



Managerial Guideline to Promote the Weekend Leisure Sports Participation for Junior High School Students in Shaoguan City

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Abstract

Background and Aim: Encouraging weekend leisure sports participation improves physical fitness, lowers stress, and promotes a healthy lifestyle. Through common recreational pursuits, it also promotes social interaction and community involvement. This study aim to develop managerial guideline to promote the weekend leisure sports participation for junior high school students in Shaoguan City.

Materials and Methods: This study used stratified sampling to survey research subjects in Zhenjiang District, including 5 junior high schools with a total of 368 junior high school students (age from 13 to 15 years) were surveyed by questionnaires to understand the current situation of weekend leisure sports development, and expert interviews were provided to formulate a plan to promote the weekend leisure sports participation for junior high school students in Shaoguan City. Second, ten focus group experts were invited to develop a management guide to promote weekend leisure sports for junior high school students based on the POLC theory. Third, seven experts evaluated and validated the guidelines for weekend leisure sports for junior high school students.

Results: This study identifies 20 indicators across four levels: planning (sports guidance, goal motivation, planning tools, short exercise programs, exercise partner matching), organizing (program enrichment, facility openness, family activities, sports social circle, safety training camps), leading (student clubs, multi-party cooperation, competitions, student-led programs, cross-school exchange), and controlling (record-keeping, feedback, rewards and penalties, health monitoring, dynamic adjustment).

Conclusion: This study develop a management guideline to promote weekend leisure sports for junior high school students in Shaoguan City based on POLC theory. The management guide is divided into four aspects: five indicators at planning level; five indicators at organization level; five indicators at leadership level and five indicators at control level.

Keywords: Managerial Guideline; Weekend Leisure Sports Participation

Introduction

As living standards improve, people increasingly recognize the role of sports in enhancing their health, making recreational sports an essential part of daily life. The study found that secondary school students are under more significant pressure to study, and study is still the central theme of summer life; secondary school students' summer leisure activities are more monotonous, and their participation in fitness and health sports and Chinese chess, calligraphy and painting activities is relatively low; secondary school students' frequency of watching TV and surfing the Internet in the summer is too high, which is not conducive to their physical and mental health. Shaoguan is a prefecture-level city under the jurisdiction of Guangdong Province, China. Located in the northern part of Guangdong Province, at the southern foothills of the Nanling Mountains, Shaoguan serves as an important gateway city for the province. With a long history and rich cultural heritage, it is known as the "Famous Prefecture of Lingnan." Similarly, recreational sports for middle school students are inadequate and suffer from insufficient field facilities and incomplete systems. All sectors of society need to pay attention to the leisure activities of secondary school students to promote the comprehensive and healthy development of secondary school students (Chen & Du, 2010). Leisure sports are characterized by fitness, autonomy, voluntary freedom of choice, and recreation. It is a form of expression that allows human nature to return, and this kind of sports program that emphasizes "play" is the product of the emergence of freedom in the true sense of the word. Leisure sports provide a good interactive platform for students' spiritual life and mutual communication, understanding, and respect, as well as strengthening their bodies and physical fitness (Ma, 2018). Recreational sports are fitness and recreational activities, and a self-learning and self-improvement educational process. Leisure sports can cultivate secondary school students' good interest in leisure sports, correct concepts, scientific attitudes, and good habits of fitness and recreation (He, 2018). Leisure and physical activity are essential for development because they provide opportunities for skill development and forming social relationships during adolescence. Today's adolescents' leisure behaviours are not always constructive or positive, and learners are becoming more passive (Carron et al., 2023). This passivity is influenced by various factors, such as lack of leisure time, excessive exposure to technological means to spend leisure time, and lifestyle changes





(Merrill, 2020). The relative autonomy of students' lives on weekends is a favourable time to observe students' self-lifestyles and learning styles. Students' choice of active or passive lifestyles directly relates to their physical and mental health. Based on the above analysis, this research examines the current situation of junior high school students' weekend leisure sports, analyzes the current situation of junior high school students' leisure sports and the influencing factors, and provides a more scientific way for junior high school students to develop leisure sports. It fills a research gap by analyzing the current situation of junior high school students' leisure sports and the factors affecting them. It suggests that junior high school students carry out leisure sports more scientifically.

Objectives

- (1) To survey the current situation and problems of weekend leisure sports participation for junior high school students in Shaoguan City.
- (2) To develop the managerial guideline to promote the weekend leisure sports participation for junior high school students in Shaoguan City.

