

# Continuous Professional Teacher Development Model in Yunnan Provincial Universities

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## Abstract

This article aims to: 1. Assess the current state of continuous professional teacher development (CPTD) in Yunnan Provincial Universities. 2. Identify key factors influencing CPTD in Yunnan Provincial Universities. 3. Propose a comprehensive CPTD model specifically for Yunnan Provincial Universities. The research design is a mixed-methods approach. The study is framed by theories including Adult Learning Theory, Social Cognitive Theory, and Instructional Leadership Theory. The research area is Yunnan Province, China. The target group consists of 500 individuals, including 85 administrators and 415 teachers, selected using stratified random sampling. Additionally, 9 educational experts participated in qualitative interviews. The research tools consist of two types: 1. A structured questionnaire employing a 5-point Likert scale. 2. Semi-structured interview protocols for qualitative insights. Data were analyzed using basic descriptive and inferential statistics for quantitative data, and content analysis with descriptive narrative for qualitative data.

Research findings: 1. The findings related to the first objective indicate varying levels of CPTD engagement across universities, highlighting disparities in access to resources and institutional support. 2. The findings related to the second objective reveal that teacher job satisfaction, instructional leadership, school climate, teacher professional autonomy, and professional collaboration significantly impact CPTD, with policy support as a key mediating factor. 3. The comprehensive CPTD model proposed integrates these influencing factors, emphasizing structured policies, supportive leadership, and collaborative practices.

The findings of this study provide valuable insights for policymakers and university administrators to enhance CPTD frameworks, fostering structured and sustainable professional growth among faculty members in higher education institutions.

**Keywords:** Continuous Professional Teacher Development; Instructional Leadership; School Climate; Teacher Development; Sustainable development goals (SDGs)

## Introduction

Continuous Professional Teacher Development (CPTD) has become a central focus in global higher education, driven by the increasing demands for high-quality teaching and learning outcomes. Effective CPTD ensures that educators continuously refine their

pedagogical skills, remain engaged in professional growth, and adapt to evolving educational environments. Many developed countries, including Finland, Singapore, and the United Kingdom, have implemented structured professional development models that emphasize lifelong learning, reflective practice, and collaborative professional communities. However, disparities in professional development resources and institutional support remain significant challenges, particularly in developing regions (Kennedy, 2014; Guskey, 2002).

In China, CPTD has gained national attention as a critical factor in improving education quality at all levels. The Ministry of Education has introduced initiatives such as the *National Training Program for Primary and Secondary School Teachers* (State Council of the People's Republic of China, 2010) and faculty development programs in higher education institutions. These efforts aim to enhance teachers' professional competencies, promote research engagement, and foster instructional leadership (Yang, 2024; Li, 2024). However, significant challenges persist, particularly in less economically developed provinces such as Yunnan. The region faces unique barriers, including limited funding, unequal access to training programs, and an urgent need for more structured development frameworks to support university faculty members (Huang, 2024; Wei, 2021).

In Yunnan Provincial Universities, the professional development landscape is characterized by inconsistent access to training opportunities, variations in institutional policies, and a lack of comprehensive strategies to support long-term teacher growth. Faculty members often struggle with issues such as job satisfaction, professional autonomy, and administrative support, all of which influence their engagement in professional learning (Li, 2024; Wei, 2021). Given these challenges, there is a pressing need to develop a targeted CPTD model that addresses the specific needs of university educators in Yunnan.

## Research Objectives

- 1.To assess the current state of continuous professional teacher development in Yunnan Provincial Universities.
- 2.To identify key factors influencing the continuous professional teacher development in Yunnan Provincial Universities.
- 3.To propose a comprehensive CPTD model of Yunnan Provincial Universities.

## Literature Review

This section summarizes the results of a comprehensive review of relevant documents, articles, and research studies to identify the knowledge gap that has not yet been adequately addressed, which this study seeks to fill. The literature review systematically explores key dimensions relevant to Continuous Professional Teacher Development (CPTD), including instructional leadership, teacher autonomy, professional collaboration, school climate, and job satisfaction.

## **1. Concept of Continuous Professional Teacher Development (CPTD)**

Continuous Professional Teacher Development (CPTD) is widely recognized as a critical mechanism for enhancing educators' professional skills, knowledge, and competencies to improve educational outcomes. Guskey (2002) emphasizes that effective professional development is essential for sustained instructional improvement and teacher motivation. Avalos (2011) highlights the complexity of CPTD, noting it includes formal and informal opportunities such as workshops, peer mentoring, collaborative activities, and reflective practice.

