

# Research on the Integration of Swimming Courses and Ideological and Political Education in Colleges and Universities from the Perspective of "Curriculum Ideology and Politics"

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**Abstract:** This article presents an analysis of the forms and results of integrating university swimming courses with ideological and political education, with a particular focus on the “ideology and politics of the curriculum.” The study employs questionnaires and experimental measures administered to university students to analyze the role of swimming courses in reducing anxiety levels and to discuss strategies for integrating them into ideological and political education. The findings indicate that swimming lessons have a marked effect in reducing students’ anxiety levels and enhancing their mental well-being. The incorporation of ideological and political education, including “red stories” (narratives related to the history and ideology of the Communist Party of China), team competitions, and situational learning, into the curriculum has been observed to enhance students’ patriotism, sense of social responsibility, and teamwork spirit. The study demonstrates the efficacy of integrating swimming courses with ideological and political education, providing theoretical and empirical support for the integration of physical education courses with ideological and political education in universities.

**Keywords:** Curriculum ideology and politics; Swimming course; Ideological and political education; Social responsibility; Teamwork

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## 1. Introduction

In light of the accelerated pace of modern society and the concomitant acceleration in the pace of life, the issue of mental health problems among college students has increasing significance. Anxiety is now recognized as one of the most significant psychological health issues affecting college students. It has a considerable impact on academic performance, quality of life, and future development. It is therefore of the utmost importance to identify effective methods for alleviating students’ anxiety.

In recent years, there has been a growing interest in the use of physical activity as a non-pharmacological

intervention method. In particular, swimming lessons are regarded as an effective method for alleviating anxiety, given the unique aquatic environment and whole-body aerobic exercise characteristics inherent to the activity <sup>[1]</sup>. The act of swimming not only serves to strengthen the body, but also helps students to achieve a state of relaxation, both physically and mentally, through the coordinated movement of the entire body and the rhythmic breathing patterns that accompany it <sup>[2]</sup>. Nevertheless, further investigation is required to ascertain how swimming lessons can be effectively integrated with ideological and political education to achieve enhanced educational outcomes.

Ideological and political education represents a fundamental means of cultivating in students a correct worldview, outlook on life, and values. The integration of ideological and political education into professional courses enables students to not only gain knowledge but also to develop appropriate values and enhance their sense of social responsibility. Currently, a considerable number of universities have endeavored to incorporate ideological and political education into a multitude of academic disciplines, with some notable achievements <sup>[3]</sup>. Nevertheless, there is still a lack of systematic research and practical experience on how to effectively integrate ideological and political education in physical education classes, particularly in swimming classes.

The objective of this article is to examine the integration pathways and outcomes of university swimming classes with ideological and political education from the perspective of “curricular ideology and politics.” In particular, the study examines the relationship between physical activity, specifically swimming, and anxiety levels among college students. It also analyzes the role of swimming lessons in mitigating anxiety and explores specific strategies for implementing ideological and political education in swimming lessons. The objective of this study is to ascertain the impact of swimming lessons <sup>[4]</sup> on the anxiety levels of college students. The primary research questions are as follows: What are the specific strategies for integrating ideological and political education into swimming lessons? And what are the consequences of incorporating swimming lessons into ideological and political education?

We intend that this research will provide empirical support and theoretical guidance for a deeper integration of physical education classes and ideological and political education in universities. Additionally, it will explore a viable educational avenue to promote the holistic development of university students. The findings of this study have significant theoretical implications and are also intended to inform practical teaching and enhance the overall pedagogical effectiveness of physical education courses in universities.

## **2. Literature review**

### **2.1. Educational function of swimming courses**

#### **2.1.1. The role of swimming courses in university education**

Swimming lessons form a core part of the university’s physical education program, with the dual benefit of improving students’ physical fitness and serving an important educational purpose. Swimming is a full-body aerobic exercise that has been demonstrated to enhance students’ physical fitness, stamina, team spirit, and stress resistance. The aquatic environment in which swimming takes place offers significant benefits for students’ physical and mental well-being.

#### **2.1.2. Psychological health effects of swimming courses**

Multiple studies have demonstrated the positive effects of swimming on mental health. Peng pointed out that swimming can effectively alleviate anxiety and stress, and improve psychological resilience. Moreover, through systematic training and goal-setting, swimming courses can enhance students’ self-confidence and sense of achievement, thereby improving their overall psychological well-being <sup>[5]</sup>.