Literature review

Multiple studies have revealed the critical role of leisure activities. Fancourt et al. (2021) point out that leisure activities positively impact mental and physical health through mechanisms such as reducing stress, increasing social participation, and promoting physical activity. Stebbins (2020) emphasizes in his book "Serious Leisure Perspectives" that serious leisure activities can bring personal growth and satisfaction, and these activities have the characteristics of deep engagement and high skills. Furthermore, Stebbins (2017) shows that individual choices and social environment influence leisure activities. The empirical study by Heo et al. (2012) shows that the core characteristics of serious leisure, such as skill development and persistence, positively affect the quality of life of older adults. In addition, Dierker et al. (2017) found that incorporating a serious leisure perspective into medical environments can help reduce patient stress and healthcare worker burnout. In summary, leisure activities play a crucial role in promoting health and well-being, and their impact is multifaceted and interrelated (Fancourt et al., 2021; Stebbins, 2020; Stebbins, 2017; Heo et al., 2012; Dierker et al., 2017).

The existing research has a limited and inconsistent theoretical framework, calling for longitudinal studies on youth groups, small-scale events, and participatory activities to advance the research agenda of sports participation outcomes. (Smith et al., 2020). In terms of mass participation in sports activities, a literature review proposes the concept of "active leisure activities", aiming to integrate research on "mass participation" activities targeting non-elite participants and promote the coherence of theoretical and applied research (Jones et al., 2021). These studies collectively emphasize the diversity of leisure sports participation and its importance in different contexts (Smith et al., 2020; Jones et al., 2021; Johnson et al., 2022; Brown et al., 2021; Davis et al., 2023).

POLC theory is a classic and widely used framework in modern management, and its core content revolves around the four basic functions of Planning, Organizing, Leading, and Controlling. This theory first proposed the five functions of management, including planning, organizing, directing, coordinating, and controlling, which were later simplified into four core functions, forming the POLC framework in modern management (Fayol, 1916). In addition, Luther Gulick and Lindall Urwick further developed the theory of managerial functions based on Fayol's work by proposing the POSDCORB model (Plan, Organize, Personnel, Direct, Coordinate, Report, and Budget), which provided a more detailed framework for the POLC theory (Gulick & Urwick, 1937). The POLC theory, a classical framework in management, systematically guides management practices through four key functions: Planning, Organizing, Leading, and Controlling. This study aimed at promoting weekend leisure sports participation among junior high school students in Shaoguan City, drawing on the POLC theory. It reviews relevant literature to provide theoretical foundations and practical evidence.

Conceptual Framework

INPUT	PROCESS	OUT PUT
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1. Weekend Leisure Sport	1. Literature Method	Managerial guidelines to promote the weekend leisure sports participation for junior high school students in Shaoguan City
2. Influencing factors for sports participants	2. Questionnaire	
3. Current situation for sport participation	3. Expert interview	
4. The POLC management theory	4. Focus group	
5. Sports promotion	5. Connoisseurship	

Methodology

This study used stratified sampling to survey research subjects in the Zhenjiang District, including five junior high schools with 4,432 students aged 13 to 15. Based on Taro Yamane's sample extraction method, if the population size is in the thousands, at least 5% of the sample should be used. Therefore, the survey sample for this study is 368 people. The questionnaire was obtained through Questionnaire Star and offline paper data collection, and informed consent was obtained from the subjects. In this study, we learned the results of descriptive statistics on the basic information of the 368 participants of pairs of junior high school students. Gender distribution showed that there were 166 males, or 45.1% of the total sample, and 202 females, or 54.9% of the total sample. Regarding grade distribution, 114 or 31.0% of the first-grade students, 148 or 40.2% of the second-grade students, 106 or 28.8% of the third-grade students, and the age range of all the subjects were 13-15 years old.

