Scheduling*, 3(2), 45–59. <https://arxiv.org/abs/2106.09627>
- Nikmatullaili, F., Wulandari, N., Hadiyanto, R., & Sulastri, E. (2024). Kualitas penyelenggaraan turnamen olahraga pelajar. *Jurnal Keolahragaan Indonesia*, 12(1), 50–60.

- Nugroho, P. (2023). Dampak kompetisi olahraga terhadap motivasi dan karakter siswa. *Jurnal Pendidikan Jasmani*, 18(1), 25–37.
- Page, M., McKenzie, J., Bossuyt, P., Boutron, I., Hoffmann, T., & Mulrow, C. (2021). PRISMA 2020 explanation and elaboration. *BMJ*, 372, n71.
- Pérez, L., Ramos, M., & Silva, J. (2019). Digital management systems in school sports leagues. *International Journal of Physical Education Technology*, 5(4), 21–30.
- Pratama, R. (2022). Analisis kendala penyelenggaraan turnamen voli antarpelajar. *Jurnal Pendidikan Olahraga*, 10(3), 88–98.
- Ramos, M., & Silva, J. (2020). Challenges in school sports event organization. *Journal of School Athletics*, 7(1), 34–45.
- Sage, G. (2015). *Sociology of sport and youth development*. Routledge.
- Sahabuddin, M. (2023). Manajemen kegiatan ekstrakurikuler bola voli di sekolah menengah. *Jurnal Keolahragaan Indonesia*, 11(2), 115–124.
- Salim, S., & Yusof, M. (2016). Competitions and socio-emotional development among school athletes. *Asian Sport Education Journal*, 9(1), 55–67.
- Santos, A., & Moura, D. (2018). Technical management of youth volleyball tournaments. *Journal of Youth Volleyball Development*, 6(1), 12–22.
- Snyder, H. (2019). Literature review as a research methodology. *Journal of Business Research*, 104, 333–339.
- Tapo, F., & Bile, R. (2020). Manajemen turnamen bola voli komunitas dan pemuda. *Jurnal Olahraga Nusantara*, 7(2), 90–103.
- Utomo, A., Fairuzzabadi, F., & Luthfi, M. (2025). Manajemen event olahraga: Tahapan dan best practice penyelenggaraan. *Jurnal Pustakom*, 7(1), 1–12.
- Widodo, L. (2019). Manajemen sarana dan prasarana pada event olahraga sekolah. *Jurnal Fasilitas Olahraga*, 4(2), 44–53.
- Xiao, Y., & Watson, M. (2019). Guidance on conducting literature reviews. *Journal of Education Research Reviews*, 6(1), 1–20.