## **2.2. The concept and development of “curriculum ideology and politics”**

### **2.2.1. Concept and theoretical foundation of curriculum ideology and politics**

“Curriculum ideology and politics” refers to the integration of ideological and political education into professional courses, cultivating students’ correct worldview, outlook on life, and values through knowledge transmission and value guidance. Marxism emphasizes the importance of ideological and political education, moral education theory underscores the necessity of value guidance, and educational psychology provides a psychological basis for “curriculum ideology and politics.”<sup>[6]</sup>

### **2.2.2. Practical development of curriculum ideology and politics**

In recent years, “curriculum ideology and politics” has received widespread attention and practical exploration in university education. Many universities have integrated ideological and political education into various professional courses and have achieved significant success through innovative course design and teaching methods. Tan found that integrating ideological and political education into engineering courses not only improved students’ professional skills but also enhanced their sense of social responsibility and mission<sup>[7]</sup>.

## **2.3. Integration pathways of swimming courses and ideological and political education**

### **2.3.1. The necessity of integrating swimming courses with ideological and political education**

The integration of swimming courses and ideological and political education holds significant practical value. On one hand, swimming courses can alleviate students’ psychological stress and anxiety through physical activity, providing a solid physical and mental foundation for the implementation of ideological and political education. On the other hand, ideological and political education can enhance students’ motivation and experience in swimming courses through value guidance and emotional education<sup>[3]</sup>.

### **2.3.2. Specific strategies for integrating swimming courses with ideological and political education**

Designing educational content related to ideological and political education within swimming courses. For instance, integrating patriotic education through red stories or historical events during swimming training, and enhancing students’ collective honor and sense of responsibility through group activities and team competitions. Using situational teaching methods, combining swimming training with real-life scenarios to cultivate students’ social adaptability and stress resistance. Enhancing swimming instructors’ awareness and ability in ideological and political education, ensuring that they can effectively integrate ideological and political content during teaching. Regularly conducting teacher training and teaching seminars to share experiences and methods for integrating ideological and political education into physical education courses<sup>[1]</sup>.

### **2.3.3. Practical effects of integrating swimming courses with ideological and political education**

Integrating ideological and political education into swimming courses significantly reduces students’ anxiety levels and improves their psychological well-being. Furthermore, students’ patriotism, sense of social responsibility, and team spirit are also enhanced<sup>[4]</sup>. Wang found through empirical research that integrating ideological and political education not only enhances the educational effect of swimming courses but also significantly improves students’ ideological and political qualities. In summary, the integration of swimming courses and ideological and political education has significant theoretical and practical value. Through effective integration strategies, dual educational goals of swimming courses and ideological and political education can be achieved, promoting the comprehensive development of students<sup>[8]</sup>.

### **3. Research design**

#### **3.1. Research participants**

The research participants are university students from a particular institution, including students from freshmen to seniors. The research sample was selected using stratified random sampling, with 1,200 questionnaires distributed and 1,077 valid responses collected, resulting in a response rate of 89.8%. Among the participants, 639 were male, and 438 were female. Their ages ranged from 19 to 22 years, with an average age of 21. Grade distribution was: 193 freshmen, 777 sophomores, 75 juniors, and 32 seniors.

#### **3.2. Research methods**

This study employed a questionnaire survey method and experimental intervention, with descriptive statistical analysis, correlation analysis, and regression analysis conducted using Statistical Package for the Social Sciences (SPSS) software.

##### **3.2.1. Questionnaire design**

The questionnaire design for this study was divided into three parts: demographic information, physical activity status, and anxiety levels. The questionnaire underwent multiple rounds of expert review and pilot testing to ensure its validity and reliability.

- (1) The demographic information section collected basic information about the participants, including gender, age, grade, and major.
- (2) The physical activity section assessed participants' physical activity status, including questions on weekly exercise frequency (0 times, 1-2 times, 3-4 times, 5 times or more), duration of each exercise session (less than 30 minutes, 30-60 minutes, 60-90 minutes, more than 90 minutes), primary exercise activities (running, swimming, basketball, football, others), exercise intensity (low intensity [mild sweating], moderate intensity [noticeable sweating], high intensity [profuse sweating, shortness of breath]), swimming frequency (0 times, 1 time, 2 times, 3 times or more), swimming duration (less than 30 minutes, 30-60 minutes, 60-90 minutes, more than 90 minutes), and swimming intensity (low intensity [light swimming], moderate intensity [moderate exercise], high intensity [vigorous exercise]).
- (3) The anxiety level section used a standardized Self-Rating Anxiety Scale (SAS), which contains 20 items. Participants rated each statement based on their feelings over the past week, with scores ranging from 1 (none) to 4 (severe) to assess their anxiety levels.

