

# Kung fu in martial arts education: pedagogical approaches and effectiveness

Haifeng Han<sup>1,2,\*</sup>

<sup>1</sup> Graduate School, Adamson University, CO 1000, Manila, Philippines

<sup>2</sup> Shangqiu Normal University, Shangqiu, Henan, China

\* Corresponding author: Haifeng Han (Email: 362445339@qq.com)

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**Abstract:** This study investigates the beliefs and determinants that impact students' inclination to pursue further training in Kung Fu, a traditional form of martial arts. By conducting a thorough examination of demographic characteristics, pedagogical efficacy, and factors influencing training continuance, valuable insights were obtained. Most of the participants were males aged 18 to 25 and had 1-2 years of training experience. Evaluation of teaching methods indicated low efficacy ratings in several domains of Kung Fu instruction. Gender and age did not show any significant variations, but the period of training had a substantial impact on the perceived efficacy. The factors that affect the continuance of training, such as a supportive environment, good instruction, and personal safety considerations, were given poor average ratings. Nevertheless, there were no notable disparities detected in relation to gender or age. However, there was variation in the duration of training. A robust positive association was discovered between the efficiency of teaching methods and the elements that contribute to the continuation of training. These findings highlight the need for specific outreach efforts, updated teaching methods, customized instruction, and supportive learning settings to improve Kung Fu training experiences and encourage long-term participation.

**Keywords:** Pedagogical Approaches; Supportive Environment; Good Instruction Personal Safety Considerations.

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## 1. Introduction

Kung Fu, an ancient martial art rooted in China, has captivated practitioners and admirers worldwide due to its elegant yet powerful techniques, extensive historical background, and profound philosophical principles (Britannica, 2023). Beyond its combat prowess, Kung Fu embodies a comprehensive approach to martial arts education, integrating physical, mental, and spiritual aspects. It serves not only as a self-defense system but also as a holistic framework for personal growth and cultural preservation. This research delves into Kung Fu's pedagogical approaches within martial arts education, examining their effectiveness in imparting essential skills and values to learners and the factors influencing individuals' commitment to Kung Fu (He, 2023).

Kung Fu's significance in Chinese culture and education is profound, embodying the nation's rich traditions, values, and history. It transcends being a martial art to symbolize China's national identity and cultural heritage. This study's importance lies in its role in preserving and accurately transmitting Kung Fu's profound teachings and practices to future generations (Tripaneer.com, 2023). Furthermore, Kung Fu fosters national pride and identity, resonating deeply with the Chinese people on individual and societal levels (Long, 2023). It promotes holistic well-being, encompassing physical fitness, mental discipline, and overall balance, aligning with contemporary health and wellness trends (Zheng, 2023).

The research also has significant implications for the martial arts industry in China, enhancing teaching standards and contributing to economic growth. China's global influence in martial arts is evident through Kung Fu's international appeal. By exploring Kung Fu's pedagogical elements, this study aims to improve teaching quality for both local and international students, strengthening China's global

martial arts stature (Nspirement, 2018). Additionally, in light of ongoing educational reforms, investigating Kung Fu's alignment with these changes can provide valuable insights for shaping educational policies and curriculum development in China.

However, the study faces challenges, including the diversity of Kung Fu styles and the lack of standardized teaching methods, making broad conclusions difficult. Cultural and linguistic barriers may hinder international researchers, and the subjective nature of evaluating Kung Fu instruction adds complexity. Despite these obstacles, examining Kung Fu within martial arts education offers significant potential to enhance understanding, develop effective pedagogical approaches, and foster intercultural exchange.

This study addresses a notable research gap, focusing on the pedagogical aspects of Kung Fu instruction, and aims to preserve and promote this traditional martial art in a contemporary context. Its findings will contribute to educational reform, cultural preservation, and the promotion of holistic well-being, benefiting both practitioners and the broader martial arts community.

## 2. METHODOLOGY

### 2.1. Research Design

The research methodology employed in this study integrated descriptive, comparative, and correlational approaches to comprehensively analyze Kung Fu instruction. Descriptive research provided a detailed depiction of participants' demographics, such as age, gender, and training duration, offering essential context for analysis. The comparative approach assessed the effectiveness of various instructional methods, including techniques, forms, sparring, weapons training, breathing and meditation, physical conditioning, and application, by comparing their impact on

students' perceptions and intentions. This analysis yielded valuable insights for Kung Fu instructors and schools in refining teaching strategies. The correlational study explored potential relationships between instructional effectiveness and factors influencing students' commitment to continue their training. This holistic methodology established a robust foundation for understanding the impact of Kung Fu instruction on students' experiences and retention.

