

# Professional Identity and Self-efficacy of Physical Education Teachers in Xingyi Middle Schools

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**Abstract:** The professional identity and self-efficacy of physical education teachers directly affect the development of school sports and the physical health development of students. Whether physical education teachers identify with their profession and have a high sense of self-efficacy determines whether they can actively implement relevant national policies and whether they have a high sense of responsibility to value the physical health development of students. This study takes secondary school physical education teachers in Xingyi City as an example, with professional identity and self-efficacy as the research core. The differences in professional identity and self-efficacy were analyzed from the aspects of gender, teaching experience, education, and professional title, and the correlation between professional identity and self-efficacy was analyzed. The aim is to explore the characteristics and interrelationships of self-efficacy and professional identity among middle school physical education teachers in Xingyi City. Through research, researchers have proposed an action plan to enhance the professional identity and self-efficacy of secondary school physical education teachers in Xingyi City.

**Keywords:** Physical Education Teacher; Professional Identity; Self-efficacy.

## 1. Introduction

With the continuous development of China's social economy, the country's emphasis on education is also increasing, and the teaching work of various levels and types of schools has been greatly improved and enhanced. This requires teachers to have higher standards and requirements in terms of knowledge level, professional skills, and professional ethics. In recent years, the national level has continued to pay attention to the construction of the teaching staff, and numerous documents related to the construction of the teaching staff have been issued, all of which demonstrate the high importance attached by the national level to the construction of the teaching staff. This has also put forward new ideas and requirements for the professional development of middle school physical education teachers in Xingyi City, Guizhou Province.

The professional identity and self-efficacy of physical education teachers directly affect the development of school sports and the physical health of students. Whether a physical education teacher devotes themselves wholeheartedly to the education industry, loves their profession, is passionate about their profession, identifies with their profession, and has a high sense of self-efficacy, determines whether they can actively implement relevant national policies and whether they have a high sense of responsibility to value the healthy development of students' physical fitness. This study takes middle school physical education teachers in Guizhou Province as an example, with professional identity and self-efficacy as the research core, aiming to explore the current level characteristics of self-efficacy and professional identity of middle school physical education teachers in Guizhou, to reveal the characteristics and interrelationships of professional identity and self-efficacy of middle school physical education teachers in Guizhou, and to fill the gap in research on professional identity and self-efficacy of middle school physical education teachers in Xingyi City.

## 2. Statement of the Problem

This study will analyze the current status and relationship between professional identity and self-efficacy of middle school physical education teachers. Specifically, it sought to answer the following questions:

(1) What is the profile of the teacher respondents in terms of:

- 1) sex;
- 2) Length of service as a teacher;
- 3) Education background;
- 4) Professional ranks and titles

(2) What is the assessment of professional identity middle school physical education teachers in terms of:

- 1) Ability identity
- 2) Emotional identity
- 3) Value identity
- 4) Investment identity
- 5) Continuous identity

(3) Is there a significant difference in the professional identity of middle school physical education teachers when profile is taken as test factor?

(4) What is the assessment of self-efficacy of middle school physical education teachers in terms of:

- 1) Classroom management efficacy
- 2) Teaching efficacy

(5) Is there a significant difference in self-efficacy of middle school physical education teachers when profile is taken as test factor?

(6) Is there a significant relationship between professional identity and self-efficacy of middle school physical education teachers?

(7) What development program can be proposed to enhance the professional identity and self-efficacy of middle school physical education teachers?

### 3. Methodology

#### 3.1. Research Design

This study will adopt a descriptive-comparative-correlation research design, with a descriptive correlation design that will be used in the study, aiming to provide static images of the context and establish relationships between different variables. This study starts with the concepts, characteristics, and influencing factors of professional identity and self-efficacy of physical education teachers in middle schools in Xingyi. By consulting references, previous research results are summarized as the theoretical background of this study. This study will adopt a questionnaire survey and purposive sampling method, selecting 144 physical education teachers from 27 middle schools of Xingyi City as the research objects, to investigate the current status of professional identity and self-efficacy of middle school physical education teachers, and explore the relationship between professional identity and self-efficacy of middle school physical education teachers.

#### 3.2. Scope and Delimitation of the Study

This study mainly explores the professional identity and self-efficacy of middle school physical education teachers. The researchers will investigate the professional identity and self-efficacy of physical education teachers in middle schools in Xingyi City. 144 physical education teachers from 27 middle schools in Xingyi City will be selected as the research subjects.