Results

Descriptive analysis

Table 1 The current situation and problems of weekend leisure sports participation for junior high school students in Shaoguan City (N=368)

Questionnaire items	Total score		Result
	\bar{x}	S.D	
Planning			
1. I usually have a regular recreational exercise program on weekends.	1.94	0.77	poor
2. I think it is very important to have a weekend leisure and sports program.	3.07	0.81	moderate
3. I will plan my exercise program and time in detail before the weekend.	1.60	0.49	very poor
4. I usually plan my weekend exercise program well in advance.	3.07	0.85	moderate
Organizing			
5. I prefer to organize weekend leisure sports with my friends.	2.96	0.90	moderate
6. I am satisfied with the work of my school or community in organizing weekend leisure sports.	2.96	0.92	moderate
7. I would like my school or community to provide sports venues to help organize weekend recreational sports.	2.32	1.05	poor
8. I am willing to join the weekend sports clubs organized by my school or community.	2.03	0.76	poor
Leading			
9. I am willing to take on the role of organizer or leader in weekend leisure sports.	2.09	0.70	poor
10. Invitations from classmates or friends would greatly influence my motivation to participate in weekend leisure sports.	2.06	0.72	poor
11. I would like to have a professional coach or teacher to guide weekend leisure sports.	2.08	0.72	poor
12. I am willing to try new sports or activities.	2.14	0.71	poor
Controlling			
13. I can insist on completing my weekend leisure exercise	2.98	0.91	moderate





Questionnaire items	Total score		Result
	\bar{x}	S.D	
14. My academic burden may prevent me from completing my weekend recreation and sports program.	2.06	0.72	poor
15. I will reflect on my performance after the weekend exercise program, such as the effect of exercise and whether I have achieved my goal.	2.08	0.74	poor
16. I would appreciate regular feedback from my school or community about my sports participation.	2.03	0.77	poor

According to Table 1, descriptive statistics were analyzed for the four items at the planning level. The mean values of the four items ranged from 1.60 to 3.07, with standard deviations ranging from 0.49 to 0.85. At the Organizing level, we conducted a descriptive statistical analysis for the four items. The mean values of the four items ranged from 2.03 to 2.96, and the standard deviations ranged from 0.76 to 1.05, indicating a certain degree of fluctuation and diversity in respondents' attitudes and behaviours in organizing weekend leisure sports. At the leading level, descriptive statistics were analyzed for the four items; the mean values of the four items ranged from 2.06 to 2.14, and the standard deviations ranged from 0.70 to 0.72, indicating that the respondents' attitudes and behaviours at the leadership level were relatively consistent, but the overall motivation was not high. Descriptive statistics were analysed for the four items regarding the controlling level of weekend leisure sports. The mean values of the questions ranged from 2.03 to 2.98, and the standard deviations ranged from 0.72 to 0.91, indicating some fluctuations in the attitudes and behaviours of the respondents in the control dimension. Still, the overall performance needs to be improved. In this study, the focus group method was adopted to interview 10 experts to develop the managerial guidelines to promote weekend leisure sports participation for junior high school students.

Connoisseurship analysis

To confirm the managerial guideline to promote weekend leisure sports participation for junior high school students in Shaoguan City. This study invited seven experts to evaluate managerial guidelines to promote weekend leisure sports participation for junior high school students in Shaoguan City (see Table 2). Seven experts include two specialists in sports science, two specialists in leisure sports, and three specialists in physical education, all with over two years of experience in their respective fields.

Table 2 Connoisseurship evaluation result analysis

Content	Guideline factor	Expert opinions		Result
		X	S.D.	
Planning	Schools and communities should provide instructional programs for exercise planning	4.86	0.38	Very high
	Establish a clear incentive system for exercise goals	4.86	0.38	Very high
	Develop exercise planning tools	4.86	0.38	Very high
	Design short exercise programs (e.g., 15-minute micro-exercise) that utilize fragmented time	4.86	0.38	Very high
	Setting up an exercise partner matching system to promote social participation	4.71	0.49	Very high
Organizing	Enrich sports programs to meet the interests of different students	4.71	0.49	Very high
	Improve the accessibility of sports venues and equipment	4.86	0.38	Very high
	Organize regular sports activities for families	4.86	0.38	Very high
	Establishing a "Sports Social Circle" platform	4.57	0.53	Very high
	Conducting "Sports Safety Training Camps"	4.71	0.49	Very high
Leading	Encourage students to organize and manage their own sports clubs	4.86	0.38	Very high
	Coaches, teachers, and parents should work closely together and formulate strategies together	4.71	0.49	Very high
	Organize competitions and challenges to stimulate students' sense of competition.	4.71	0.49	Very high
	Implement student-led sports activity programs (e.g., Creative Games)	4.86	0.38	Very high
	Establish a cross-school sports exchange platform to facilitate resource sharing	4.71	0.49	Very high



Content	Guideline factor	Expert opinions		Result
		X	S.D.	
Controlling	Implement a record-keeping mechanism	4.86	0.38	Very high
	Provide regular reports on students' sports performance	4.86	0.38	Very high
	Set up a reasonable reward and punishment system	4.71	0.49	Very high
	Establishment of a health monitoring and exercise risk assessment mechanism	4.57	0.53	Very high
	Implement a dynamic adjustment mechanism	4.57	0.53	Very high
Total		4.76	0.36	Very high

According to Table 2, through seven expert assessments, the management guidelines for promoting weekend leisure sports for junior high school students had high scores in each index, which met the standards of promotion and implementation. The research shows that the management guidelines to promote weekend leisure sports for junior high school students need to implement the strategies from four levels: planning, organization, leadership, and control.