##### **3.2.2. Experimental design**

To explore how ideological and political education strategies and methods can be integrated into swimming courses, an experimental intervention was designed in this study. Participants were randomly divided into an experimental group and a control group. The experimental period lasted 8 weeks, with one 90-minute intervention session per week. The experimental group integrated ideological and political education content into each swimming class, including red story explanations, team competitions, and situational teaching. The control group received only regular swimming training without ideological and political education content.

- (1) Experimental group: Ideological and political education content integrated into swimming courses included the following strategies:
  - (i) Red stories and historical events: Weekly explanations of red stories or historical events during swimming training to inspire students' patriotism and sense of social responsibility.
  - (ii) Team competitions and group activities: Enhancing students' teamwork spirit and collective honor through team competitions and group activities.

- (iii) Situational teaching method: Using situational teaching methods to combine swimming training with real-life scenarios, cultivating students' social adaptability and stress resistance.
  - (iv) Teacher training and seminars: Improving swimming instructors' awareness and ability in ideological and political education to ensure effective integration of ideological and political content during teaching.
  - (v) Student feedback mechanism: Regularly collecting feedback from students on the effectiveness of integrating ideological and political education into swimming courses, and adjusting teaching strategies based on feedback.
- (2) Control group: Received only regular swimming training without integrating ideological and political education content.

### **3.2.3. Data analysis methods**

SPSS software was used to analyze the collected data using the following methods:

- (1) Descriptive statistical analysis: Describing the demographic characteristics of the sample and the distribution of key variables.
- (2) Correlation analysis: Calculating Pearson correlation coefficients between various physical activity indicators and anxiety scores to explore the strength and direction of the relationship.
- (3) Regression analysis: Establishing a multiple regression model to analyze the specific impact of physical activity on anxiety scores while controlling for demographic characteristics.
- (4) Comparative analysis: Comparing differences between the experimental group and the control group in terms of anxiety levels, patriotism, sense of social responsibility, and teamwork spirit to evaluate the effectiveness of integrating ideological and political education into swimming courses.

## **3.3. Implementation process**

### **3.3.1. Preliminary preparation**

- (1) Teacher training: Organizing training for swimming instructors on ideological and political education to enhance their awareness and teaching ability in this area.
- (2) Teaching content design: Designing specific teaching content and activity plans based on the goals and requirements of ideological and political education.

### **3.3.2. Experimental implementation**

- (1) Teaching activities: Integrating ideological and political education content into the swimming courses of the experimental group, including red story explanations, team competitions, and situational teaching, conducted once a week.
- (2) Data collection: Conduct pre- and post-experiment questionnaires for both the experimental group and the control group to collect data on their anxiety levels, patriotism, sense of social responsibility, and teamwork spirit.

### **3.3.3. Data analysis**

The collected data was organized and entered into SPSS software. Descriptive statistical analysis, correlation analysis, regression analysis, and comparative analysis were conducted using SPSS software to evaluate the effectiveness of integrating ideological and political education into swimming courses <sup>[7]</sup>.

### 3.4. Data analysis and results

#### 3.4.1. Descriptive statistical analysis

Descriptive statistical analysis was conducted on the 1,077 valid questionnaires, and the basic characteristics of the sample are as follows.

**Table 1.** The basic characteristics of the sample

Gender	Number	Percentage
Male	639	59.30%
Female	438	40.70%
Age	Number	Percentage
19	422	39.20%
20	298	27.70%
21	245	22.70%
22	112	10.40%
Grade	Number	Percentage
Freshman	193	17.90%
Sophomore	777	72.10%
Junior	75	7.00%
Senior	32	3.00%

#### 3.4.2. Descriptive statistics of physical activity and anxiety levels

**Table 2.** Descriptive statistics of physical activity and anxiety levels

Variable	Mean	Standard deviation
Weekly exercise frequency (times)	3.52	1.23
Exercise duration (hours)	3.65	1.15
Exercise intensity	3.78	1.08
Anxiety score	50.32	10.76

#### 3.4.3. Correlation analysis

**Table 3.** Correlation analysis of the data

Variable	Correlation coefficient	P-value
Weekly exercise frequency (A1)	-0.52	<0.0001
Exercise duration (A2)	-0.75	<0.0001
Exercise intensity (A3)	-0.71	<0.0001
Anxiety score (SAS)	-0.65	<0.0001

The data indicate that there are significant negative correlations between weekly exercise frequency, exercise duration, exercise intensity, and anxiety scores. The higher the frequency, duration, and intensity of exercise, the lower the anxiety levels.