The Organization for Economic Cooperation and Development (OECD, 2019) underscores the structured nature of CPTD, linking teachers' pedagogical skills, subject knowledge, and classroom management capabilities to educational quality. Desimone (2009) further asserts that effective CPTD requires sustained, relevant, and institutionally aligned activities. However, despite broad recognition of CPTD's importance, research gaps remain concerning contextual factors affecting its efficacy in less economically developed regions, such as Yunnan Province, China.

## **2. Factors Influencing CPTD**

Research identifies several key factors influencing CPTD: teacher job satisfaction, instructional leadership, school climate, teacher professional autonomy, and professional collaboration. Herzberg's Two-Factor Theory (1959) posits that intrinsic motivators (e.g., recognition, meaningful work) and extrinsic motivators (e.g., institutional support, salary) significantly affect job satisfaction and engagement in CPTD activities.

Instructional leadership theory, as discussed by Hallinger and Murphy (1985), emphasizes administrative roles in fostering supportive environments conducive to professional learning. Effective instructional leadership has been consistently linked to increased motivation and engagement in CPTD (Leithwood et al., 2004; Robinson et al., 2008).

School climate, characterized by collegial support, inclusivity, and positive peer relationships, is another significant factor influencing CPTD. Bryk and Schneider (2002) argue that trustful and supportive institutional environments encourage faculty to participate actively in professional learning opportunities.

Teacher professional autonomy is critical, providing educators with freedom over curriculum and pedagogical decisions, fostering intrinsic motivation and sustained professional growth (Deci & Ryan, 1985). Conversely, overly restrictive institutional policies can hinder autonomy and professional development engagement.

Professional collaboration, particularly through Professional Learning Communities (PLCs), peer mentoring, and interdisciplinary teams, enhances instructional innovation and teaching effectiveness (DuFour & Eaker, 1998; Vescio et al., 2008). Yet, research identifies gaps in structured opportunities for collaborative engagement, especially in developing regions like Yunnan (Wang & Liu, 2020).

## Summary of the Literature Review

The reviewed literature highlights essential theoretical frameworks, including Adult Learning Theory, Social Cognitive Theory, and Instructional Leadership Theory, foundational to understanding CPTD's complexities. The identified gaps, particularly in the Yunnan context, emphasize inconsistencies in institutional policies, limited professional autonomy, insufficient collaborative opportunities, and variable leadership support. This study directly addresses these gaps by exploring and integrating these influential factors into a comprehensive CPTD model tailored for universities in Yunnan Province, thereby contributing valuable insights to enhance structured professional development in similar contexts.

## Conceptual Framework

The central rectangle represents the research topic of this dissertation, T The left and right sides of the rectangle are recent references cited by researchers., including 6 aspects: (1) Continuous Professional Development; (2) Teacher Job Satisfaction, (3) Instructional Leadership, (4) School Climate, (5) Teacher Professional Autonomy, and (5) Professional Collaboration. Below the rectangle are five experts from Yunnan Province, China. At the top of the rectangle are interviews with five experts from Yunnan province, China on the content of the study. Below the rectangle are domestic and foreign references. As shown in Figure 1