## 2.2. Instrumentation

The primary instrument for data gathering in this study was a meticulously crafted questionnaire designed to explore various aspects of Kung Fu instruction and student experiences. The questionnaire was divided into several sections, each targeting specific constructs based on a thorough review of relevant literature. The initial section collected demographic information such as age, gender, and duration of Kung Fu training, providing essential context for understanding the participant demographics.

The next section assessed participants' perceptions of the effectiveness of different instructional approaches, including foundational techniques, forms, sparring, weapons training, breathing and meditation, physical conditioning, and technique application. Participants rated the effectiveness of each component using a predefined scale. Another crucial section investigated factors influencing participants' willingness to continue training, examining elements like training environment, teaching effectiveness, instructor-student relationships, social connections, and the importance of self-defense and personal safety.

## 2.3. Data Gathering Procedures

This study employed a systematic, ethical approach using a stratified random sampling technique to select Kung Fu students from various schools in China. Participants provided informed consent and completed a rigorously validated questionnaire available in electronic and paper formats. The survey collected demographic data, evaluated perceptions of instructional methods, and identified factors influencing training interest, including open-ended questions for qualitative insights. Data collection ensured participant privacy and confidentiality, with quantitative data analyzed using t-tests, ANOVA, and correlation analysis. Findings were validated for accuracy and reliability and disseminated through scholarly publications and academic presentations, contributing significantly to Kung Fu and martial arts pedagogy.

## 2.4. Statistical Treatment

Descriptive statistics provided a comprehensive summary of the data, including mean, median, and standard deviation for quantitative variables, and frequencies and percentages for demographic data like age, gender, and training duration.

For inferential statistics, t-tests were used to identify significant differences in respondents' perceptions of pedagogical methods (e.g., foundational techniques, forms, sparring) based on demographics. This helped determine if different groups had varying attitudes toward Kung Fu instruction.

Analysis of Variance (ANOVA) was employed to explore differences in perceptions of teaching methods among various institutions, identifying any significant disparities between colleges and universities.

Pearson's correlation coefficient examined relationships between the effectiveness of instructional approaches and factors influencing students' intentions to continue training. This aimed to reveal significant associations between teaching methodologies and training motivations.

## 3. Results, Analysis, and Interpretation

### 3.1. Profile of the Respondents

**Table 1.** Frequencies and percentage of Demographic factors

	Sex	Counts	% of Total
	Female	100	28 %
	Male	262	72 %
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Age			
	18-25 years old	276	76 %
	26 years old and above	77	21 %
	below 18 years old	9	2 %
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Duration of Training			
	1-2 years	262	72 %
	less than 1 year	19	5 %
	more than 3 years	81	22 %

According to the data, 72% of the students were male, and 76% were aged 18-25. Additionally, 72% had one to two years of training, indicating that most students are young males with moderate experience in Kung Fu.

### 3.2. Fundamental Technique

**Table 2.** Assessment of the Effectiveness of Pedagogical Approaches in Kung Fu in terms of Fundamental Technique

Indicators	Mean	SD	V.I	Rank
1.The fundamental methods taught in my Kung Fu lesson are obvious and simple.				
2.The core techniques, I believe, have increased my overall Kung Fu talents.	1.76	0.62	Low	
3.The tutors successfully emphasize the significance of acquiring fundamental procedures.	1.72	0.55	Low	3
4.The core skills are taught in an entertaining and practical manner.	1.72	0.55	Low	5
5.Our regular training sessions include proper integration of foundational concepts.	1.63	0.57	Low	9
6.I am confident in my ability to correctly conduct foundational procedures.	1.78	0.48	Low	2
7.For foundational tasks, the tutors provide adequate feedback and adjustments.	1.65	0.54	Low	8
8.Foundational techniques have greatly aided my Kung Fu development.	1.69	0.50	Low	7
9.The program places a strong emphasis on the development of fundamental skills.	1.54	0.56	Low	10
10.Mastering fundamental methods, in my opinion, is vital for becoming a skilled Kung Fu practitioner.	1.79	0.48	Low	1
	1.72	0.47	Low	5
COMPOSITE MEAN	1.70	0.22	Low	

Legend: 1.00-1.50: Strongly Disagree (Very Low); 1.51-2.50: Disagree (Low); 2.51-3.50; Agree (Average); 3.51-4.00: Strongly Agree (High)

Table 2 shows a composite mean score of 1.70 (SD = 0.22) for the efficacy of Kung Fu teaching approaches in fundamental techniques, indicating a low assessment. Students reported the highest mean (1.79) for the emphasis on fundamental skills and the lowest mean (1.54) for the contribution of these techniques to their overall Kung Fu

development. These findings suggest that while students appreciate the focus on core skills, they perceive a gap in their overall impact. This highlights the need for instructors to reassess and potentially enhance their pedagogical strategies. Comparatively, Negković's (2020) study on Shaolin Temple training underscores the importance of cultural immersion and suggests that blending traditional and modern approaches could enhance Kung Fu education globally.