### 3.4.4. Regression analysis

**Table 4.** Regression analysis of the data

Variable	Regression coefficient	Standard error	t-value	P-value	Confidence interval lower limit	Confidence interval upper limit
Constant	48.62	1.18	41.06	<0.0001	46.31	50.93
Weekly exercise frequency (A1)	-1.05	0.18	-5.96	<0.0001	-1.4	-0.7
Exercise duration (A2)	-1.92	0.29	-6.65	<0.0001	-2.49	-1.35
Exercise intensity (A3)	-1.36	0.29	-4.63	<0.0001	-1.93	-0.79
Gender	0.34	0.25	1.36	0.174	-0.15	0.83
Age	-0.15	0.2	-0.75	0.453	-0.54	0.24
Grade	-0.22	0.18	-1.22	0.223	-0.58	0.14

The data indicate that increasing the frequency, duration, and intensity of physical activity significantly contributes to reducing the anxiety levels of university students.

### 3.4.5. Comparison between the experimental and control groups

The comparison between the experimental group and the control group shows that the experimental group significantly outperformed the control group in terms of anxiety levels, patriotism, sense of social responsibility, and teamwork spirit, proving the effectiveness of integrating ideological and political education into swimming courses.

**Table 5.** Comparison of data between experimental and control groups

Variable	Experimental group mean	Control group mean	P-value
Anxiety score	42.18	45.62	<0.01
Patriotism	4.5	3.8	<0.05
Sense of social responsibility	4.6	3.9	<0.05
Teamwork spirit	4.7	4	<0.05

### 3.4.6. Effect of swimming courses on alleviating anxiety

The data analysis shows that weekly exercise frequency, exercise duration, and exercise intensity all have significant negative correlations with anxiety scores (correlation coefficients are -0.52, -0.75, and -0.71, respectively, with P-values < 0.0001). This indicates that the higher the frequency, duration, and intensity of exercise, the lower the anxiety levels of university students. Multiple regression analysis further confirms this, with regression coefficients showing that weekly exercise frequency, exercise duration, and exercise intensity significantly reduce anxiety levels (P-values < 0.0001).

### 3.4.7. Effectiveness of integrating ideological and political education content

By integrating ideological and political education content, such as red story explanations, team competitions, and situational teaching, into swimming courses, the ideological and political qualities of the students in the experimental group were significantly improved. Specifically, the experimental group students' patriotism, sense of social responsibility, and teamwork spirit were significantly higher than those of the control group,

with mean scores of 4.5 against 3.8, 4.6 against 3.9, and 4.7 against 4.0, respectively (all P-values < 0.05).

### **3.4.8. Role of teacher training and student feedback mechanisms**

The study found that teacher training and student feedback mechanisms played key roles in enhancing the effectiveness of ideological and political education. By regularly organizing teacher training and teaching seminars on ideological and political education, the awareness and ability of teachers to integrate ideological and political content into their teaching were significantly improved. Furthermore, by establishing an effective student feedback mechanism, the feedback from students on the course was promptly collected and analyzed, leading to the continuous optimization of teaching content and methods, ensuring sustained improvement in teaching effectiveness<sup>[9]</sup>.

Through comparative analysis between the experimental and control groups in terms of anxiety levels, patriotism, sense of social responsibility, and teamwork spirit, the effectiveness and necessity of integrating ideological and political education into swimming courses were validated. The experimental group significantly outperformed the control group in all indicators, further proving that systematic ideological and political education strategies and methods can achieve dual educational goals in swimming courses and ideological and political education, promoting the comprehensive development of students<sup>[10]</sup>. Future research can be conducted in more universities to verify the results and explore more diversified ideological and political education strategies combined with different physical education programs to further enhance students' ideological and political qualities and mental health.

## **4. Conclusion**

This study examines the influence of integrating ideological and political education into college swimming courses on students' mental health, patriotism, sense of social responsibility, and team spirit. The research concluded that through the rational design of swimming courses and the organic combination of ideological and political education, it is possible to significantly reduce college students' anxiety levels and improve their mental health. The incorporation of ideological and political education elements, such as red stories, team competitions, and situational teaching, not only enhances students' patriotism but also fosters their sense of social responsibility and team spirit. The results demonstrate that the integration of ideological and political education with physical education courses can achieve the dual educational objective of physical and moral education, with a positive impact on the development of student's physical and mental health, as well as their ideological and moral qualities. The data from our study also lend support to the feasibility and effectiveness of this integration, demonstrating its wide applicability and promotional value in the education of college students.

In conclusion, the integration of swimming lessons with ideological and political education represents a novel and valuable approach to college education. It enables students to develop their bodies and minds holistically while providing a robust foundation for their ideological and political qualities. The findings of this study provide a robust theoretical foundation and practical guidance for more effectively integrating ideological and political education into physical education courses in the future. They also offer valuable insights for future research and practice.

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