Discussion

At the planning level, this study proposes five indicators to promote student physical activity on weekends: physical activity planning guidance courses, goal incentive systems, development of planning tools, design of fragmented exercise routines, and exercise partner matching systems. These proposals are based on a systematic analysis of adolescent physical activity behaviors and existing issues, with specific reasons as follows: first, students generally lack scientific physical activity planning skills (such as inadequate awareness of proper form and intensity control), which can be addressed by planning guidance courses through knowledge dissemination and skill training; second, adolescents' physical activity is easily influenced by vague goals and insufficient motivation persistence, and goal incentive systems enhance behavioral adherence through short-term and long-term goal linkage mechanisms and visual feedback; third, the introduction of digital tools reduces the cognitive threshold for creating physical activity plans and improves execution convenience; fourth, short, efficient exercise programs align with students' fragmented time patterns, helping to overcome the common barrier of 'lack of time'; finally, the absence of social support systems can lead to interruptions in solitary physical activities, and matching systems reinforce behavior persistence through peer supervision and interaction. This study emphasized the importance of an instructional exercise planning course. Research has shown that exercise planning instruction sessions can improve students' knowledge and implementation of exercise programs (Hortz & Petosa, 2006). These courses teach students how to develop an exercise plan based on their health status and goals and provide individualized exercise recommendations and training instructions (Radu & Bdu, 2024). Through these programs, students can learn the basic principles of exercise planning, including frequency, intensity, duration, and type of exercise (the FITT principle), essential to their long-term adherence to exercise and achieving health goals. In addition, empirical research on goal-setting theory in sports has shown that clear goals can motivate students to participate better in sports (Gu et al., 2017). The introduction of a sports goal incentive system can significantly enhance students' sports performance and motivation by setting specific, measurable goals. Finally, technological advances have made it possible to develop exercise planning tools that can help students plan and track their exercise programs more scientifically. The development of exercise program tools, such as mobile apps and online platforms, can help students plan and track their exercise programs more scientifically, and the convenience and real-time feedback features of these tools can further increase student engagement and compliance (McMahon et al., 2013).

Regarding fragmented exercise design, Gibala's (2021) study confirmed that the accumulation of high-frequency, short bursts of exercise similarly improves cardiorespiratory fitness, consistent with the guidelines proposed in this study. Smith-Turchyn et al.'s (2024) study on peer support for health behaviours revealed a cumulative effect of peer effects, but Thoits (2010) noted the "Social Stress Reverse Effect," that there may be an adverse effect of partnerships based on perceptions of stress.

At the organizational level, this study proposes three key indicators for enriching sports programs: improving the openness of facilities, organizing family participation activities, establishing a "Sports Social Circle" platform, and conducting "Sports Safety Training Camps. First, increasing the diversity of sports programs can effectively enhance students' physical fitness and interest in sports, and increasing the diversity of sports programs can effectively enhance students' physical fitness (Moore, 2004) by providing a variety of sports options, the needs and preferences of different students can be met, thus increasing their





participation. Secondly, improving the openness and availability of sports facilities is a key factor in increasing student sports participation, and providing better facilities and openness can encourage more students to participate in physical activity (Gardsjord et al., 2014). Good facility conditions can reduce barriers to student participation in sports and provide a safer and more comfortable sports environment, improving student participation and the sports experience. Finally, family involvement has been identified as an important factor in increasing student sports participation. Students' motivation to play sports and family support can be increased by organizing family involvement activities, which is especially important for adolescents to develop sports habits (Straub & Plessner, 2024). Family involvement provides emotional support and enhances interaction and bonding between family members.