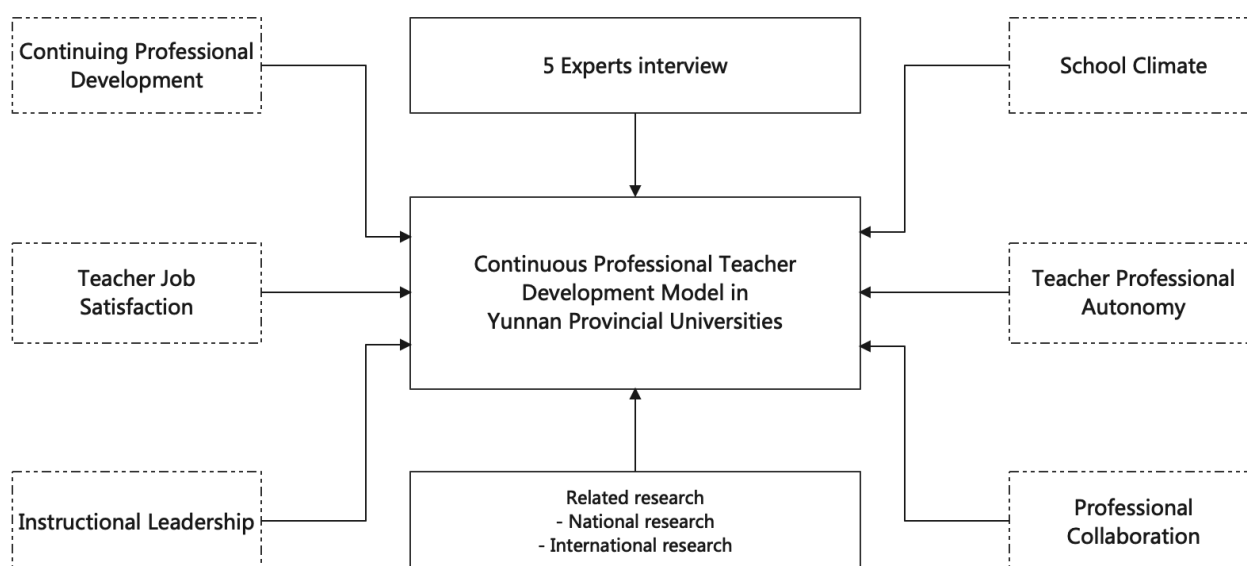


Figure 1 Conceptual Framework

## Research Methodology

### Research Design

This study employs a mixed-methods research design that integrates both quantitative and qualitative approaches to comprehensively examine Continuous Professional Teacher Development (CPTD) in Yunnan Provincial Universities. The quantitative phase involves a survey-based study conducted among university administrators and faculty members, while

the qualitative phase utilizes semi-structured interviews with educational experts. This methodological enhances the validity and reliability of the findings (Creswell & Plano Clark, 2018).

### **Research Sample**

The population for this study includes faculty members and administrators from 23 universities in Yunnan Province. These institutions were selected based on their size, faculty composition, and participation in professional development programs. A stratified random sampling method was used to ensure representative participation from different universities. The total sample size was determined using Comrey and Lee's (1992) guidelines for factor analysis, which recommend a minimum sample size of 300 for robust statistical analysis. The final sample comprised 500 participants, In addition, 9 experts in the field of education were invited to participate in the in-depth interviews.

### **Research Instruments**

#### **Questionnaire Design**

The primary research instrument for the quantitative study was a self-administered questionnaire, Each item was measured using a 5-point Likert scale. The questionnaire was pilot-tested with 30 faculty members to ensure content validity and reliability. The Cronbach's Alpha reliability coefficient for the final questionnaire was 0.89, indicating high internal consistency (George & Mallery, 2016).

#### **Semi-Structured Interview Guide**

For the qualitative phase, a semi-structured interview protocol was developed to explore, Each interview lasted 30–45 minutes, and responses were recorded, using thematic content analysis.

### **Data Analysis Methods**

#### **Quantitative Data Analysis**

The quantitative data collected from the questionnaire were analyzed using SPSS software. Descriptive statistics were used to analyze the demographic characteristics of the participants and the mean and standard deviation of each variable. Exploratory factor analysis was conducted to identify the underlying factors of teacher CPTD, and the reliability and validity of the factors were tested.

#### **Qualitative Data Analysis**

The qualitative data from the interviews were analyzed using content analysis. The interview transcripts were coded and categorized to identify the main themes and sub-themes. The coding process was independently conducted by two researchers, and the intercoder reliability was tested using Cohen's Kappa coefficient. The qualitative analysis results were used to supplement and validate the quantitative analysis findings.

## Research Results

### Demographic Profile of Respondents

Of all surveys, there were 483 valid responses. The demographic characteristics of the 483 participants are shown in Table 1. The results indicate that the sample includes a slightly higher proportion of female respondents (54.08%) compared to male respondents (45.92%). Regarding professional roles, 81.12% of the respondents are vocational teachers, while 18.88% hold administrative positions. In terms of age distribution, 39.29% of participants are between 31–40 years old, followed by 20.75% under 30 years old and 22.27% between 41–50 years old. A smaller proportion, 17.68% of participants, are 51 years and above. Regarding educational background, the majority of respondents hold a master's degree (59.69%), followed by Bachelor's degree holders (29.93%), while 10.37% have a Doctoral degree.

