A STUDY ON THE INFLUENCING FACTORS OF THE EFFECTIVENESS OF ONLINE INTERNATIONAL CHINESE LANGUAGE TEACHING BASED ON LEARNING MOTIVATION THEORY – A CASE STUDY OF CONFUCIUS INSTITUTES IN THAILAND[*]

Wang Jianchao

Siam University, Thailand

Corresponding Author's Email: Wangjianchao0123@gmail.com

Abstract

This study investigates key factors influencing the effectiveness of online international Chinese language teaching at Confucius Institutes in Thailand. Based on Learning Motivation Theory, the research focuses on three critical dimensions: classroom management, teachers' instructional capabilities, and teachers' information literacy. A questionnaire survey of 334 students was conducted, and statistical analysis including correlation and multiple regression revealed that all three factors significantly influence teaching effectiveness. The study provides recommendations for enhancing online Chinese teaching through improved teacher training, greater use of educational technologies, and promotion of interactive learning strategies.

Introduction

In the dual contexts of the Internet era and the post-pandemic era, the international Chinese language education industry has ushered in novel development opportunities and challenges. On the one hand, the continuous improvement of China's economic level and overall national strength has sparked a global "Mandarin fever". Internet technology has prompted the transformation of international Chinese language dissemination from "traditional classrooms" to "online+ offline classrooms," with 5G technology further facilitating the widespread implementation of international Chinese language "online teaching". Online international Chinese language teaching is no longer constrained by traditional teaching formats, breaking through the temporal and spatial limitations of traditional instruction while further developing and integrating teaching resources. On the other hand, the outbreak of infectious diseases such as COVID-19 has severely impacted international endeavors such as online international Chinese language teaching and the dissemination of language and culture. Scholars such as Li (2023) have stated that "Chinese international education is a 'sensitive type of education' and a 'barometer' of international affairs, with the COVID-19 pandemic exerting explicit or implicit, direct or indirect, short-term or long-term, negative or positive impacts on Chinese international education". Consequently, traditional online international Chinese language teaching needs to evolve to meet the demands of the new landscape for international Chinese language dissemination. "Online teaching" has injected new vitality into the globalization of Chinese language education, becoming a focal point at the forefront of online international Chinese language

teaching and even the entire field of education. However, the thriving "online international Chinese language teaching" urgently requires a reserve of teachers with online teaching capabilities as the "driving force" to remain grounded amidst the tides of the times. Following the outbreak of COVID-19, traditional Chinese language teaching models and international Chinese language dissemination efforts were disrupted. Nevertheless, trends such as the "Belt and Road Initiative" and "economic globalization" have sustained the high demand for Mandarin. Supported by Internet technology, online Chinese language teaching has broken through the temporal and spatial constraints of traditional instruction, promoting autonomous Chinese language learning and becoming a new avenue for disseminating Chinese, entering a phase of vigorous development. Wu et al., (2021) proposed that the construction of the "teacher" workforce is the core of the "three teachings" issue.

In 2012, MOOCs (Massive Open Online Courses) ignited a global wave of online learning, gradually bringing online teaching platforms into the public eye. Research on online teaching has become increasingly comprehensive. Especially following the outbreak of COVID-19, online teaching has emerged as one of the mainstream forms of Chinese language teaching, with the current focus of educational research being on online teaching models and the enhancement of online teaching quality. International Chinese language education, as a discipline marked by its cross-cultural nature, is even more inseparable from online teaching. Current research on online international Chinese language teaching focuses on teachers' reflections on online teaching and the exploration of online teaching characteristics and effective teaching strategies. Therefore, this study utilizes Learning Motivation Theory to investigate the factors influencing the effectiveness of online international Chinese language teaching and proposes effective improvement strategies, which not only contribute to enhancing the quality of online international Chinese language teaching but also provide

valuable references for other online language teaching endeavors (Zheng, 2022). This study focuses on the effectiveness of online international Chinese language teaching at Confucius Institutes in Thailand. It employs a comprehensive methodology, incorporating literature review, questionnaire surveys, and quantitative analysis, to investigate students' perspectives at these institutes. Guided by Learning Motivation Theory, the study identifies key factors influencing the effectiveness of online international Chinese language teaching and proposes targeted recommendations for enhancement.

Objectives

1. To explore the effect of classroom management on the effectiveness of online international Chinese language teaching.

2. To explore the effect of teachers' instructional capabilities on the effectiveness of online international Chinese language teaching.

3. To explore the effect of teachers' information literacy on the effectiveness of online international Chinese language teaching

Literature Review

This section focuses on reviewing and analyzing previous research findings regarding the effectiveness of online international Chinese language teaching. It aims to deeply dissect the notable achievements and existing deficiencies of these studies, thereby laying a solid theoretical and practical foundation for the smooth progress of this research. Through in-depth reading and analysis of the literature, it is observed that previous studies have yielded fruitful results in defining the connotation, identifying influencing factors, and exploring the mechanisms of the effectiveness of online international Chinese language teaching. Meanwhile, there are some shortcomings, such as a lack of depth and breadth in some studies, relatively limited research methods, and confined

sample selection. The existence of these issues provides new entry points and research directions for this study, prompting this study to place greater emphasis on comprehensiveness, depth, and innovation in our research, to achieve breakthroughs and advancements in the field of the effectiveness of online international Chinese language teaching.