#### 3.3. Research Instrument

A modified questionnaire will be used in this study. The questionnaire will be used on professional identity and self-efficacy of middle school physical education teachers.

#### 3.4. Statistical Treatment of the Data

When analyzing the data, researchers will use the following tools:

Frequency and percentage: These will be used to describe the basic situation of student participants.

Mean Percentage: Using descriptive statistical methods to summarize and present the basic characteristics of data. For example, sex, age, teaching experience, education level, income, professional title, as well as career identity and self-efficacy scores are all descriptive statistics.

To describe the weighted average, the following ranges and

their corresponding descriptive explanations will be used.

### 4. Results of the Study

#### 4.1. Profile of the Participants

The frequency and percentage distribution of the participants in terms of gender, length of service as a teacher, education background, professional ranks and titles. It is seen from the table that majority or 80.56% of the participants are male. It can be observed from the table that most or 31.25% of the participants's length of service as a teacher are 11-20 years. It can be observed from the table that most or 90.28% of the participants are bachelor. It can be observed from the table that most or 60.42% of the participants are intermediate.

**Table 1.** Frequency and Percentage Distribution of Participants in Terms of Gender

Profile of the Participants	Frequency	Percent
<b>Sex</b>		
Male	116	80.6
Female	28	19.4
Total	144	100.0
<b>Length of Service as A Teacher</b>		
Less than 5 years	25	17.4
6-10 years	42	27.8
11-20 years	45	31.2
21-30 years	28	19.4
Over 31 years	4	2.8
Total	144	100.0
<b>Education Background</b>		
Junior College	9	6.2
Bachelor	130	90.3
Master	5	3.5
Total	144	100.0
<b>Professional Ranks and Titles</b>		
Junior	38	26.4
Intermediate	85	59.0
Advanced	21	14.6
Total	144	100.0

#### 4.2. Assessment on Participants' Professional Identity

**Table 2.** Assessment on Participants' Professional Identity

Items	Mean	Std. Deviation	Verbal Description/Interpretation
Ability Identity	2.74	0.71	Agree/Satisfied
Emotional identity	2.90	0.68	Agree/Satisfied
Value identity	2.80	0.76	Agree/Satisfied
Investment identity	2.91	0.75	Agree/Satisfied
Continuous identity	2.97	0.71	Agree/Satisfied
OVER-ALL MEAN	2.87	0.54	/

The data in Table 2 shows that the scores of professional identity and its five dimensions: ability identity, emotional identity, value identity, investment identity and continuous identity, of secondary school physical education teachers in

Xingyi City are 2.87, 2.74, 2.90, 2.80, 2.91, and 2.97, respectively, all of which are in the "Agree/Satisfied" range. This indicates that the surveyed subjects are more engaged in their work, believing that their work is based on value and meaning, and they are willing to make efforts for the

development of students and the cause of physical education.

### 4.3. Assessment on Participants' Self-efficacy

The data in Table 3 shows that the self-efficacy of physical education teachers in secondary schools in Xingyi City, as well as their scores in two dimensions: classroom management effectiveness and teaching effectiveness, are

2.72, 2.75, and 2.63, respectively, both of which are in the "Agree/Satisfied" range. This indicates that the surveyed subjects have high confidence in their ability to manage teaching and guide students' physical activities. Physical education teachers with high self-efficacy can not only improve their teaching effectiveness, but also have a positive impact on students' participation and grades in sports.

**Table 3.** Assessment on Participants' Professional Identity

Items	Mean	Std. Deviation	Verbal Description/Interpretation
Classroom Management Efficacy	2.75	0.66	Agree/Satisfied
Teaching Efficacy	2.63	0.88	Agree/Satisfied
OVER-ALL MEAN	2.72	0.58	/

### 4.4. Difference on the Assessment of the Quality of Participants' Professional Identity when Grouped According to the Profile Variables

#### 4.4.1. Sex

Uses independent sample t-test to compare the professional identity and five dimensions of professional identity of middle school physical education teachers in Xingyi City by gender. There are significant differences in the overall professional identity, investment identity, and continuous identity dimensions among middle school physical education teachers in Xingyi City of different genders. On average, females are significantly higher than males, indicating that female physical education teachers have significantly higher professional identity, investment identity, and continuous identity than male physical education teachers. There is no significant difference in ability identity, emotional identity, and value identity among physical education teachers of different genders.