**Table 1** Demographic Profile of Respondents

Personal situation	Frequency	Frequency(n=483)	Percentage (%)
Gender of Respondents	Male	222	45.92%
	Female	261	54.08%
Role of Respondents	Administrator	91	18.88%
	Vocation teachers	392	81.12%
Age of Respondents	Under 30 years old	100	20.75%
	31~40 years old	190	39.29
	41~50 years old	108	22.27
	51 years and above	85	17.68
The Highest Education Background of Respondents	Doctoral degree	50	10.37%
	Master's degree	288	59.69%
	Bachelor's degree	145	29.93%
Working Experience of Respondents	Under 5 years	86	17.86%
	5~10 years	117	24.32%
	11~15 years	94	19.56%
	16~20 years	73	15.14%
	21~25 years	62	12.93%
	Above 25 years	49	10.20%

### Exploratory Factor Analysis Results

**Factor Extraction** The exploratory factor analysis was performed using the principal component analysis method with varimax rotation. The results showed that five factors with eigenvalues greater than 1 were extracted, explaining a total of 64.947% of the variance. The scree plot was used to assist in determining the number of factors, and it was found that the plot line transitioned from steep to flat at the fifth factor, supporting the extraction of five factors. The scree plot as shown in Figure 1. and the rotated component matrix and communality as shown from Table 2 to 6.

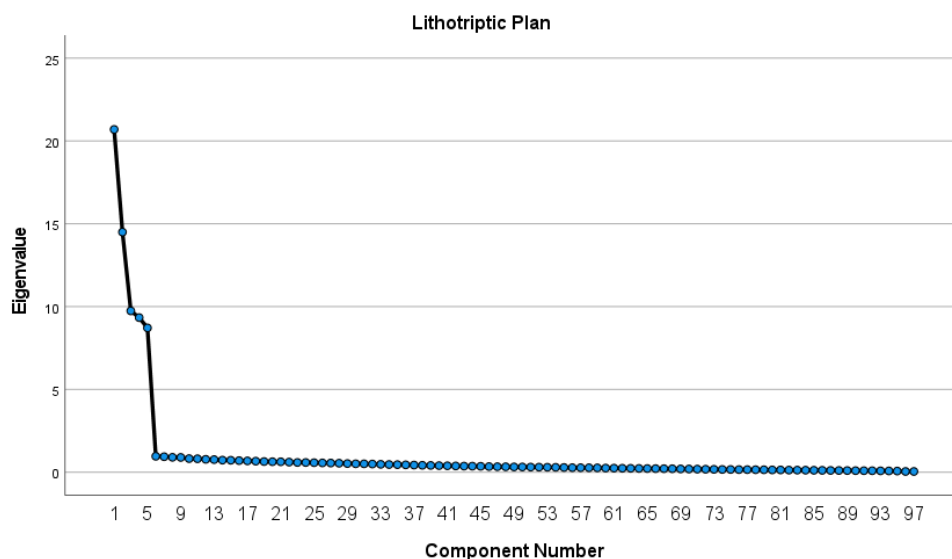


Figure 2 Scree plot

From Table 2, we can find that has 33 important descriptive variables, arranged in order of importance according to factor weight (factor loading), which have a variable weight value in the composition between 0.907 and 0.656. When considering all the variables, most variables are related to working conditions, occupational recognition, administrative support and career development. The researcher named this factor “Teacher Job Satisfaction”.

Table 2 Factor1: Teacher Job Satisfaction

No.	Contents of Items	Factor Loading
7	The school administration provides adequate support for managing teaching responsibilities.	0.907
33	The administration is responsive when I face challenges in my work.	0.885
79	The administration effectively communicates necessary policies.	0.883
17	The school provides support to manage work-related stress.	0.875
42	The school administration meets my professional needs.	0.872
81	The physical environment at my school supports effective teaching.	0.869
62	Teaching materials and resources are readily available	0.866
67	The school environment is comfortable and conducive to teaching.	0.843
63	My workload is balanced and allows personal time.	0.823
37	Job demands rarely overwhelm me.	0.818
75	The school facilitates collaborative problem-solving and innovation among teachers.	0.807
19	There are opportunities for public recognition of my work.	0.79
16	My teaching achievements are recognized and valued.	0.789



No.	Contents of Items	Factor Loading
85	Career advancement opportunities are sufficient.	0.788
88	My accomplishments are frequently recognized by the school.	0.784
8	I maintain a healthy balance between work and personal life.	0.784
48	I am encouraged to pursue professional development for career growth.	0.78
77	My contributions are regularly acknowledged by school leadership.	0.779
44	The school supports my career goals	0.77
55	My workload allows sufficient time for personal activities.	0.765
12	Teachers frequently share teaching materials and resources.	0.761
38	The school offers clear paths for career advancement.	0.761
70	Teachers in my school collaborate effectively with one another.	0.758
53	Teachers are open to providing and receiving feedback from their colleagues.	0.732
36	Teachers work together to solve common teaching challenges.	0.728
47	The instructional leader supports teachers in improving their teaching practices.	0.722
74	The instructional leader promotes participation in professional development activities.	0.705
82	The instructional leader encourages innovative teaching methods.	0.697
27	The instructional leader regularly evaluates teaching effectiveness.	0.683
28	The instructional leader ensures that professional development aligns with instructional goals.	0.68
78	The instructional leader provides constructive feedback on teaching practices.	0.673
31	There is a clear system for monitoring and improving teaching practices.	0.672
94	The school fosters an inclusive environment where all teachers feel respected.	0.656