Over the past two decades, online international Chinese language teaching has continued to develop. Especially since the outbreak of the COVID-19 pandemic, online international Chinese language teaching has undergone forced transformation, with a surge in demand for such teaching, and concurrent increases in industry attention and research. Currently, domestic research on online Chinese language teaching focuses on its characteristics, resources, platforms, and strategies. Online international Chinese language teaching relies on network technology for long-distance language instruction, possessing distinct features that differentiate it from offline teaching. Li (2017) identified four unique qualities of online Chinese language teaching compared to offline teaching: the influence of the "Internet+" background, the breaking of time and space constraints, the transformation of students' subjective consciousness, and a more comprehensive teaching system. Wen (2018) pointed out that online Chinese language teaching emphasizes students' dominant position in language learning, enhancing students' autonomy compared to "teacher-centered" classrooms. Zhang et al. (2019) proposed that online Chinese language teaching is characterized by high teaching efficiency, strong teaching flexibility, and abundant educational resources. Yan (2021) believed that post-pandemic online Chinese language teaching features the implementation of teaching relying on network technology, greater autonomy in student learning, complete construction of the teaching system, and freedom from time and space constraints. Saelao (2021) noted that online Chinese language teaching breaks the traditional time and space limitations of teaching, possessing openness and flexibility.

The practice of international online Chinese language teaching requires online teaching platforms as support, and the functions and application of these platforms are one of the main factors affecting online teaching effectiveness. Currently, there is no shortage of research on online Chinese language teaching platforms. Xu (2018) believed that various online Chinese language teaching platforms can meet the diverse learning needs of Chinese learners, but the current development of online Chinese language teaching platforms is not yet mature and proposed ideas for platform development. Ding (2019) discussed the characteristics, advantages, and disadvantages of the online interactive Chinese language teaching platform using Chinlingo as an example. Zhou (2020) conducted instructional design based on students' online learning needs on the Zoom platform and proposed strategies for reasonably utilizing the Zoom platform to promote teaching interaction. Yang (2022) addressed the shortcomings of current online Chinese language teaching platforms and proposed a design concept for online Chinese language teaching platforms with higher levels of interaction and participation.

The convenience and abundance of teaching resources are one of the formal competitive advantages of online teaching. Dong (2014) summarized the resources on online Chinese language teaching platforms, noting that online teaching resources lack targeted content and are slow to update, and proposed countermeasures. Chen (2016) suggested that the development of online resources should progress together with teaching methods to enhance the effectiveness of online Chinese language teaching. Xing (2021) classified online teaching resources for Teaching Chinese as a Foreign Language into four categories: textbook resources, teacher-created resources, online resources, and student resources. By comparing the application of these resources, she found that online Chinese language teaching resources lack diversity and student resources need to be fully developed, and put forward targeted suggestions.

Research on online international Chinese language teaching also includes studies on online teaching strategies. Li (2019) analyzed the advantages and disadvantages of applying teaching strategies to online Chinese language teaching for ethnic Chinese children and proposed optimization suggestions. Xiao (2021) conducted an online comprehensive course instructional design for Indian ethnic Chinese children learners and proposed corresponding teaching strategies from the perspectives of online classroom management, online language practice, platforms, and networks. Yang (2022) designed teaching interactive activities based on the application of interaction theory on the Lingo Ace online Chinese language teaching platform and proposed teaching strategies suitable for one-on-one beginner Chinese comprehensive courses for overseas children.

Learning motivation is a socially acquired behavior that primarily influences learning behaviors. The outcomes of learning behaviors manifest in the driving force behind the learning process and its effectiveness. The quality of learning outcomes can be analyzed from both macro and micro perspectives. From a macro perspective, when students possess strong learning motivations, their enthusiasm and proactive engagement in learning increase, leading to more pronounced learning outcomes as their positive learning motivations rise (Han, 2021). From a micro perspective, however, for a specific subject, students' learning motivations and learning outcomes are not always positively correlated; sometimes, strong learning motivations do not necessarily result in significant learning outcomes. In terms of the learning process, students' learning behaviors are influenced by various factors and possess a certain monitoring role. Sometimes, students may be distracted by external factors, indicating that their external learning motivations outweigh their internal motivations. However, if students possess sufficiently strong internal motivations, their external motivations will have difficulty interfering with their learning behaviors, allowing them to persist in learning to achieve their set goals. David Paul Ausubel, a

renowned American educational psychologist influenced by McClelland and Atkinson's achievement motivation theory, opposed Skinner and Hull's drive reduction theory. He believed that although material rewards can be effective in motivating individual learning behaviors, internal motivations become increasingly important as individuals age (Kan, 2020).

