

Research on Optimization Strategies of Youth Outdoor Camp Education from the Perspective of Sports Psychology

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Abstract: As an innovative form integrating nature, sports and education, outdoor camp education has significant value for the all-round development of young people. However, adolescents face multiple psychological challenges such as motivation, emotion and social interaction during participation. Based on the theoretical framework of sports psychology, this study systematically analyzes four major common psychological problems of young people in camps—low participation willingness, weak self-regulation, excessive competition and difficult interpersonal adaptation—through on-site investigations and interviews at Fosun Tourism & Culture Mini-Camp. On this basis, the study constructs a four-dimensional optimization strategy system including motivation stimulation, self-regulation improvement, sports spirit shaping and social adaptation promotion, and proposes an integrated implementation model and effect evaluation plan covering the pre-camp, in-camp and post-camp stages. This research aims to promote the in-depth integration of sports psychology and camp education, and provide theoretical reference and practical model for the professional development of the industry.

Keywords: Outdoor Camp Education; Adolescents; Sports Psychology; Optimization Strategies

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1. Introduction

In recent years, with the issuance of policies such as the Development Plan for the Outdoor Sports Industry (2022—2025), youth outdoor camp education, as an important part of quality education, has shown a strong development momentum. Through physical exercise, natural exploration and team life, it has irreplaceable value in cultivating young people's sound personality and social adaptation ability. However, camp education in China started relatively late. In practice, it often emphasizes activity processes and skill training, while ignoring the complex psychological dynamics of young people, such as motivation fluctuations, emotional ups and downs and social anxiety^[1]. If these psychological challenges are not effectively guided, they will weaken the educational effect and even bring negative experiences.

Sports psychology studies the laws of psychological activities of people in sports situations. Its theories and technologies on motivation stimulation, emotion management, attention regulation and team cohesion can precisely provide strong support for solving the above problems. This study aims to systematically introduce sports psychology into youth outdoor camp education^[2]. Taking Fosun Tourism & Culture Mini-Camp as an example, it analyzes the psychological problems of young people through on-site investigations and interviews, and constructs scientific optimization strategies to improve the quality of camp education and promote its scientific development^[3].

2.Theoretical Basis and Research Methods

2.1 Theoretical Basis

Sports psychology provides a solid theoretical support for camp education. Self-Determination Theory (SDT) points out that meeting individuals' basic psychological needs for autonomy, competence and relatedness can stimulate intrinsic motivation^[4]. Achievement Goal Theory distinguishes between task orientation and ego orientation, guiding young people to focus on personal progress rather than mere victory or defeat, which helps to enhance the fun of activities. Emotion Regulation Theory emphasizes that individuals can manage emotions through strategies such as cognitive reappraisal and relaxation techniques, which is crucial for coping with high-challenge situations in camps. Attention and Arousal Theory reveals the inverted U-shaped relationship between arousal level and performance, and technologies such as imagery training and self-talk can help young people maintain an optimal psychological state. Team Dynamics Theory shows that setting common goals and carrying out team-building activities can effectively improve task cohesion and social cohesion, and promote team collaboration^[5].

2.2 Research Methods

This study adopts a qualitative research approach, comprehensively using the literature review method, on-site investigation method, interview method and logical analysis method. From July to August 2025, the researchers participated in two sessions of Fosun Tourism & Culture Mini-Camp's "Guilin Natural Outdoor Exploration Camp" as observers, observing and recording the behaviors and emotional performances of about 60 campers aged 8-12 in activities such as stream trekking and rock climbing. At the same time, semi-structured interviews were conducted with 5 senior camp staff to gain an in-depth understanding of campers' psychological challenges and the current situation of response. Finally, using the logical analysis method, the observation and interview data were matched with sports psychology theories to construct optimization strategies^[6].

3.Analysis of the Current Situation of Youth Camp Participation and Psychological Problems

3.1 Low Willingness to Participate in Some Activities and Psychological Resistance

When facing high-challenge projects such as rock climbing and trapeze, some campers show behavioral withdrawal, negative emotions and low participation. The underlying reasons are as follows: first, frustrated competence needs and low self-efficacy—campers with weak physical fitness or lack of experience choose to avoid because they predict they "cannot do it"; second, social anxiety and lack of relatedness needs—introverted campers find it difficult to integrate into the group for fear of being laughed at; third, cognitive biases and fear psychology—excessive imagination of unknown environments and risks triggers strong fear; fourth, gender differences—some girls resist high-intensity activities due to physical burdens or social stereotypes^[7].