From Table 3, we can find that has 22 important descriptive variables, arranged in order of importance according to factor weight (factor loading), which have a variable weight value in the composition between 0.864 and 0.7. When considering all the variables, most variables are related to most of the variables are related to leadership, goal setting, decision-making engagement and professional development support. The researcher named this factor “Instructional Leadership”.



**Table 3 Factor2: Teacher Job Satisfaction**

No.	Contents of Items	Factor Loading
64	The instructional leader regularly observes classroom instruction and provides feedback.	0.864
20	The instructional leader consults with teachers when setting educational goals.	0.859
72	The instructional leader ensures that the school's vision is shared and understood by all staff.	0.846
66	The instructional leader aligns the school's goals with teaching practices.	0.841
4	The instructional leader sets high expectations for student achievement.	0.84
91	Teachers have a say in the development of school policies.	0.838
6	Teachers are involved in making decisions about curriculum development.	0.824
41	The instructional leader values teachers' input in decision-making processes.	0.822
35	Teachers are encouraged to pursue continuous learning opportunities.	0.821
68	The school environment supports innovation and creativity in teaching.	0.803
95	Differences in opinion among teachers are respected and valued.	0.787
71	The instructional leader supports collaboration in professional development.	0.785
39	The school leadership actively promotes inclusivity and respect in the school community.	0.784
46	The school's goals and objectives are clearly communicated and aligned with teaching practices.	0.783
32	The school encourages an open dialogue on important issues affecting the teaching staff.	0.775
60	Teachers are regularly informed about the instructional leader's expectations.	0.746
21	Teachers are held accountable for their students' academic performance.	0.734
61	The school promotes a culture of collaboration among teachers.	0.728
76	The school provides a safe environment for both students and staff.	0.722
10	The instructional leader clearly communicates the school's educational vision.	0.715
96	The school administration responds effectively to safety concerns raised by teachers.	0.706
34	The school has clear policies to address bullying or harassment.	0.700

From Table 4, we can find that has 15 important descriptive variables, arranged in order of importance according to factor weight (factor loading), which have a variable weight value in the composition between 0.898 and 0.699. When considering all the variables, most variables are related to most of the variables are related to Peer Learning, Collaborative Planning and Shared Resources. The researcher named this factor “Professional Collaboration”.

**Table 4 Factor3:** Professional Collaboration

No.	Contents of Items	Factor Loading
43	I have opportunities to learn from my colleagues’ teaching practices.	0.898
59	Peer observation is encouraged as a way to improve teaching.	0.881
25	Teachers in my school regularly engage in peer learning activities.	0.870
1	Collaborative planning sessions are productive and well-organized.	0.845
97	I frequently participate in discussions about teaching strategies with colleagues.	0.814
73	Teachers in my school share teaching resources with one another.	0.811
93	The school encourages the sharing of resources among teachers.	0.810
23	I am an active participant in a professional learning community.	0.806
29	I have access to a shared repository of teaching materials.	0.805
57	Collaborative problem-solving is a regular practice in my school.	0.796
56	Joint problem-solving leads to effective solutions in our school.	0.793
65	I work closely with my colleagues to align our teaching approaches.	0.782
86	I feel supported by my colleagues when addressing difficult teaching situations.	0.781
14	PLCs provide valuable opportunities for my professional growth.	0.746
69	Professional learning communities in my school focus on improving teaching practices.	0.700

From Table 5, we can find that has 14 important descriptive variables, arranged in order of importance according to factor weight (factor loading), which have a variable weight value in the composition between 0.866 and 0.716. When considering all the variables, most variables are related to most of the variables are related to Curriculum Design Autonomy, Teaching Methods Autonomy, and Professional Development Choices. The researcher named this factor “Teacher Professional Autonomy”.