Ausubel categorized students' learning motivations into three types: cognitive drive, self-enhancement drive, and affiliative drive. He believed that students' learning behaviors can be explained from these three perspectives. Ausubel also emphasized the necessity of short-term learning motivations (Feng, 2020). In short-term learning, students have less need for intrinsic drive and external rewards. Therefore, teaching departments cannot wait for students to have appropriate motivations and interests before initiating learning. A student may temporarily lack learning motivations, but after receiving good learning and education, their learning motivations will naturally arise, further motivating them to learn. According to Ausubel's view, every student's learning motivations encompass cognitive drive, self-enhancement drive, and affiliative drive, but the proportions of each drive vary among individuals, generally changing with factors such as age, gender, social class, ethnic origin, and personality structure. Wang (2021), in a study of efficient online Chinese language classrooms in Thailand through surveys and interviews with teachers and students, found issues such as students lacking strong learning motivation and unclear learning goals. Teachers did not play a good guiding role, and classroom interactivity was weak. Wang (2022), through classroom observations of elementary-level online comprehensive Chinese language courses and questionnaires to teachers and students, concluded that teachers in online Chinese teaching have a strong sense of interaction and can often achieve teaching effects close to those of offline teaching. Based on these findings, it was suggested that teachers should actively prepare their lessons, be fully prepared, promptly identify students' situations, engage in interactive teaching, and strengthen classroom management. Gao

(2022), using a classroom observation scale, studied the teaching behaviors of novice teachers in online Chinese language teaching and proposed that teachers should adjust their speaking speed according to students' proficiency levels and return classroom discourse power to students, thereby optimizing teachers' online teaching behaviors.

Liu (2022) employed quantitative research methods to explore the relationship between teaching leadership abilities and identity among novice teachers in online international Chinese language teaching. It was found that there is a positive correlation between teaching leadership abilities and identity among these teachers. It was suggested that teachers should improve their teaching leadership abilities by enhancing their teaching skills, interpersonal skills, and affinity. Chen (2022) combined classroom teaching techniques with online Chinese classrooms, conducting analysis and research on lesson preparation, classroom organization and management, teacher talk, and blackboard writing. It was proposed that online teaching should focus more on preparing students and fully understanding them. Classroom organization and management should be naturally connected, and multimedia should be proficiently utilized to complete teaching.

Zhang (2023), by analyzing interactive behaviors in online Chinese language classrooms for Thai children, suggested that teachers should design classroom interactions based on children's cognitive characteristics and language learning processes, possess a proactive teaching mindset, focus on students, and design classroom interactions with specific purposes. Li (2023) took teacher talk in the "Online Chinese Classroom" as the research content, understanding the usage of teacher talk through classroom observations and interviews. It was found that optimizing teacher talk has a significant effect on improving teaching quality. Teachers should consciously optimize their communication, manage classroom

activities in an organized and purposeful manner, and utilize the benefits of online platforms.

Ahern and Gress (1986) believed that classroom teaching competence is the core of a teacher's competence structure and a crucial factor influencing students' academic performance. Shen and Wang (2000), from a cognitive psychology perspective, viewed teaching competence as a professional ability demonstrated in subject-specific teaching activities, considering it a comprehensive ability developed on the foundation of cognitive abilities and intelligence. Dineke et al. (2004) saw teaching competence as the knowledge, skills, and attitudes required for effective teaching outcomes in various educational contexts. Sun (2004) pointed out that teaching competence encompasses comprehensive abilities such as planning and design, operational expression, organizational management, evaluation and feedback, and teaching and research demonstrated in the teaching process to achieve expected teaching goals and effects. The factors influencing teachers' instructional capabilities are not singular.

Zhang (2007) believed that the factors influencing novice teachers' instructional capabilities include internal personal factors and external environmental factors. Internal personal factors refer to teachers' personal practical experience and knowledge systems, while external environmental factors include institutional training systems, reward mechanisms, and assessment systems. Tong (2007) attributed the factors influencing the development of teachers' instructional capabilities to three levels: personal, school, and societal. Song (2011) also proposed a consistent viewpoint, but with different specific classifications at the personal level. Since the official establishment of the discipline of international Chinese education in the 1950s, specialized research on the cultivation of international Chinese teachers emerged only in the 1980s. Deng (1991) suggested strengthening regular training for in-service international Chinese teachers, with training content encompassing both

essential general knowledge and skills for international Chinese teachers and targeted competence training based on teaching practice.

Consequently, these countries have introduced a series of new education reform policies and implementation measures, actively enhancing teachers' information technology skills to advance their respective educational informatization processes. Modern educational technology serves as a bridge connecting educational theory, learning theory, and educational teaching practice (Ye 2021). However, due to inadequate popularization of modern information technology education in China, most international Chinese language teachers dispatched to various countries lack systematic information literacy training (Wu et al., 2021). Therefore, when facing learners from developed countries with high information literacy, international Chinese language teachers encounter a series of significant challenges in their teaching. This highlights the varying levels of information teaching technology capabilities among international Chinese language teachers and the relatively low proficiency and efficiency in utilizing digital teaching resources (Wang, 2021). Especially at the current stage of development, the rise of online Chinese education has once again underscored the inadequacy of international Chinese teachers' information literacy. A widespread issue also exists where academia, universities, organizations, and others do not prioritize the cultivation of their information literacy (Li & Wu, 2022).

