

Research on the Organizational Plan of University Sports Games Based on the Overall Plan——Taking Guangzhou Huali College as an Example

Haiyan Zhang^{1,2,*}, Xiaoxia Li¹, Mengsha Wu¹, Junye Zhong¹

¹*Institute of Physical Education, Guangzhou Huali College, Guangzhou, 511325, China*

²*Exercise and Sports Science Programme, School of Health Sciences, Universiti Sains Malaysia, Kubang Kerian, Kelantan, 16150, Malaysia*

**Corresponding author*

Abstract: *This study aims to explore the organizational plan for university sports events based on a coordination chart, in order to improve the efficiency and quality of sports event organization. By taking Guangzhou Huali College as a case study and combining the method of overall planning, a complete set of sports organization plan was designed, and it was analyzed and discussed in depth. Research has found that the design of sports event organization plans based on a coordination chart can help organizers clearly understand the dependencies, workflow, and time arrangement between tasks, achieve resource optimization and scheduling, effectively manage and respond to risks, and thus improve the efficiency and quality of sports events. This study provides a systematic design scheme for organizers of university sports events, aiming to provide useful reference for the planning of similar activities.*

Keywords: *overall plan, university sports meet, organizational plan, resource optimization, risk management*

1. Introduction

The university sports meet, as an important component of campus culture, is not only an important platform to showcase student style, enhance physical fitness, and cultivate team spirit, but also an effective way to promote teacher-student interaction and enhance cohesion. With the continuous expansion of university scale and the increasing variety of activity projects, the organization and management of sports games are facing more and more challenges. How to efficiently and orderly organize a large-scale sports meet under limited time and resource conditions has become an important issue that every university manager must face.

Currently, many universities face problems such as unreasonable time arrangements, uneven resource allocation, and insufficient coordination and communication in the process of organizing sports events [1]. These issues not only affect the smooth progress of the sports meet, but may also lead to a decrease in the satisfaction of participating athletes and spectators. Therefore, exploring a scientific and systematic organizational method to improve the efficiency and quality of sports meet organization has important practical significance and application value.

This study aims to introduce the Program Evaluation and Review Technique (PERT) theory and propose an efficient sports event organization plan by analyzing and optimizing the sports event organization plan of Guangzhou Huali College. A coordination chart is a tool used for project management, which can clarify the logical relationships and interdependencies between various tasks through graphical methods, thereby helping managers to arrange time and resources reasonably and improve overall organizational efficiency.

2. Theoretical foundation

2.1 Overview of overall planning theory

Program Evaluation and Review Technique (PERT) is a tool used for project management, primarily to determine the time, resources, and critical path required for project completion [2]. The

overall planning diagram clarifies the logical relationships and interdependencies between various tasks by drawing diagrams, helping managers to arrange time and resources reasonably and improve overall organizational efficiency. In the overall plan, tasks are represented by nodes, and the arrows between nodes represent the order of tasks. Each node has an estimated completion time (i.e. most optimistic time, most likely time, most pessimistic time), as well as the average completion time and standard deviation calculated from these times. Through these times, the earliest start time (ES) and latest start time (LS) of the task, as well as the earliest completion time (EF) and latest completion time (LF), can be calculated to determine the critical path and project completion time. The basic principle of a coordination chart is based on the dependency relationship and time estimation between tasks. Through calculation and analysis, the critical path and risk points of the project are determined, helping managers to plan and control project progress reasonably.

Critical Path Method (CPM) is a project management method developed based on the theory of overall planning [3]. It is mainly used to determine the critical path of the project, which is the longest path that affects the total project duration. Tasks on the critical path cannot be delayed, otherwise it will lead to delays in the entire project. In the critical path method, the sequential relationship between tasks is represented through a network diagram. Firstly, based on the dependency relationship and time estimation between tasks, draw a network diagram; Then, the critical path is determined by calculating the earliest start time (ES), earliest completion time (EF), latest start time (LS), and latest completion time (LF) for each task. The tasks on the critical path have the longest completion time, and any task on the critical path cannot be delayed, otherwise it will directly affect the progress of the entire project. The application of critical path method can help project managers accurately grasp project progress, timely identify and solve problems, and ensure timely completion of projects. It has the advantages of simple calculation, intuitive understanding, and visualization, and is therefore widely used in project management.