**Table 5 Factor4:** Teacher Professional Autonomy

No.	Contents of Items	Factor Loading
40	I can select the content that best meets my students’ needs.	0.865
11	I can implement innovative teaching strategies without restrictions.	0.864
54	I have the freedom to choose the teaching methods I use in the classroom.	0.860

No.	Contents of Items	Factor Loading
83	I have the autonomy to design the curriculum I teach.	0.860
92	I have the freedom to introduce new topics into the curriculum.	0.838
18	I am allowed to adapt the curriculum to fit my teaching style.	0.835
15	I can determine the most appropriate ways to assess my students' learning.	0.817
52	I am encouraged to experiment with different instructional approaches.	0.802
87	I have the autonomy to create my own assessments.	0.788
3	I can choose which professional development opportunities to pursue.	0.776
2	I can choose how to use assessment data to inform my teaching.	0.759
58	I can select the professional development activities that best meet my needs.	0.725
80	I have the freedom to modify assessments based on student performance.	0.724
50	I have the autonomy to focus on areas of professional growth that interest me.	0.717

From Table 6, we can find that has 13 important descriptive variables, arranged in order of importance according to factor weight (factor loading), which have a variable weight value in the composition between 0.912 and 0.776. When considering all the variables, most variables are related to most of the variables are related to Teacher Relationships, Safety and Security and Institutional Environment. The researcher named this factor “School Climate”.

**Table 6 Factor5: School Climate**

No.	Contents of Items	Factor Loading
45	The school fosters an inclusive environment where all teachers feel respected.	0.912
49	Teachers are involved in decision-making processes within the school.	0.891
24	The school supports professional autonomy in the classroom.	0.876
9	Teachers are respected by their colleagues.	0.861
90	The school emphasizes the importance of mutual respect in teacher collaboration.	0.853
26	The school leadership ensures a positive and inclusive school culture.	0.850
84	The school fosters teacher engagement and motivation.	0.843
89	The school administration meets my professional needs.	0.833
22	Teachers feel supported and valued by their peers.	0.830
30	The school promotes participation in professional development activities.	0.827
51	Regular meetings or discussions are held among teachers to address teaching challenges.	0.809



No.	Contents of Items	Factor Loading
5	The school provides a safe and inclusive teaching environment.	0.808
13	The school ensures that teachers' voices are heard in decision-making processes.	0.776

#### Semi-structured Interview Results

The qualitative interview results provided in-depth insights into the factors influencing Continuous Professional Teacher Development (CPTD) in Yunnan Provincial Universities. The nine interviewees generally held a positive attitude towards the influence and application of these five factors (or components). Experts identified financial constraints, heavy workloads, and unclear career progression pathways as major challenges to faculty engagement in CPTD. They emphasized the critical role of university leadership and institutional support in fostering a culture of continuous learning. They highlighted Professional Learning Communities (PLCs), cross-institutional collaborations and digital learning platforms as effective strategies for enhancing faculty development opportunities.

## Discussion

### Factors Influencing Continuous Professional Teacher Development

The study identified five key factors affecting CPTD: teacher job satisfaction, instructional leadership, school climate, teacher professional autonomy, and professional collaboration.

#### 1. Teacher Job Satisfaction and CPTD Engagement

The findings reveal that faculty members with higher job satisfaction are more engaged in CPTD. This aligns with Herzberg's Two-Factor Theory (Herzberg, 1959), which highlights the role of intrinsic motivators such as professional growth, recognition, and meaningful work. However, workload pressures and lack of financial incentives were identified as barriers to sustained engagement in professional development (Ingersoll, 2001). These results suggest that universities must address faculty well-being and provide structured career advancement opportunities to enhance CPTD participation.

#### 2. Instructional Leadership and Administrative Support

The study found that faculty members perceive instructional leadership as a moderate influence on their professional development. Effective leadership is essential for creating a culture of continuous learning, providing mentorship, and ensuring access to professional development programs (Hallinger & Murphy, 1985). However, inconsistencies in administrative policies and limited funding for faculty training remain major obstacles. These findings are consistent with Leithwood et al. (2004), who argue that proactive instructional leadership fosters faculty motivation and engagement in professional learning.

#### 3. School Climate and Collegial Support

The results indicate that a positive school climate significantly enhances faculty engagement in CPTD. Previous studies suggest that collegial relationships, peer collaboration, and a supportive academic environment contribute to professional development participation (Bryk & Schneider, 2002). However, the study also revealed disparities in access to professional development resources across institutions, indicating that faculty members in smaller universities or rural areas may face more barriers to CPTD.

#### 4. Teacher Professional Autonomy and Decision-Making

Faculty members reported moderate levels of professional autonomy, with some expressing concerns about rigid institutional policies limiting their ability to make independent decisions regarding curriculum design and teaching methodologies. According to Deci and Ryan's (1985) Self-Determination Theory, higher autonomy is associated with greater intrinsic motivation and professional engagement. These findings suggest that universities should provide greater flexibility in faculty decision-making to enhance professional growth.