Research on the cultivation of international Chinese teachers' information literacy has garnered some attention from scholars. Wu & Ju (2020) conducted a study on international Chinese teachers' information literacy, analyzing its connotation from the perspective of teaching informatization. They designed an evaluation index system for Chinese teachers' information literacy in three levels and proposed relevant cultivation pathways. In the context of the development of international Chinese education in the new era, some scholars have built an

information literacy model for international Chinese teachers based on existing information literacy standards and frameworks, combined with the development background of the "Belt and Road" Initiative. This provides a certain basis for the evaluation and cultivation of international Chinese teachers' information literacy at the current stage (Yuan & Liu, 2020).

Cultivating and enhancing the information literacy of international Chinese teachers does not necessarily mean that teachers must systematically master complex information technology. Instead, teachers should highly value the cultivation and development of their information literacy, improve their abilities to acquire, analyze, and apply information, and continuously enhance teaching efficiency and quality (Wang, 2020). However, current research specifically targeting information literacy is still in its infancy. Scientific quantitative evaluation indicators for international Chinese teachers' information literacy remain to be studied and established, and related research needs further enhancement (Zhang et al., 2021).

Methodology

This study focused on students enrolled in online international Chinese language courses at Confucius Institute in Thailand, encompassing diverse gender, age, and grade cohorts. The objective is to identify critical factors influencing the effectiveness of online international Chinese language teaching and propose targeted improvement strategies. In collaboration with the academic department of Confucius Institute, the research first established the target population as 2,175 students who had participated in online Chinese language courses, followed by scientifically grounded sampling procedures. Based on Krejcie & Morgan's (1970) sample size calculation table, the theoretically recommended sample size for this population (N = 2175) was determined to be 334 participants, calculated under the parameters of a 95% confidence level, 5% margin of error (d = 0.05),

and P = 0.5. This calculation balances population size, confidence level, and margin of error to ensure the sample adequately represents the population while avoiding resource overcommitment from excessive sampling.

However, practical considerations necessitated adjustments to the theoretical sample size. To mitigate risks associated with invalid responses, 20% additional participants were incorporated into the sampling strategy. Consequently, the final sample size was set at 400 participants. Questionnaires were distributed randomly via an online platform, with rigorous data collection and screening protocols to ensure representativeness and validity. This methodology guarantees both theoretical rigor and practical feasibility, ultimately providing empirically grounded insights to optimize the quality and efficacy of online international Chinese language instruction.

This study aimed to verify the specific impacts of classroom management, teachers' instructional capabilities, and teachers' information literacy on the effectiveness of online international Chinese language teaching, providing theoretical support and practical guidance for optimizing online international Chinese language teaching. Therefore, the following hypotheses are proposed in this study:

H1: Classroom management has a significant effect on the effectiveness of online international Chinese language teaching.

H2: Teachers' instructional capabilities have a significant effect on the effectiveness of online international Chinese language teaching.

H3: Teachers' information literacy has a significant effect on the effectiveness of online international Chinese language teaching.

The framework of this questionnaire is primarily based on learning motivation theory. In terms of classroom management dimensions, the investigation focuses on the clarity of classroom rules, monitoring and management of student engagement, maintenance of classroom discipline,

timeliness of interaction and feedback, and the creation of classroom atmosphere. For the dimension of teachers' pedagogical competence, the questionnaire examines familiarity with teaching content, application of instructional technologies, understanding and fulfillment of student learning needs, stimulation of learning interest, and tracking of learning progress. Regarding teachers' information literacy, the questionnaire assesses familiarity with online education platforms, ability to integrate instructional resources using information technology, proficiency in applying information technology, awareness of information ethics and security, and willingness to learn information technology to enhance teaching capabilities continuously. In evaluating the effectiveness of online international Chinese language teaching, the questionnaire investigates course satisfaction, improvement of students' language proficiency, learning interaction and engagement, personalized learning support, and stimulation of learning motivation.

Through data analysis, Cronbach's Alpha values for classroom management, teachers' instructional capabilities, teachers' information literacy, and the effectiveness of online international Chinese language teaching are 0.846, 0.839, 0.885, and 0.867, respectively. The internal consistency of the questionnaire is good, and the reliability is high.

The Kaiser-Meyer-Olkin (KMO) value compares the simple correlation coefficients and partial correlation coefficients among variables, ranging from 0 to 1. The KMO value should be above 0.7, and a KMO value of 0.9 or higher indicates that the data on the scale is highly suitable for factor analysis. Survey data shows that the overall KMO value is 0.857, with a significance level of 0.000, which is less than 0.05 and reaches a significant level, indicating that factor analysis can be conducted. This study employs confirmatory factor analysis (CFA). According to the factor analysis results of the variables, the cumulative explanatory rates for the influencing factors of classroom management, teachers' instructional capabilities, teachers' information literacy, and the effectiveness of

online international Chinese language teaching are 84.304%, with significance levels greater than 0.5. This indicates their suitability for factor analysis. The factor analysis yields three valid factors: classroom management, teachers' instructional capabilities, and teachers' information literacy.

Through CFA, all question items are divided into three dimensions. From the results of the independent variable factor analysis, a total of five question items with eigenvalues greater than 1 are extracted, which are consistent with the original topic classification. Additionally, the factor loadings of each measurement item in the questionnaire are all above 0.5, and the discriminant validity among dimensions is good, indicating good independence among dimensions. This suggests that the overall validity of the questionnaire is good.