**Table 3.** Assessment of the Effectiveness of Pedagogical Approaches in Kung Fu in terms of Forms

Indicators	Mean	SD	V.I	Rank
1.Learning Kung Fu forms (katas) has helped me increase my overall martial arts ability.				
2.Practicing Kung Fu forms is an exciting and gratifying component of my training for me.				
3.My Kung Fu class's forms are well-structured and logical in progression.	1.68	0.51	Low	8
4.Forms training has helped me better comprehend Kung Fu ideas and techniques.	1.70	0.50	Low	5.5
	1.70	0.52	Low	5.5
5.Forms, in my opinion, are an efficient approach to internalize Kung Fu motions.	1.73	0.54	Low	3
	1.72	0.56	Low	4
6.The instructors explain and demonstrate Kung Fu forms in detail.	1.67	0.49	Low	9
7.Forms practice has improved my balance, coordination, and focus.	1.69	0.52	Low	7
8.Kung Fu forms, I believe, contribute greatly to my total martial arts skill set.	1.94	0.40	Low	1
9.Forms training aids in the development of muscle memory for Kung Fu skills.	1.92	0.42	Low	2
	1.54	0.57	Low	10
10.For Kung Fu practitioners, incorporating forms into the curriculum is advantageous.	1.73	0.22	Low	

COMPOSITE MEAN

Legend: 1.00-1.50: Strongly Disagree (Very Low); 1.51-2.50: Disagree (Low); 2.51-3.50; Agree (Average); 3.51-4.00: Strongly Agree (High)

Table 3 reveals a low overall mean score of 1.73 (SD = 0.22) for the effectiveness of forms in Kung Fu pedagogy, suggesting general disagreement among students regarding their benefits. The highest mean score (1.94) was for the belief that forms contribute significantly to martial arts skills,

while the lowest mean score (1.54) was for the belief that incorporating forms into the curriculum is beneficial. This indicates a need for instructors to improve explanations and demonstrations of forms, as well as to emphasize their role in skill development. Research by Zeng et al. (2018) supports the benefits of forms training for physical and skill enhancement, highlighting the importance of addressing students' concerns to improve engagement and effectiveness.

**Table 4.** Assessment of the Effectiveness of Pedagogical Approaches in Kung Fu in terms of Sparring

Indicators	Mean	SD	V.I	Rank
1.Sparring sessions in my Kung Fu class are extremely beneficial for developing practical self-defense skills.				
2.Sparring improves my capacity to use Kung Fu skills in real-life circumstances, in my opinion.	1.79	0.52	Low	6
3.The teachers provide explicit sparring guidelines and safety precautions.	1.71	0.53	Low	8
4.Sparring allows me to sharpen my reflexes and adaptability in battle situations.	1.72	0.47	Low	7
	1.70	0.52	Low	9.5
5.Sparring, in my opinion, is a vital component of martial arts training.	1.81	0.48	Low	5
6.In terms of talent and experience, my sparring partners in my class are well matched.	1.95	0.41	Low	1.5
	1.95	0.44	Low	1.5
7.Sparring is both a fun and tough component of my training.	1.70	0.52	Low	9.5
8.On my sparring performance, I got constructive feedback and instruction.	1.82	0.52	Low	4
9.Sparring helps me gain confidence in my abilities to adequately protect myself.	1.91	0.36	Low	3
	1.81	0.23	Low	
10.Sparring improves my general comprehension of Kung Fu techniques.				

COMPOSITE MEAN

Legend: 1.00-1.50: Strongly Disagree (Very Low); 1.51- 2.50: Disagree (Low); 2.51-3.50; Agree (Average); 3.51-4.00:

Strongly Agree (High)

Table 4 reveals a low overall mean score of 1.81 (SD = 0.23) for the effectiveness of sparring in Kung Fu instruction, indicating student disagreement regarding its benefits. Specifically, students rated the improvement of reflexes (M = 1.70) and constructive feedback (M = 1.70) lowest. However, the highest ratings were for the well-matched sparring partners (M = 1.95) and the enjoyment of sparring (M = 1.95). These findings suggest that while students appreciate well-matched and enjoyable sparring sessions, they perceive a lack of effectiveness in improving reflexes and receiving feedback. This indicates a need for instructors to enhance feedback quality and ensure appropriate pairing during sparring to improve skill development and training satisfaction.