#### 4.4.2. Length of Service as A Teacher

Uses ANOVA or F-test to evaluate the occupational identity and five dimensions of occupational identity of middle school physical education teachers in Xingyi City, grouped according to their teaching experience level. There is no significant difference in the overall professional identity and five dimensions of professional identity among middle school physical education teachers in Xingyi City with different teaching experience: ability identity, emotional identity, value identity, investment identity, and continuous identity.

#### 4.4.3. Education Background

Uses ANOVA or F-test to evaluate the occupational identity and five dimensions of occupational identity of middle school physical education teachers in Xingyi City grouped by educational level. There is no significant difference in the overall professional identity and dimensions of professional identity among middle school physical education teachers in Xingyi City with different educational backgrounds, including ability identity, value identity, and continuous identity. There are significant differences in the dimensions of emotional identity and engagement identification among middle school physical education teachers in Xingyi City with different teaching experience.

#### 4.4.4. Professional Ranks and Titles

Uses ANOVA or F-test to evaluate the occupational identity and five dimensions of occupational identity of middle school

physical education teachers in Xingyi City, grouped according to their professional title level. There is no significant difference in the overall professional identity and dimensions of professional identity among middle school physical education teachers with different professional titles in Xingyi City, including emotional identity, value identity, continuous identity, and investment identity. There are significant differences in the dimension of ability identity among middle school physical education teachers with different professional titles in Xingyi City.

### 4.5. Difference on the Assessment of the Quality of Participants' Self-efficacy when Grouped According to the Profile Variables

#### 4.5.1. Sex

Uses independent sample t-test to compare the self-efficacy, classroom management efficacy, and teaching efficacy of physical education teachers in Xingyi City's middle schools grouped by gender. There is no significant difference in the overall self-efficacy, classroom management efficacy, and teaching efficacy of middle school physical education teachers of different genders in Xingyi City.

#### 4.5.2. Length of Service as A Teacher

Uses ANOVA or F-test to evaluate the self-efficacy, classroom management efficacy, and teaching efficacy of physical education teachers in Xingyi City's middle schools grouped by teaching experience. There is no significant difference in the overall self-efficacy, classroom management efficacy, and teaching efficacy of middle school physical education teachers in Xingyi City with different teaching experience.

#### 4.5.3. Education Background

Uses ANOVA or F-test to evaluate the self-efficacy, classroom management efficacy, and teaching efficacy of middle school physical education teachers in Xingyi City, grouped by educational background. There is no significant difference in the overall self-efficacy, classroom management efficacy, and teaching efficacy of middle school physical education teachers with different educational backgrounds in Xingyi City.

#### 4.5.4. Professional Ranks and Titles

Uses ANOVA or F-test to evaluate the self-efficacy, classroom management efficacy, and teaching efficacy of physical education teachers in Xingyi City's middle schools grouped by professional titles. There is no significant

difference in the teaching efficacy dimension of self-efficacy among middle school physical education teachers with different professional titles in Xingyi City. There are significant differences in the overall level of self-efficacy and classroom management efficacy dimensions among middle school physical education teachers with different professional

titles in Xingyi City.

#### 4.6. Relationship Between Professional Identity and Self-efficacy in Middle School Physical Education Teachers in Xingyi City

**Table 4.** Relationship Between Professional Identity and Self-efficacy in Middle School Physical Education Teachers in Xingyi City