This study selected students from Confucius Institutes in Thailand as the research subjects and data collection was conducted from March 2025 to May 2025. The questionnaires were distributed and collected primarily through the online platform of Wenjuanxing, with online recovery of questionnaires. A total of 400 questionnaires were distributed. During the questionnaire recovery process, the research team conducted strict checks to eliminate invalid questionnaires, including those that were incomplete or inconsistent. A total of 334 responses were recovered, with an effective questionnaire recovery rate of 83.5%. Through this process, the research team collected a substantial amount of valuable data, which can be used to analyze the factors influencing the effectiveness of online international Chinese language teaching.

Results

In terms of gender distribution, there are 140 male students, accounting for 42% of the total, and 194 female students, accounting for 58% of the total. The proportion of female students is slightly higher than that of male students. This may be related to Thai society's attitude towards Chinese language learning,

personal interests, career planning, and other factors. Females may be more inclined to choose language learning or have a stronger interest in Chinese and Chinese culture.

Regarding age distribution, there are 8 students under 18 years old, accounting for 2% of the total, 310 students aged 18-22 years old, accounting for 93% of the total, and 16 students above 22 years old, accounting for 5% of the total. The age of students is mainly concentrated between 18 and 22 years old, which corresponds to the college student age group. This indicates that the online international Chinese courses offered by Confucius Institutes in Thailand are primarily targeted at college students. The few students under 18 may be high school students or have special learning needs, while those above 22 may be pursuing further education or learning Chinese due to career demands.

In terms of grade distribution, there are 42 first-year college students, accounting for 13% of the total, 87 second-year college students, accounting for 26% of the total, 126 third-year college students, accounting for 38% of the total, and 79 fourth-year college students, accounting for 24% of the total. The academic distribution of students is mainly concentrated in the second to fourth years of college, with the highest proportion being third-year students. This suggests that as the academic year progresses, students' demand for Chinese language learning gradually increases, possibly due to career planning, academic research, or cultural exchange needs.

Students who have taken online international Chinese courses at Confucius Institutes in Thailand are predominantly female, mainly aged between 18 and 22, and belonging to the college student group, with an academic distribution covering all college grades. These data reflect the positive attitude and strong interest of Thai college students in Chinese language learning, while also providing valuable market information and teaching references for Confucius Institutes in Thailand. In future teaching, more personalized teaching plans and

activities can be developed for students of different genders, ages, and grades to improve teaching effectiveness and student satisfaction.

The Pearson correlation coefficient matrix was utilized to demonstrate the degree of linear correlation among four variables. The correlation coefficient between classroom management and the effectiveness of online international Chinese language teaching is .649, indicating a significant positive correlation between the two. This suggests that effective classroom management has a positive impact on enhancing the effectiveness of online international Chinese language teaching. The correlation coefficient between teachers' instructional capabilities and the effectiveness of online international Chinese language teaching is .736, revealing a significant positive correlation between them. This implies that improvements in teachers' instructional capabilities contribute to better teaching outcomes in online international Chinese language courses.

The correlation coefficient between teachers' information literacy and the effectiveness of online international Chinese language teaching is .774, demonstrating a very significant positive correlation between the two. This emphasizes the importance of teachers' information literacy in enhancing online teaching effectiveness. With p-values less than 0.01, these correlation coefficients are statistically highly significant. This strengthens our confidence in the relationships among these variables. In summary, this Pearson correlation coefficient matrix uncovers the close relationships among classroom management, teachers' instructional capabilities, teachers' information literacy, and the effectiveness of online international Chinese language teaching. These relationships indicate that to improve the teaching effectiveness of online international Chinese language courses, it is necessary to comprehensively consider and optimize multiple aspects, including classroom management, teachers' instructional capabilities, and teachers' information literacy.

The purpose of Multiple Regression Analysis is to explore the impact of classroom management, teachers' instructional capabilities, and teachers' information literacy on the effectiveness of online international Chinese language teaching. The R-squared value is 0.784, indicating that the predictor variables in the model (classroom management, teachers' instructional capabilities, and teachers' information literacy) collectively account for 78.4% of the variability in the dependent variable (the effectiveness of online international Chinese language teaching).

The Unstandardized Coefficient (Unstd. B) for classroom management is 0.743, which means that, when other predictor variables remain constant, an increase of one unit in classroom management leads to an average increase of 0.743 units in the dependent variable (the effectiveness of online international Chinese language teaching). The Standardized Beta coefficient (Std. Beta) is 0.742, indicating that classroom management significantly impacts the dependent variable compared to other predictor variables. The t-value is 6.350, with a Significance level (Sig.) of 0.000, demonstrating a significant linear relationship between classroom management and the dependent variable. The Variance Inflation Factor (VIF) is 1.124, close to 1, suggesting no severe multicollinearity between classroom management and other predictor variables.

The Unstd. B for teachers' instructional capabilities is 0.725, with a Std. The beta of 0.748 indicates that teachers' instructional capabilities significantly impact the dependent variable. The t-value is 6.658, with a Sig. of 0.000, further confirming this significance. The VIF is 1.236, similarly indicating that multicollinearity is not a serious issue.