2.2 Project management theory

Project management is a systematic approach that involves planning, organizing, guiding, and controlling activities to achieve project objectives [4]. Project management includes setting project goals, determining scope, allocating resources, controlling progress, managing costs, and assessing risks. The core idea of project management is to integrate and coordinate various resources to achieve project goals. It emphasizes project management on a project by project basis, emphasizing abilities in teamwork, risk control, communication and coordination. Project management also emphasizes continuous improvement and learning to adapt to constantly changing environments.

The overall plan plays an important role in project management. Firstly, it can help project managers clearly understand the dependencies and importance between tasks. By drawing an overall plan, the logical structure and critical path of the project can be visually displayed, helping managers clarify the importance and sequence of various tasks. Secondly, the overall plan can help managers arrange their time and resources reasonably. By calculating the earliest start time (ES) and latest completion time (LF) of each task, the critical path and urgency of the task are determined, thereby allocating time and resources reasonably and improving project efficiency. In addition, the overall plan can help managers identify and manage project risks. By analyzing the average completion time and standard deviation of critical paths and tasks, the risk points of the project can be determined, and corresponding countermeasures can be formulated to reduce project risks.

In summary, the overall plan plays an important role and advantage in project management. It can help managers comprehensively grasp project progress, arrange resources reasonably, reduce project risks, and thus improve the efficiency and success rate of project management. Introducing the theory of overall planning in the organization of university sports games can help managers plan the competition schedule, coordinate resources, and ensure the smooth progress of the competition.

3. Analysis of the current organizational situation of the Guangzhou Huali College

3.1 School overview and sports history

Guangzhou Huali College is a comprehensive university located in Guangzhou, with multiple colleges and majors. The school is renowned for its excellent teaching quality and outstanding research achievements, attracting many outstanding students and teachers. The sports meet is an important event held by the school, aimed at promoting the physical and mental health development of students,

enhancing teamwork spirit and competitive awareness. The sports meet is usually held once a year and lasts for several days. In the past few years, the school sports meet has gradually developed and grown. The school has continuously expanded the scope of competition projects, added various sports and cultural performances, and attracted more participants and audiences. The sports meet is not only a stage for sports competition, but also an important opportunity to showcase the school's style and team strength. The organizational structure of the school's sports meet mainly includes the preparatory committee, organizational department, competition department, and logistics department. The preparatory committee is responsible for overall planning and decision-making, the organizing department is responsible for athlete registration and competition affairs, the competition department is responsible for organizing specific competition projects, and the logistics department is responsible for venue construction, equipment preparation, and service support. The organizational process of a sports meet generally includes the following stages: planning and preparation stage, registration and preparation stage, competition execution stage, and summary and filing stage. At each stage, close cooperation is required between departments to ensure the smooth completion of tasks. However, there are still some issues with the school sports meet that need further improvement and refinement.

Firstly, there are challenges in time management. Due to the numerous competition events and performance programs involved in the sports meet, the schedule needs to be planned reasonably to ensure that all activities can proceed smoothly and avoid delays. Secondly, there is an imbalance in resource allocation. Due to the need for a large amount of venues, equipment, and human resources for sports events, improper resource allocation may lead to insufficient resources for certain projects or departments, affecting the quality and effectiveness of the competition. Additionally, there are certain issues with coordination and communication. The organization of the sports meet involves the cooperation of multiple departments and personnel, and the efficiency of information exchange and coordination communication directly affects the smooth progress of the project. At present, poor coordination and communication may lead to issues such as delayed information transmission, overlapping tasks, or conflicts.