#### 5. Professional Collaboration and Peer Learning

The study highlights that professional collaboration is an essential yet underutilized aspect of CPTD in Yunnan universities. Research suggests that collaborative professional learning models, such as Professional Learning Communities (PLCs), enhance faculty development and instructional effectiveness (DuFour & Eaker, 1998). However, institutional silos, limited interdisciplinary collaboration, and lack of formalized mentoring programs were identified as barriers. This indicates that universities must create structured platforms for peer learning and interdisciplinary exchange.

### **Major obstacle to Continuous Professional Teacher Development in Yunnan universities.**

#### 1. Funding and Resource Allocation

The study found that financial constraints remain a major obstacle to CPTD in Yunnan universities. Many faculty members lack access to research grants, professional training programs, and international development opportunities. These findings are consistent with Avalos (2011), who argues that well-funded professional development programs contribute to higher faculty engagement and improved teaching outcomes.

#### 2. Policy Framework for Professional Development

The qualitative findings indicate gaps in institutional policies related to CPTD implementation. Some universities have established faculty development programs, but many lack standardized policies, clear career progression pathways, and structured incentives for participation. Previous research suggests that universities with well-defined faculty development frameworks experience higher levels of engagement in professional learning activities (Guskey, 2002). This highlights the need for policy reforms to ensure consistency in CPTD opportunities across institutions.

#### 3. Leadership Strategies for Promoting CPTD

Effective instructional leadership plays a crucial role in fostering a culture of lifelong learning. The study found that faculty members who received strong leadership support were more likely to participate in CPTD. These findings align with Robinson et al. (2008), who emphasize the role of leadership in promoting faculty collaboration, providing mentorship, and facilitating access to professional development resources.

### **Proposal of the Continuous Professional Teacher Development Model**

Based on the research findings, the authors propose the Continuous Professional Teacher Development (CPTD) Model for Yunnan Provincial Universities is proposed. The model highlights the interaction and mutual influence of five key factors: teacher job satisfaction, instructional leadership, school climate, teacher professional autonomy, and professional collaboration. These factors collectively shape faculty engagement in CPTD.

Teacher job satisfaction, school climate, and professional collaboration serve as positive drivers that enhance faculty participation in professional development. Conversely, limited instructional leadership and restricted professional autonomy act as barriers that must be addressed. Additionally, policy support play a mediating role in ensuring effective implementation of CPTD initiatives.

Universities can enhance CPTD engagement by improving job satisfaction, fostering a supportive school climate, strengthening faculty collaboration, expanding professional autonomy, and providing proactive leadership support. These measures will create a sustainable and structured professional development framework, ensuring equitable access to faculty training opportunities and long-term career growth.

## **Conclusion**

### **Summary of the Study**

This study investigated Continuous Professional Teacher Development (CPTD) in Yunnan Provincial Universities using a mixed-methods approach. The findings revealed that faculty engagement in CPTD is influenced by five key factors: teacher job satisfaction, instructional leadership, school climate, teacher professional autonomy, and professional collaboration. policy support were identified as mediating factors that significantly impact faculty participation in professional development initiatives. Based on these findings, a CPTD Model was proposed, emphasizing the interaction between institutional policies, leadership, and faculty development engagement. Additionally, strategies for enhancing CPTD, such as structured training pathways, peer collaboration, and digital learning platforms, were suggested to improve faculty engagement in continuous learning.

### **Research Contributions**

This study contributes to the existing literature by providing empirical evidence on the factors affecting faculty professional development in higher education institutions in Yunnan Province. The proposed CPTD Model offers a structured framework for improving professional development policies, leadership strategies, and institutional support mechanisms. This study