The Unstd. B for teachers' information literacy is 0.623, with a Std. The beta of 0.664, showing that teachers' information literacy also has a significant impact on the dependent variable. The t-value is 6.674, with a Sig. of 0.000, reaffirming this significance. The VIF is 1.153, indicating that multicollinearity is within an acceptable range. The Sig. values for all predictor variables are 0.000,

far below commonly used significance levels (such as 0.05 or 0.01), indicating that the impacts of these predictor variables on the dependent variable are highly significant. The VIF values are all close to 1, suggesting no severe multicollinearity among the predictor variables, which contributes to the stability and accuracy of the model.

Therefore, based on the data analysis results, classroom management has a significant effect on the effectiveness of online international Chinese language teaching, supporting Hypothesis 1; Teachers' instructional capabilities has a significant effect on the effectiveness of online international Chinese language teaching, supporting Hypothesis 2; Teachers' information literacy has a significant effect on the effectiveness of online international Chinese language teaching, supporting Hypothesis 3.

Discussion

The analysis of gender distribution revealed that 58% of students enrolled in online international Chinese courses at Confucius Institutes in Thailand were female, while 42% were male. This finding suggests that female students demonstrate a relatively stronger inclination toward learning the Chinese language and culture. Previous studies have highlighted that gender plays a role in foreign language learning choices, with women often showing greater motivation and interest in language acquisition compared to men (Oxford, 2016; Pfenninger & Singleton, 2017). In the Thai context, this may be explained by cultural expectations, personal career planning in education or tourism, and an increasing interest among women in cross-cultural communication (Wang & Phakdeephasook, 2015). Thus, the observed gender imbalance reflects broader social trends in language education in Thailand.

The age distribution results indicated that the majority of students (93%) were between 18 and 22 years old, which aligns with the typical age of college

students. Only 2% were below 18, and 5% were above 22. These findings confirm that online international Chinese courses are particularly attractive to the undergraduate population, corresponding to their academic and career preparation needs. This result is consistent with earlier studies showing that university students are the primary participants in Chinese as a Foreign Language (CFL) programs worldwide, due to both academic requirements and job-market competitiveness (Jin & Cortazzi, 2017). Students under 18 likely represent those with special academic interests or advanced language learning goals, while older participants may be motivated by professional development (Gong et al., 2018).

In terms of grade distribution, the highest proportion of students (38%) were third-year college students, followed by second-year (26%), fourth-year (24%), and first-year students (13%). This suggests that Chinese language learning becomes increasingly important as students progress in their academic journey. It may reflect preparation for internships, research projects, or career-related requirements in later years of study. Similar findings are reported in studies of foreign language learning motivation, where students in higher academic years tend to show greater instrumental motivation tied to employment and future professional opportunities (Dörnyei & Ushioda, 2021).

The Pearson correlation analysis revealed strong positive relationships between classroom management, teachers' instructional capabilities, teachers' information literacy, and the effectiveness of online international Chinese language teaching. Specifically:

- Classroom management correlated at .649,

- Teachers' instructional capabilities at .736, and

- Teachers' information literacy at .774 with teaching effectiveness.

These results highlight the multi-dimensional nature of teaching effectiveness. Effective classroom management ensures a conducive online learning environment, which is critical in virtual education settings (Martin & Bolliger, 2018). Teachers' instructional capabilities contribute to better student

engagement and learning outcomes, as supported by second language pedagogy research (Richards & Rodgers, 2014). Meanwhile, the strongest correlation—teachers' information literacy—emphasizes that online teaching effectiveness relies heavily on educators' ability to integrate technology effectively, a finding consistent with recent scholarship on digital pedagogy (Redecker & Punie, 2017).

The regression model further confirmed that classroom management, instructional capabilities, and information literacy significantly predict the effectiveness of online Chinese teaching, with an R^2 of 0.784, meaning these three predictors explain nearly 80% of the variance. Among the predictors, classroom management (B = 0.743, **β** = 0.742), teachers' instructional capabilities (B = 0.725, **β** = 0.748), and teachers' information literacy (B = 0.623, **β** = 0.664) all showed highly significant effects ($p < 0.01$). These findings reinforce the argument that effective online language teaching requires not only strong pedagogical skills but also technological proficiency and structured classroom organization. This supports previous research showing that successful online language learning outcomes are shaped by an interplay of teaching methods, teacher competence, and digital readiness (Gong et al., 2020; Sun, 2014).

Recommendation

1. Increase Interaction, Cultivate Teacher–Student Relationships, and Strengthen Discipline

To maximize the benefits of online international Chinese education, teachers should enhance interaction, build strong teacher–student relationships, and reinforce classroom discipline. Approaches include:

- Adopting interactive questioning methods (e.g., free comments, anonymous posts, bullet chats) to encourage student participation.

- Implementing a closed-loop teaching model (pre-class guidance, in-class interaction, and post-class consolidation).

- Using popular, student-friendly language to make content engaging and foster autonomous learning.

- Applying a three-stage teaching approach to maintain discipline (advance reminders, structured in-class participation, and post-class assignments).

- Strengthening attendance monitoring and performance evaluation, integrating student discipline and participation into quantitative assessments.