3.2 SWOT analysis

Guangzhou Huali College has excellent teaching staff and professional sports facilities, which can provide good competition conditions and competition environment. The university has rich organizational experience and the ability to successfully organize large-scale activities. At the same time, the university focuses on student physical exercise and comprehensive quality cultivation, with high participation and enthusiasm.

However, after summarizing the situation of the school's sports meet in recent years, it was found that there are problems in time management and resource allocation in the organization of the sports meet, and more reasonable planning and allocation are needed to ensure that all activities can proceed smoothly and achieve success. In addition, there are also difficulties in coordination and communication, as well as untimely information transmission. Therefore, it is necessary to strengthen communication and collaboration abilities and establish more efficient working mechanisms. At the same time, for some emerging projects and performance programs, there is a lack of relevant experience and professional guidance. It is necessary to seek the support and guidance of professionals to improve the quality and level of these projects, and add more highlights and attractiveness to the sports meet. Therefore, in the preparation for future sports games, it is necessary to conduct in-depth analysis of these issues and take effective measures to solve them, in order to enhance the overall quality and influence of the games.

The sports meet of Guangzhou Huali College also faces many opportunities. The sports meet can become an important platform for schools to showcase their image and characteristics, attract more outstanding students and faculty, and enhance the school's visibility and attractiveness. Sports meet can promote communication and cooperation among various colleges and majors in the school, cultivate team spirit and collaborative ability, and contribute to the cohesion and vitality within the school. In addition, the sports meet can attract external attention and support, promote the brand building and campus culture construction of the school, and add new impetus and resources to the development of the school. Therefore, fully utilizing these opportunities will help to enhance the overall image and competitiveness of the university, promote the comprehensive development and enhancement of the university.

The sports meet at Guangzhou Huali College faces the following threats: firstly, college students face enormous academic pressure, and they need to spend a lot of time and energy on learning, which

may affect their active participation and investment in the sports meet. Secondly, the sports meet faces limitations in terms of funding and venue resources, which may have a certain impact on the scale and quality of the competition events. In addition, the school's sports meet may also face challenges from other competitors, requiring continuous improvement of its organizational level and attractiveness to attract more participants and audiences, ensuring the success of the sports meet. Therefore, in the face of these threats, it is necessary to conduct in-depth research and effective organizational plans to address these challenges and ensure the smooth progress and sustainable development of the sports meet.

In summary, the sports meet of Guangzhou Huali College has certain advantages, but there are also some disadvantages and challenges. By fully leveraging strengths and opportunities, addressing weaknesses and threats, schools can further enhance the organizational level and influence of sports events, and provide students with a better platform for sports and cultural exchange.

4. Design of sports event organization plan based on overall planning

4.1 Task identification and decomposition

Before organizing a successful sports meet, it is necessary to first identify and decompose tasks. The goal of this stage is to clarify the various tasks and work of the sports meet, and break them down into manageable small tasks. Through task identification and decomposition, it is possible to clearly understand the work content that needs to be completed, which helps to plan time and resources reasonably.

In the process of task identification and decomposition, the following aspects can be considered: determining the organizer, setting the theme and goals of the sports meet, determining competition projects and performance programs, planning the arrangement of participants and spectators, preparing the venue and equipment, etc. The decomposed small tasks can be sorted in chronological order or relevance to form a clear task list.

4.2 Construction of overall planning diagram

A coordination chart is a graphical tool used to display the relationships and processes between tasks [5]. In the design of sports event organization plans, building a coordination chart can help organizers have a clearer understanding of the dependencies, workflow, and time arrangement between tasks. By constructing an overall plan, various tasks can be better coordinated to ensure the smooth progress of the sports meet.