Sports Social Circle is an online platform to connect individuals and groups interested in sports. Individuals can share their sports experiences and find workout partners on the platform. The establishment of the Sports Social Circle platform provides a convenient social space for sports enthusiasts to easily find like-minded friends and share experiences, thereby promoting sports participation (Vliet & Eduard, 2021). The launch of the 'Sports Safety Training Camp' aims to meet modern people's demand for a healthy lifestyle by providing professional training to ensure participants enjoy the fun of sports while also safeguarding their safety, emphasizing the importance of sports safety (Zae et al., 2024).

At the leadership level, establishing student sports clubs can promote students' sports participation and leadership development, implement student-led sports activity programs (e.g., Creative Games), and establish a cross-school sports exchange platform to facilitate resource sharing. This study highlights the importance of establishing student sports clubs, collaborating with multiple parties to promote motivation, and organizing tournaments and challenges. Establishing student sports clubs can promote sports participation and leadership development (Carron et al., 2005). Club activities not only enrich campus cultural life but also stabilize the social mindset of college students and improve their social skills and teamwork abilities. Multi-party cooperation, including school, community, and family cooperation, can enhance students' motivation to participate in physical activities (Jafarzadeh et al., 2014). Such collaborations can combine resources to provide a more diverse range of athletic opportunities while enhancing connections between students, families, and communities. Hosting tournaments and challenges can inspire competitive spirit and participation among students (Carron et al., 2005). These activities improve students' athletic skills and foster a sense of competition and teamwork. Student-led physical activity models encourage students to design and organize their sports activities, such as creative games. These games may include team challenges, fun obstacle courses, or innovative variations of traditional sports. This approach increases student engagement and fosters leadership and creativity (Mallard et al., 2024). By establishing an inter-school sports exchange platform, students from different schools can share and exchange sports resources like spacious playing fields, advanced equipment, and rich competition experience. The platform can also host online seminars and offline meetups, allowing students to learn and grow through interaction. Which helps break down barriers between schools, promotes broader communication and collaboration (Kikuchi, 2013), and inspires more innovative sports activities.

At the controlling level, the exercise recording mechanism allows monitoring of the progress and effectiveness of students' exercises. This study proposes three key indicators for implementing an exercise recording mechanism, establishing a feedback mechanism, and setting up a reward and punishment system. The exercise recording mechanism can help monitor students' exercise progress and effectiveness and provide a basis for subsequent adjustments (Kuru, 2024). By recording and analyzing exercise data, students can better understand their exercise habits and room for improvement. Establishing a feedback mechanism is crucial for students' exercise performance to help them understand their progress and areas for improvement. Timely feedback can enhance students' self-efficacy and improve their motivation and participation in exercise. Then, establishing a reward and punishment system can be used to motivate students' healthy behaviours (Garavan & Weierstall, 2012). By rewarding excellent performance and penalizing deficiencies, students' exercise participation can be increased while developing their sense of responsibility and self-management skills. Establishment of a health monitoring and exercise risk assessment mechanism. With the advancement of technology, health monitoring devices such as smart bracelets and blood pressure monitors have become increasingly widespread. Health monitoring aids in the early detection of potential health issues, allowing timely intervention, which is beneficial for implementing healthy exercise routines (Han et al., 2024). Finally, a dynamic adjustment mechanism should be implemented, as individual health status changes over time, requiring flexible responses. Continuously optimize and adjust health plans based on real-time data and feedback. The above discussion is based on the POLC model and incorporates current research and practice to demonstrate strategies and methods for promoting student participation in physical activity at different levels. By implementing these strategies, students' physical activity participation can be effectively enhanced, promoting their physical and mental health.



Conclusion

This study develop a management guideline to promote weekend leisure sports for middle school students in Shaoguan City based on POLC theory. This study identified five indicators at the planning level, five indicators at the organizing level, five indicators at the leading level and five indicators at the controlling level, including three indicators at the control level including: implementation of a record-keeping mechanism for sports.

Recommendation

It is recommended that schools and communities increase the frequency and coverage of instructional sports planning programs to increase students' awareness and ability to implement sports planning. To attract more students to participate in sports activities, it is recommended that schools and communities enrich the types of sports programs, including team sports, individual sports, and recreational sports, to meet the interests and needs of different students. Schools and communities are advised to take measures to promote family participation in sports activities, such as organizing family sports days or parent-child sports activities to enhance interaction and contact among family members. It is recommended that schools actively set up and support student sports clubs to provide a platform for students to develop their leadership and teamwork skills. Meanwhile, regular sports competitions and challenges are organized to stimulate students' competitive spirit and participation. A timely feedback mechanism should be established to help students understand their progress and areas for improvement.

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