2. Engage in Continuous Learning, Refine Evaluation, and Diversify Expression Methods

Teachers must continuously improve their professional and digital teaching skills. Recommendations include:

- Participating in IT training and peer learning exchanges to stay updated on online teaching technologies.

- Utilizing big data analytics to design evaluation systems and establish incentive mechanisms that enhance teaching quality.

- Exploring diverse expression methods, such as body language demonstrations via pre-recorded videos, pronunciation animations, and virtual or VR-assisted teaching, to compensate for the limitations of online interaction.

- Encouraging bilingual and multimodal approaches to help international students, especially beginners, better grasp Chinese language fundamentals.

3. Foster Autonomous Learning and Improve Teachers' Information Literacy

Sustainable development of teachers' professional abilities depends on strengthening information knowledge and discipline-specific digital literacy. Strategies include:

- Staying updated through online platforms, webinars, and professional communities on information technology in language teaching.

- Experimenting with multiple educational applications and digital devices to enrich teaching practice.

- Enhancing teachers' academic literacy, research capacity, and problem-solving skills to balance teaching, research, and lifelong learning.

- Promoting innovation in teaching design to create engaging learning experiences that support student autonomy and diverse learning needs.

Further Study

Deepening the Study of Learning Motivation Theory Future research should explore how different types of motivation (intrinsic, extrinsic, achievement, etc.) influence the effectiveness of online international Chinese teaching. A specialized learning motivation framework for online CFL (Chinese as a Foreign Language) could be developed to better understand motivational mechanisms in digital contexts.

References

Ahern, J. F., & Gress, J. R. (1986). Teacher self-concept: Some survival strategies. Psychological Review, 22(1), 40-45.

Chen, Y. (2016). On the application value of online teaching resources for teachers of Chinese as a foreign language. Soochow University.

Chen, Y. (2022). Exploration of online classroom teaching skills issues for internship teachers in international Chinese language education. Master's thesis, Central China Normal University.

Deng, E. M. (1991). On the curriculum setting for teacher training. World Chinese Teaching, (1), 48-54.

Dineke, H. T., Diana, J. M., & Inek, H. W (2004). The development and validation of a framework for teaching competence in higher education. Higher Education, 48(2), 253-268.

Ding, Y. M. (2019). An exploration of teaching forms of online interactive Chinese teaching platform. Huaqiao University, 4(3), 120-122.

Dong, C. (2014). Online resources for teaching Chinese as a foreign language and their utilization. Lanzhou University, 5(2),50-53.

Dörnyei, Z., & Ushioda, E. (2021). Teaching and researching motivation (3rd ed.). Routledge.

Feng, S. S. (2020). Exploring strategies to guide students' self-exploration and enhance their internal drive for learning. Pathway to Success, 6(13), 140-141.

Gao, Y. F. (2022). Research on the online teaching behavior of novice teachers of Chinese as a foreign language. Master's thesis, Shandong Normal University.

Gong, Y., Gao, X., & Lyu, B. (2018). Teaching Chinese as a second or foreign language to non-Chinese learners in mainland China (2014–2016). Language Teaching, 51(1), 1–35.

Gong, Y., Lai, C., & Gao, X. (2020). The teaching and learning of Chinese as a second or foreign language: The current situation and future directions. Frontiers of Education in China, 15(1), 1–13.

Han, T. (2021). Research on the problems and countermeasures of teaching ancient poetry to upper primary school students based on Ausubel's meaningful learning theory. Inner Mongolia Normal University, 4(2), 15-18.

Jin, L., & Cortazzi, M. (2017). Researching intercultural learning: Investigations in language and education. Palgrave Macmillan.

Kan, J. S. (2020). Analysis of strategies to stimulate the internal drive for chemistry learning among third-year middle school students. Exam Weekly, 4(69), 127-128.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30(3), 607-610.

Li, B. G., & Wu, X. W. (2022). The impact of Chinese language education policies in Southeast Asian countries on the inclusion of Chinese in the national education system. Journal of Tianjin Normal University (Social Sciences Edition), 8(1), 21-28.

Li, D. M. (2017). A study on the application of online Chinese language teaching in international Chinese education. Zhengzhou University.

Li, H. H. (2019). Research on the teaching strategies of online video for ethnic Chinese children learning Chinese. Soochow University, 20(2), 36-39.

Li, X. R. (2023). A study on discourse action in the comprehensive course of the "Online Chinese Classroom". Master's thesis, Shenyang Normal University, 3(1), 89–97.

Li, Y. (2016). The structure of teaching ability of teachers of Chinese as a foreign language and its cultivation strategies. Chinese Studies Journal (Foreign Language Education Edition), 4(11), 173-174.

Liu, H. R. (2022). Research on the impact of online teaching leadership of novice teachers of Chinese as a foreign language on their identity. Master's thesis, Shandong University of Finance and Economics, 5(3), 51-56.

Luo, R. H. (2019). Practice and exploration of "Chinese+" online Chinese teaching. Modern Educational Science, 6(9), 9-13.

Martin, F., & Bolliger, D. U. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. Online Learning, 22(1), 205–222.

Oxford, R. L. (2016). Teaching and researching language learning strategies: Self-regulation in context (2nd ed.). Routledge.