Professional identity	Statistical Treatment	self-efficacy		Overall
		Classroom management efficacy	teaching efficacy	
Ability identity	<i>Pearson r</i>	.323**	.461**	.452**
	<i>Sig</i>	.000	.000	.000
	<i>Decision H<sub>0</sub></i>	Reject	Reject	Reject
	<i>Interpretation</i>	<b>Significant</b>	<b>Significant</b>	<b>Significant</b>
Emotional identity	<i>Pearson r</i>	.439**	.534**	.560**
	<i>Sig</i>	.000	.000	.000
	<i>Decision H<sub>0</sub></i>	Reject	Reject	Reject
	<i>Interpretation</i>	<b>Significant</b>	<b>Significant</b>	<b>Significant</b>
Value identity	<i>Pearson r</i>	.538**	.347**	.506**
	<i>Sig</i>	.000	.000	.000
	<i>Decision H<sub>0</sub></i>	Reject	Reject	Reject
	<i>Interpretation</i>	<b>Significant</b>	<b>Significant</b>	<b>Significant</b>
Investment identity	<i>Pearson r</i>	.421**	.452**	.502**
	<i>Sig</i>	.000	.000	.000
	<i>Decision H<sub>0</sub></i>	Reject	Reject	Reject
	<i>Interpretation</i>	<b>Significant</b>	<b>Significant</b>	<b>Significant</b>
Continuous identity	<i>Pearson r</i>	.364**	.337**	.402**
	<i>Sig</i>	.000	.000	.000
	<i>Decision H<sub>0</sub></i>	Reject	Reject	Reject
	<i>Interpretation</i>	<b>Significant</b>	<b>Significant</b>	<b>Significant</b>
Overall	<i>Pearson r</i>	.560**	.568**	.648**
	<i>Sig</i>	.000	.000	.000
	<i>Decision H<sub>0</sub></i>	Reject	Reject	Reject
	<i>Interpretation</i>	<b>Significant</b>	<b>Significant</b>	<b>Significant</b>

Using a Pearson Product Moment Correlation (Pearson r), revealed significant relationships between professional identity and self-efficacy in middle school physical education teachers of Xingyi city. This means that the self-efficacy of middle school physical education teachers in Xingyi City strongly affects their professional identity, as indicated by the Pearson r-value of .648 for the relationship between professional identity and self-efficacy. The positive correlation between self-efficacy and professional identity of middle school physical education teachers in Xingyi City reveals the intrinsic motivation of educational work and the self realization of teachers. This relationship not only helps to improve the teaching quality and professional satisfaction of teachers, but also promotes the comprehensive development of students and the progress of education.

## 5. Conclusion

1) The average score of professional identity for middle school physical education teachers in Xingyi City is 2.86, and the average score of self-efficacy is 2.71, which is at a relatively high level. This indicates that middle school physical education teachers in Xingyi City have a good sense of professional identity and satisfaction with their profession. They have a high sense of identity with their profession, which means they are proud of their work, believe that education work is valuable, willing to devote themselves to the education industry, and may have a strong commitment and loyalty to teaching work. A higher professional identity

helps maintain the stability of the physical education teacher team and reflects the increasing recognition of the value of physical education in society. The social status and influence of physical education teachers are gradually strengthening.

2) The average score of self-efficacy among middle school physical education teachers in Xingyi City is 2.71, which is at a relatively high level, indicating that middle school physical education teachers in Xingyi City have good self-efficacy. The above average level of self-efficacy among physical education teachers is a positive signal that they may demonstrate high efficiency and effectiveness in their teaching work. They have a high level of confidence in their teaching ability and professional skills, and they believe that their efforts can help students improve their physical performance and health level.

At the same time, they believe they have the ability to cope with various challenges encountered in teaching, including managing student behavior, designing effective physical education courses, and handling emergencies. A higher sense of self-efficacy may motivate physical education teachers to seek further professional development, and they may be willing to participate in professional training, seminars, and other learning opportunities to improve their teaching level. The self-efficacy of physical education teachers may have a positive impact on students, as their confidence and enthusiasm may stimulate students' interest and participation in learning, thereby improving their physical performance and overall health.

3) The analysis results show that there are significant differences in the overall occupational identity, investment

identity, and continuous identity dimensions among respondents of different genders; There are significant differences in emotional identity and investment identity dimensions among respondents with different educational backgrounds in their professional identity; There are significant differences in the dimension of ability identity among respondents with different professional titles; There were no significant differences in the overall occupational identity and five dimensions of occupational identity among respondents with different teaching experience. These analysis results are of great significance for educational management and teacher development.

4) The analysis results showed that there were no significant differences in the overall self-efficacy, classroom management efficacy, and teaching efficacy among respondents of different genders, educational backgrounds, and teaching experience; There are significant differences in the overall level of self-efficacy and classroom management efficacy dimensions among respondents with different professional titles. These analysis results are of great significance for educational management and teacher development.