## 4. Conclusion

4.1. The prevalence of male participants, along with their relatively young age and modest level of training experience, indicates the necessity for focused outreach and inclusion initiatives to appeal to a broader audience and encourage greater diversity in Kung Fu training. By actively involving ladies and elderly adults, the martial arts community may enhance its diversity and create a more inclusive training atmosphere.

4.2. The widespread sense of inadequate efficacy in several elements of Kung Fu instruction highlights the significance of reevaluating teaching methods and curriculum development in martial arts education. We may address these inadequacies by using creative teaching tactics, providing comprehensive teacher training, and making curriculum adjustments. This, in turn, can result in more engaging and effective learning experiences for students, eventually leading to improved overall satisfaction and retention rates.

4.3. The lack of notable variations in the evaluation of teaching effectiveness among different genders or age groups indicates a level of uniformity in perceptions across diverse demographic categories. However, the significant disparity observed in the duration of training emphasizes the significance of tailoring instructional methods to meet student's distinct requirements and preferences at various stages of their training process. Modifying instructional approaches to suit diverse proficiency levels and cognitive preferences has the potential to improve overall educational achievements and student contentment.

4.4. The consistently low ratings across categories influencing students' intention to continue training indicate areas that need improvement in creating a helpful and stimulating training environment. Highlighting the significance of mentorship, fostering a sense of community, and promoting the acquisition of practical self-defense skills has the potential to increase student motivation and dedication to long-term training objectives.

4.5. Although there are no notable disparities in the evaluation of factors that contribute to the continuation of training based on gender or age, the variability observed in relation to the duration of training indicates that customized strategies for retaining students may be required to address the changing requirements and difficulties encountered by individuals at different phases of their training process. Introducing specialized assistance programs and resources for students with different levels of expertise might enhance long-term involvement and advancement within the martial arts community.

4.6. The strong positive association between pedagogical

effectiveness and characteristics that influence training continuance highlights the crucial importance of high-quality instruction and supportive learning environments in promoting student dedication and involvement. Allocating resources to teacher training, curriculum creation, and community-building efforts can significantly benefit student retention and overall program effectiveness.

### Acknowledgements

Establish focused outreach initiatives to appeal to a broader range of persons for Kung Fu instruction, encompassing girls, elderly folks, and marginalized groups. Engage in partnerships with community groups, schools, and local officials to advocate for the widespread adoption of martial arts as an open and available activity for everyone.

Evaluate existing teaching approaches and curriculum design to solve the observed deficiencies in pedagogical efficacy. Utilize cutting-edge pedagogical techniques, immersive educational activities, and practical instruction to augment student involvement and optimize learning achievements.

Acknowledge students' diverse requirements and inclinations at different phases of their educational progression and modify teaching methods accordingly. Provide individualized assistance, chances for skill enhancement, and mentorship initiatives to assist students at all levels of proficiency.

Foster a conducive and stimulating training setting that places emphasis on mentoring, community formation, and the acquisition of practical skills. Facilitate avenues for students to engage with their classmates, professors, and mentors, cultivating a feeling of inclusion and drive to persist in their education.

Create customized strategies to address the unique demands and difficulties students with different levels of expertise face. Provide tailored assistance initiatives, valuable assets, and motivating rewards to foster long-term involvement and advancement within the martial arts community.

Allocate resources towards instructor training and development to prioritize the provision of excellent teaching and mentorship. Offer continuous professional development, mentorship, and peer collaboration to enable teachers to design captivating and impactful learning experiences for their students.

Foster engagement in collective endeavors, gatherings, and contests to promote a feeling of camaraderie and cooperation among martial arts community members. Facilitate avenues for students to engage with fellow peers, exchange personal anecdotes, and provide mutual assistance in their pursuit of martial arts.

Emphasize the pragmatic significance of self-defense instruction and the practical use of Kung Fu abilities in real-world situations. Incorporate self-defense drills, scenario-based training, and practical skill development exercises into the curriculum to give students the confidence and competence to protect themselves and others in real-life scenarios.

Consistently evaluate student input, program efficacy, and retention rates to pinpoint areas that require enhancement and adjustment. Utilize data-driven analysis to improve teaching methods, curriculum development, and support services, guaranteeing continuous improvement and alignment with students' needs and preferences.

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