Pfenninger, S. E., & Singleton, D. (2017). Beyond age effects in instructional L2 learning: Revisiting the age factor. Multilingual Matters.

Redecker, C., & Punie, Y. (2017). European framework for the digital competence of educators: DigCompEdu. Publications Office of the European Union.

Richards, J. C., & Rodgers, T. S. (2014). Approaches and methods in language teaching (3rd ed.). Cambridge University Press.

Saelao, J. (2021). Research on the development of teaching competence of novice teachers based on online Chinese teaching practice. East China Normal University.

Shen, J. L., & Wang, K. R. (2000). On teachers' teaching ability. Journal of Beijing Normal University (Humanities and Social Sciences Edition), 5(4), 72–76.

Song, X. S. (2011). A survey on the teaching ability of teachers in higher vocational colleges. Soochow University, 5(2), 48–50.

Sun, S. Y. H. (2014). Learner perspectives on fully online language learning. Distance Education, 35(1), 18–42.

Sun, Y. L. (2004). Research on the criteria for effective classroom teaching. East China Normal University.

Tong, J. (2007). Research on the cultivation of teaching ability of young teachers in colleges and universities. Central South University, 8(1), 101–107.

Wang, F. (2021). Research on effective online Chinese learning classrooms in Thailand. Master's thesis, Northwest University, 2(5), 18-21.

Wang, H. (2021). International Chinese education under the influence of the COVID-19 pandemic: Problems and countermeasures. Language Teaching and Linguistic Studies, 6(4), 11-22.

Wang, M. X. (2022). Research on interactive modes in online teaching of elementary comprehensive Chinese as a foreign language. Master's thesis, Harbin Normal University.

Wang, T. M. (2020). Analysis of hot topics and development trends in MOOC teaching research on second languages in China. International Chinese Language Education Research, 12(4), 17-23.

Wang, X., & Phakdeephasook, S. (2015). Learning Chinese as a foreign language in Thailand: Motivation, identity, and investment. Journal of Language Teaching and Research, 6(1), 1–8.

Wen, A. D. (2018). A brief analysis of the characteristics of online teaching and learning of Chinese as a foreign language. Changjiang Congkan, 7(25), 78-81.

Wu, C., & Diao, X. W. (2021). Thoughts and explorations on online teaching of Chinese as a foreign language during the COVID-19 pandemic. Cultural Industries, 4(2), 75-76.

Wu, D., Wang, M. Q., & Yang, J. Y. (2021). Information literacy in the intelligent era: Connotation, value orientation, and development path. Open Education Research, 27(3), 46-53.

Wu, J. H., & Ju, X. H. (2020). The impact of the COVID-19 pandemic on information literacy cultivation in China and related thoughts. Information Science, 38(4), 108-115.

Xiao, Y. (2021). Interactive teaching design and strategy research for online comprehensive Chinese courses. Guangdong University of Foreign Studies, 21(3),63-68.

Xing, Y. (2021). A study on the application of online teaching resources for Chinese as a foreign language. Xinjiang Normal University,5(3), 123-127.

Xu, X. H. (2018). The development and application of online Chinese teaching platform. Jilin International Studies University.

Yan, X. (2021). Online teaching research of international Chinese in the "post-pandemic era". Harbin Normal University, 53(3), 45-49.

Yang, J. R. (2022). Research on teaching strategies for online one-on-one primary Chinese comprehensive courses for overseas children based on interaction theory. Jilin International Studies University, 23(5),28-31.

Yang, Y. (2022). A ML-based efficient Chinese teaching platform design and implementation. Wireless Communications and Mobile Computing, 3(2), 1-8.

Ye, J. (2021). There are no omnipotent textbooks, only omnipresent resources: Some thoughts on the construction of resources for international Chinese education in the new era. International Chinese Education, 6(4), 15-21.

Yuan, P., & Liu, Y. P. (2020). A perspective on data literacy among international Chinese language teachers in the big data era. Ethnic Education Research, 31(6), 119-125.

Zhang, C. J., Jiang, H. J., & Lu, Q. L. (2019). Research on the development of international Chinese education under the background of "Internet+". Journal of Changchun Engineering Institute (Social Sciences Edition), 7(2), 20-22.

Zhang, H. S. (2006). A review and prospect of research on the quality and training of teachers of Chinese as a foreign language. Journal of Beijing Normal University (Social Sciences Edition), 2 (3), 108-113.

Zhang, M. (2007). Research on the development of teaching ability of new teachers in colleges and universities. Harbin Institute of Technology.

Zhang, M. H. (2023). Case study on online interaction in online international Chinese language teaching for Thai children. Master's thesis, Jilin University, 15(2), 56-59.

Zhang, N., Yang, L., Cheng, Y., Liu, Q. T., & Liu, H. H. (2021). Design and validation of a scale for teachers' informatization teaching ability. Modern Educational Technology, 11(4), 81-89.

Zheng, Y. Z. (2022). Research on problematic behaviors in online Chinese classrooms in Thai middle schools: A case study of Nonthaburi Province. Master's thesis, Harbin Normal University, 4(2), 92–97.

Zhou, B. (2020). Research on interactive distance Chinese language teaching design for adult learners in the UK based on the Zoom platform. Beijing Foreign Studies University, 12(5), 41–44.