3.2 Insufficient Awareness of Rules and Self-Regulation Ability

In activities such as archery and fan painting, some campers show rule-breaking, distracted attention and impulsive behaviors^[8]. This is mainly due to the physiological limitations of adolescents' brain development—their prefrontal cortex is not yet mature, resulting in weak impulse control ability. At the same time, egocentric thinking mode, unstable attention and weak ability of delayed gratification also make it difficult for them to understand and abide by rules.

3.3 Weakened Sports Spirit and Emergence of Excessive Competition Tendency

In competitive activities, some campers overemphasize victory or defeat, feeling frustrated when losing and mocking opponents when winning, ignoring the process and cooperation. This reflects the deviation of their achievement goal orientation, which overly binds self-worth with comparison with others. In addition, the internalization of the social and cultural concept of "striving for the first" and the insufficient understanding of sports spirit are also important reasons.

3.4 Difficulties in Adapting to Collective Life and Interpersonal Frictions

In the early stage of camp, some campers have stress reactions such as homesickness and insomnia. In collective life, due to differences in living habits, lack of social skills and insufficient empathy, conflicts between roommates and social isolation of

some campers occur from time to time. The main crux lies in psychological stress caused by sudden environmental changes and lack of experience in dealing with interpersonal relationships independently.

4. Construction of Optimization Strategies from the Perspective of Sports Psychology

To address the common problems in current youth outdoor camp education, such as insufficient participation motivation, weak rule awareness, difficult team collaboration and poor social adaptation ability, this study constructs a systematic psychological intervention and optimization strategy based on the core theories and methods of sports psychology^[9]. The strategy aims to organically integrate psychological skill training into the entire process of camp activities, and fundamentally promote the all-round development of young people's psychological quality.

4.1 Strategy for Stimulating Motivation and Enhancing Participation Willingness: "Bringing In"

The core goal is to transform young people's passive participation attitude and stimulate their intrinsic motivation, with the key lying in meeting their three basic psychological needs for autonomy, competence and relatedness.

1. Implement "step-by-step" goal setting. According to Goal Setting Theory, specific, challenging and achievable goals can effectively guide behaviors and stimulate efforts. In practice, the "SMART" principle can be introduced at the opening ceremony to guide campers to set specific goals. For high-altitude challenge projects, design personal "courage ladder" task cards, decomposing the final goal into multiple sub-goals that can be completed step by step (e.g., rock climbing can be divided into equipment wearing, touching rock holds, climbing to different heights, etc.), and giving immediate recognition after each step. Emphasizing the setting of process goals (such as "maintaining stable movements") rather than only focusing on results (such as "winning") helps to shift attention to technical mastery and reduce anxiety about failure.

2. Construct a supportive self-efficacy system. Self-efficacy stems from successful experience, vicarious experience, verbal persuasion and emotion regulation. In activities, the principle of "low starting point and high development" should be followed^[10]. In the early stage, easy-to-succeed links should be set to help campers build confidence. Before high-difficulty projects, arrange coaches or peers to demonstrate and share experience, providing vicarious learning models. Coaches' feedback should adopt the "sandwich method" (affirmation-suggestion-encouragement), focusing on praising efforts and progress. At the same time, teach simple emotion regulation skills, such as deep breathing or positive self-talk (e.g., silently saying "I can do it") before challenges.

3. Create a "family-like" sense of belonging. Satisfying the need for relatedness can significantly enhance intrinsic motivation for participation. In the early stage of camp, carefully designed ice-breaking and team-building activities (such as collaborative games) should be carried out to accelerate the integration of members. Encourage each group to create unique team cultural symbols such as team names and slogans to strengthen collective identity. Arrange fixed group sharing time every day to encourage members to communicate their feelings of the day, providing a safe space for emotional expression and promoting mutual understanding and support.

4.2 Strategy for Improving Rule Awareness and Self-Regulation Ability: "Keeping in Control"

The core is to help young people understand and internalize rules, and at the same time improve their ability to concentrate attention, manage emotions and behaviors^[11].

1. Promote "participatory" rule-making. While ensuring the bottom line of safety, hand over the right to formulate some living conventions (such as dormitory discipline) to campers, form consensus through group discussions and publicize them. Arrange campers to take turns as rule supervisors, transforming external rules into internal commitments, satisfying the need for autonomy and enhancing the willingness to abide by them.

2. Embed attention training sessions. Attention can be improved through practice. Before activities requiring fine operations (such as archery), short attention warm-up games (such as "do the opposite") can be conducted. During intervals between activity transitions, introduce a "one-minute quiet" mindfulness breathing exercise to help campers calm their emotions and regain attention. When guiding, coaches should use concise keywords (such as prompting "three-point fixation" when rock climbing) instead of long instructions to help campers maintain focus.