When constructing an overall plan, tasks can be arranged in chronological order to form a flowchart. At the same time, it is necessary to indicate the start and end times, responsible persons, and required resources for each task in order to better optimize and schedule resources. The overall plan can be a rough planning framework or a detailed task flowchart, adjusted and improved according to the actual situation.

4.3 Resource optimization and scheduling

Resource optimization and scheduling are important links in the organization and planning of sports events. In the stage of resource optimization and scheduling, it is necessary to evaluate and allocate various resources to ensure the reasonable utilization of the venue, equipment, manpower and other resources required for the sports club.

Through the guidance of the overall plan, resource optimization and scheduling can be better carried out. Firstly, it is necessary to evaluate the amount of resources required for each task and prioritize them based on their urgency. Then, in terms of resource allocation, resources can be allocated reasonably based on the scheduling and dependency relationships of tasks, avoiding resource waste and shortages.

Resource optimization and scheduling also need to consider the reasonable arrangement of human resources. Identify the responsible person and team for each task, and ensure that they possess the corresponding skills and experience. At the same time, attention should be paid to the coordination and connection between tasks to ensure smooth cooperation and communication among teams.

4.4 Risk management and response

Risk management is an important aspect in the design of sports event organization plans. By identifying potential risks and developing corresponding response measures, the impact of risks on sports events can be reduced.

Firstly, it is necessary to identify and evaluate risks, identify potential risks and their potential impacts. These risks may include weather changes, equipment malfunctions, and injuries to participating athletes. Then, corresponding response measures should be formulated for each risk, such as the preparation of backup sites, spare parts for equipment, and the formation of medical rescue teams. In addition, it is necessary to establish effective communication and coordination mechanisms to ensure timely access to information and the transmission of instructions. In addition, develop flexible response plans to enable timely response and adjustment of plans in case of unexpected situations. By identifying and decomposing tasks, constructing an overall plan, optimizing and scheduling resources, and managing risks and responses, sports organizers can better plan and manage sports events. The execution of these steps will help improve the efficiency and quality of the sports meet, providing participants and spectators with a pleasant and unforgettable sports event.

5. Conclusion

Through the research in this paper, an in-depth exploration and analysis of the organizational plan for university sports events based on a coordination chart was conducted. Based on the case study of Guangzhou Huali College, we have proposed a complete design plan for the organization of the sports meet and have drawn the following conclusions:

Firstly, the design of the sports event organization plan based on the overall plan can help organizers clearly understand the dependencies, workflow, and time arrangement between tasks. By constructing an overall plan, various tasks can be better coordinated to ensure the smooth progress of the sports meet. This method is not only applicable to the organization of university sports events, but can also be applied in the planning of other large-scale events.

Secondly, resource optimization and scheduling are an indispensable part of the sports event organization plan. In this study, we found that through the guidance of a coordination chart, resource optimization and scheduling can be better carried out. Reasonably evaluating the amount of resources required for each task and allocating resources based on the time arrangement and dependency relationship of the task can avoid resource waste and shortage, thus ensuring the smooth progress of the sports meet.

In addition, risk management and response are also key issues that need to be focused on in the organization plan of the sports meet. We emphasize the importance of identifying potential risks, developing response measures, and establishing effective communication and coordination mechanisms. Only with sufficient contingency plans and preparations can we respond and adjust plans in a timely manner in case of unexpected situations, ensuring the smooth progress of the sports meet.

Finally, this study provides a systematic sports event organization plan design scheme for university sports event organizers, aiming to improve the efficiency and quality of the sports event, and provide participants and audiences with a pleasant and unforgettable sports event. We believe that this plan will have a positive impact on the organization of future university sports events and provide useful reference for the planning of similar activities.

In summary, we have conducted in-depth research on the organizational plan of university sports events based on the overall plan, proposed a relatively complete design scheme, and believe that this will bring positive promotion and improvement to the organizational work of university sports events. However, we also realize that in practical operation, we still need to constantly summarize experience, continuously improve and adjust the sports organization plan, in order to achieve better results and experience.

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