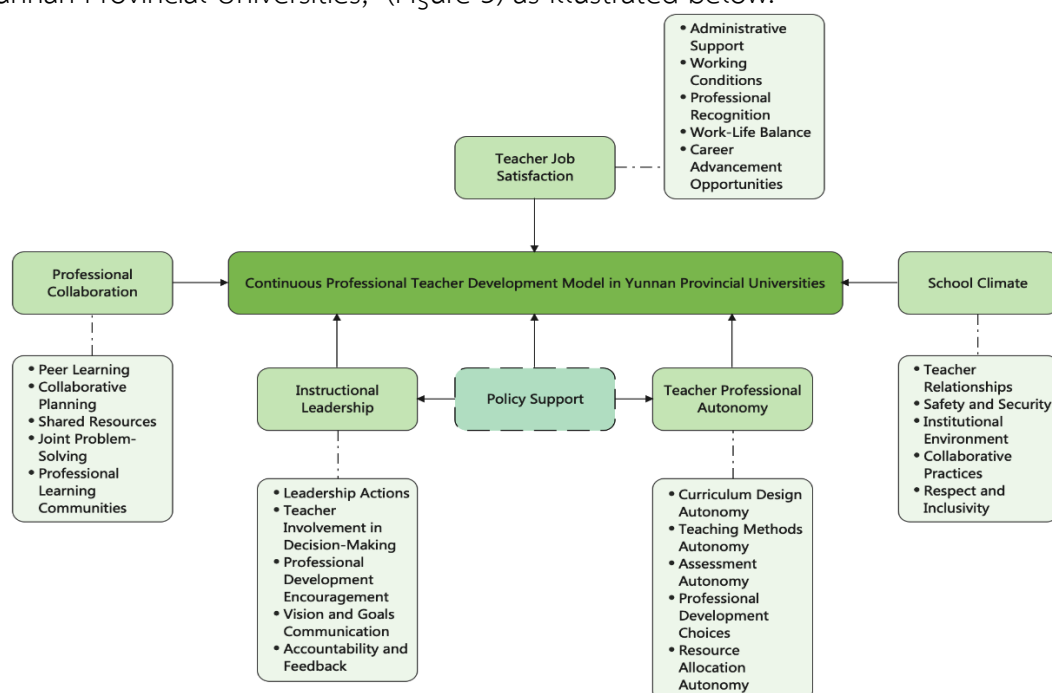
highlights the importance of adapting professional development strategies to the specific institutional, cultural, and socio-economic context of Yunnan. The findings can serve as a reference for university administrators and policymakers, guiding them in designing effective faculty development programs that align with local and national education policies.

### Limitations and Future Research Directions

Despite its valuable findings, this study has certain limitations. First, while the sample size of 483 faculty members and administrators provides a solid foundation for analysis, the results may not be fully generalizable to all higher education institutions in China. Future research could expand the sample size and explore regional variations in professional development engagement. This study provides a cross-sectional analysis, capturing faculty perceptions at a single point in time. Future research should conduct longitudinal studies to track changes in CPTD engagement over time and assess the long-term impact of different faculty development initiatives. Moreover, further studies could investigate the relationship between CPTD and faculty performance, analyzing how professional development influences teaching effectiveness, research output, and student learning outcomes. Additionally, external factors such as education policy changes, technological advancements, and economic conditions could be explored to provide a more comprehensive understanding of faculty professional development trends.

### New Knowledge

The new body of knowledge derived from this research is synthesized into a conceptual framework titled "Continuous Professional Teacher Development (CPTD) Model for Yunnan Provincial Universities," (Figure 3) as illustrated below:



**Figure 3** Continuous Professional Teacher Development Model in Yunnan Provincial Universities



This framework consists of five interconnected components: Teacher Job Satisfaction, Instructional Leadership, School Climate, Teacher Professional Autonomy, and Professional Collaboration. At the core, policy support acts as a mediator, facilitating effective interactions among these factors. The structure emphasizes that enhancing teacher job satisfaction and professional collaboration, supported by proactive instructional leadership and positive school climate, will significantly improve CPTD outcomes. Additionally, providing greater autonomy to teachers in their professional practices is highlighted as essential for sustainable professional growth. This conceptual model offers clear guidance for institutions aiming to systematically enhance faculty development practices, particularly within the context of Yunnan Provincial Universities.

## Recommendation

Based on the findings, several strategies can be recommended to enhance CPTD:

### 1. Establishing Structured Professional Development Programs

Universities should develop comprehensive CPTD frameworks that integrate structured training programs, mentorship initiatives, and interdisciplinary collaboration opportunities. Implementing modular learning programs and certification-based training can encourage sustained engagement.

### 2. Strengthening Institutional Leadership and Administrative Support

University leaders should actively promote faculty development through policy reforms, funding allocation, and strategic planning. Decentralizing decision-making and giving faculty members more autonomy in professional learning choices can enhance motivation.

### 3. Expanding Professional Collaboration Networks

Universities should encourage cross-institutional collaborations, industry partnerships, and international faculty exchange programs. Establishing Professional Learning Communities (PLCs) and faculty mentorship programs can enhance peer learning and professional growth.

### 4. Leveraging Digital Learning Platforms

Incorporating online training programs, webinars, and virtual faculty development workshops can provide more flexible learning opportunities. Universities should invest in e-learning resources and digital certification programs to support faculty engagement in CPTD.

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