3. Provide "toolbox-style" emotion management methods. Emotion regulation is an acquirable skill. Activities such as "emotional weather forecast" can be carried out to encourage campers to identify and express their emotions every day. Teach

the “traffic light” emotion control method: red light (pause action, take deep breaths); yellow light (perceive feelings, think about consequences and alternative solutions); green light (choose the best action). Through situational discussions, guide campers to identify and restructure negative thoughts such as “catastrophizing” (e.g., changing “I completely failed” to “I found areas for improvement”), and cultivate a growth mindset.

4.3 Strategy for Shaping Sports Spirit and Team Cohesion: “Integrating Well”

It aims to guide young people to establish a correct view of competition and grow together in cooperation and respect.

1. Reshape a process-oriented view of success. By setting diverse awards such as “Best Progress Award” and “Team Collaboration Award”, affirm the value of effort, courage and cooperation. Set a fixed review session after team activities to guide discussions on team performance, areas for improvement and what has been learned from opponents, shifting the focus from victory or defeat to learning and growth.

2. Design highly interdependent collaborative tasks. Task cohesion arises from the mutual dependence of members to achieve common goals. Individual projects can be converted into a team scoring model (e.g., taking the minimum score of the team multiplied by the number of members as the total score) to encourage mutual assistance among members. Specifically design projects such as “Roman battlement construction” that can only be completed through close division of labor and cooperation to create real cooperative experiences^[12].

3. Integrate ritualized sports spirit education. Introduce an athlete’s oath session before competitive activities, emphasizing respect, striving and unity. After the game, force team members from both sides to line up and greet each other (shaking hands, high-fiving). By sharing model stories in sports history that reflect fair competition and tenacious struggle, make the connotation of sports spirit specific and vivid.

4.4 Strategy for Promoting Social Adaptation and Interpersonal Communication: “Getting Along Well”

The goal is to help young people quickly adapt to new collectives and master basic social and conflict resolution skills.

1. Provide “structured” pre-camp adaptation support. Make the process of getting familiar with the camp interesting, such as guiding groups to explore key places through “treasure hunting games”. Reasonably mix and form “camp family” groups, carry out activities and evaluations in these units during the camp period, and assign campers with strong adaptability to take on mutual assistance roles to create a supportive small environment.

2. Organize micro social skills workshops. Insert short and focused skill drills during the camp. The content includes: learning to use open-ended questions to start conversations and conduct active listening; practicing the “non-violent communication” model, expressing with “I-messages” (stating behaviors, feelings and needs) instead of accusation; learning the “conflict resolution ladder” steps: calm down—express respective feelings—jointly create multiple solutions—jointly select and implement solutions.

5. Conclusion

From the theoretical perspective of sports psychology, this study conducts an in-depth investigation and analysis on the practice of youth outdoor camp education at Fosun Tourism & Culture Mini-Camp. The study finds that although the camp has rich curriculum content and sophisticated hardware facilities, young people still generally face four major psychological challenges during participation: low willingness to participate in some activities, insufficient rule awareness and self-regulation ability, weakened sports spirit and excessive competition tendency, as well as difficulties in adapting to collective life and interpersonal frictions. These problems are rooted in the phased characteristics of young people’s physical and mental development and the insufficient attention paid to the psychological level in traditional camp education. To address these problems, this study systematically constructs a sports psychology optimization strategy system consisting of four modules.

The conclusion of this study is that the systematic and structured integration of sports psychology theories and technologies into youth outdoor camp education is an effective path to solve the current practical dilemmas and improve the quality of education. This is not only an optimization suggestion for the specific case of Fosun Tourism & Culture Mini-Camp, but also provides a reference theoretical framework and practical guide for the professional and scientific development of the entire industry^[13]. As a study based on qualitative observation and theoretical construction, this paper still has some limitations. It is

mainly based on the observation of the specific case of Fosun Tourism & Culture's Guilin Camp, and the generalizability of its conclusions needs to be further tested when extended to other camps with different positioning, types and regions. In short, the in-depth integration of sports psychology and youth outdoor camp education is a blue ocean full of potential. With the increasing social attention to young people's mental health and comprehensive quality, the research and practice in this interdisciplinary field will surely usher in a broader development prospect, making more outstanding contributions to cultivating a new generation capable of meeting future challenges.

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Conflict of Interests

The authors declare that there is no conflict of interest regarding the publication of this paper.

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