5) The analysis results show that there is a significant correlation between the professional identity and self-efficacy of middle school physical education teachers in Xingyi City. As indicated by the Pearson r-value of .648 for occupational identity and self-efficacy. This positive correlation suggests that professional identity and self-efficacy may influence each other. High professional identity may enhance teachers' confidence and sense of ability, thereby improving their self-efficacy; Meanwhile, high self-efficacy may also enhance teachers' identification and commitment to their profession.

## 6. Recommendations

### 1) Provide Professional Development Opportunities

Understand the personal career goals and development needs of each teacher, and provide personalized support and guidance. Regularly hold seminars, workshops, and training courses related to physical education teaching to help teachers update their knowledge, skills, and teaching methods, thereby enhancing their professional abilities and self-efficacy.

### 2) Improve the Working Environment and Establish A Support System

Ensure that physical education teachers have sufficient teaching resources and facilities, provide good working conditions, reduce unnecessary workload, and enhance their job satisfaction. Create a supportive network of colleagues and leadership team, encourage communication and collaboration among teachers, and provide emotional support and career guidance.

### 3) Recognition and Rewards

Involve physical education teachers in the decision-making process of school management and curriculum design to enhance their sense of participation and belonging. By commending outstanding teachers, providing opportunities for career advancement, and offering appropriate salary incentives, we aim to enhance teachers' sense of professional identity and achievement.

### 4) Enhance Social Recognition

Through media promotion, community activities, and other means, we aim to increase society's awareness of the value of

physical education and enhance the social status and influence of physical education teachers.

### 5) Establish A Feedback Mechanism

Regularly collect feedback from students, parents, and colleagues on physical education teachers, adjust teaching strategies in a timely manner, and enhance teachers' self reflection and improvement abilities.

## References

- [1] Fu, Z. (2022). Research on the relationship between emotional labor, occupational burnout, and professional identity of physical education teachers [Master's thesis, Liaoning Normal University].
- [2] Gao, Y., Luo, S. Q., & Sui, H. R. (2023). The relationship between physical exercise and subjective well-being among college students: The chained mediating role of perceived social support and emotional regulation self-efficacy. *Hubei Sports Science*, 2023, 42(3), 199-204, 249.
- [3] Huang, L. (2023). Research on the relationship between occupational stress, occupational happiness, and self efficacy of junior high school physical education teachers in Fujian province under the background of middle school physical education reform [Master's thesis, Fujian Normal University].
- [4] Liu Q. (2023). Research on the Relationship between Professional Identity, Work Stress, and Career Delayed Satisfaction of Physical Education Teachers in Ordinary High Schools in Zhejiang Province [Master's Thesis, Zhejiang Normal University].
- [5] Li, Y. (2023). Research on the relationship between perceived social support, self efficacy, and job satisfaction of middle school physical education teachers in Henan province [Master's thesis, Henan University].
- [6] Li Y. X. (2021). Research on Professional Identity and burnout of physical education teachers in middle schools in Xiangxi Prefecture [Master's thesis, Jishou University].
- [7] Peng, L. (2024). Research on the relationship between social support, teaching efficacy, and professional identity of college physical education teachers [Master's thesis, Chengdu University].
- [8] Wang, J. (2024). Empirical study on professional identity and self efficacy of english teachers in vocational colleges under the background of curriculum ideological and political education reform. *Modern Vocational Education*, (02), 77-80.
- [9] Wu T. (2023). Research on the Relationship between Professional Identity, Organizational Identity, and Job Satisfaction of Primary and Middle School Physical Education Teachers [Master's Thesis, Nanjing Institute of Physical Education].
- [10] Xiong, M. T. (2020). A Comparative Study on Professional Identity of pre-service Physical education Teachers in different Levels of Normal Universities [Master's thesis, Jiangxi Science and Technology Normal University].
- [11] Xu, J. H. (2018). The relationship between professional identity and self-efficacy of primary school teachers in Anhui and Jiangsu. *China Journal of Health Psychology*, (07), 1063-1068. <https://doi.org/10.13342/j.cnki.cjhp.2018.07.031>.
- [12] Yang, Y., Deng, W. L., Zhou, W. C., & Yuan, J. Q. (2023). An investigation on the professional identity of middle school physical education teachers in minority areas--A case study of Qianxinan Prefecture. *Science & Technology of Stationery & Sporting Goods*, 4(4), 121-123. <https://doi.org/10.3969/j.issn.1006-8902.2023.04.042>.