Humanities and Social Sciences Letters
2026 Vol. 14, No. 1, pp. 280-297
ISSN(e): 2312-4318
ISSN(p): 2312-5659
DOI: 10.18488/73.v14i1.4705

Unveiling the knowledge, attitudes, and practices toward middle Chinese pronunciation in the recitation of tang poetry: A survey among Malaysian poetry enthusiasts

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Article History
Received: 31 July 2025
Revised: 15 December 2025
Accepted: 7 January 2026
Published: 14 January 2026

Keywords
Knowledge–Attitude–Practice (KAP) model
Malaysian poetry enthusiasts
Middle Chinese pronunciation
Survey
Tang poetry recitation.

ABSTRACT

The study investigates the KAP (Knowledge, Attitude, Practice) model among Malaysian poetry enthusiasts in reciting Tang poetry using Middle Chinese pronunciation in Malaysia. Tang poetry is a significant component of Chinese literature, but its original phonological patterns have evolved over time. To understand how audiences appreciate and engage with its historical phonology, a quantitative survey was conducted at the 17th Overseas Chinese Book Fest in Kuala Lumpur City Centre Park (KLCC), involving 255 respondents. A structured questionnaire assessed participants' knowledge, attitudes, and practices, with data analyzed through Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM), including mediation testing using AMOS and bootstrapping techniques. Results indicated that participants generally recognized phonological changes in Chinese but lacked awareness of the musical importance of pronunciation in poetry. The attitudes of the students were predominantly positive, reflecting an interest and satisfaction in reciting Tang poems in Middle Chinese. Some respondents reported engaging in practical trials of Tang phonetic recitation and participating in related events. Importantly, SEM analysis confirmed that attitudes partially mediate the relationship between knowledge and practice, emphasizing the role of positive attitudes in transforming knowledge into practice. The study affirms the applicability of the KAP model in the context of cultural poetry recitation. Beyond its educational implications, the findings highlight the significance for education, cultural preservation, and cross-cultural dialogue. Reviving Middle Chinese pronunciation can enhance aesthetic appreciation while ensuring cultural continuity.

Contribution/Originality: This study addresses the gap in understanding the engagement with Middle Chinese pronunciation in Tang poetry recitation by providing empirical data on the knowledge, attitudes, and practices of Malaysian poetry enthusiasts. It emphasizes how classical cultural heritage is preserved within Malaysia's multicultural context and contributes to the recognition of Tang poetry as a global cultural asset through contemporary revival and reinterpretation of medieval phonology.

1. INTRODUCTION

The large number of Chinese poetry enthusiasts in Malaysia can be attributed to several interrelated factors. As a multicultural nation, Malaysia boasts a large Chinese diaspora, which provides a favorable environment for the transmission of cultural values and traditions from generation to generation, fostering an enduring love for Chinese

art forms such as poetry (DeBernardi, 2004). This rich cultural heritage and pride in cultural identity have encouraged many Malaysians to appreciate, recite, and pass on Chinese poetry. As such, Chinese poetry in Malaysia plays an important role in the country's culture as it enriches the diversity and depth of cultures found across the country.

The educational and cultural infrastructure of Malaysia pushes this forward. According to Raman and Yao (2015), schools, community associations, and cultural groups often organize literary talks and cultural festival poetry recitation competitions where participants showcase their talents. The advancement of digital platforms has also opened up channels of communication among people interested in poetry and those who are in the know and able to perform, discuss, and create (Yaqub & Alsabban, 2023). The educational, community, and digital factors help to maintain a singing community of Chinese poetry, allowing the tradition to live on but also to take on new forms.

In parallel, recent scholarship highlights that the revival of classical Chinese poetry is not only evident in Malaysia but also part of a broader cultural and educational resurgence. For example, Wei and Geng (2022) argue that the revival of classical poetry composition has been strongly supported by the new liberal arts movement and digital technologies, which enable younger generations to access, compose, and reinterpret traditional verse. At the same time, Geng and Wei (2022) show that students' majors and learning style preferences significantly influence their levels of writing apprehension in poetry composition, reminding us that cognitive and affective factors also shape how individuals engage with classical poetic forms. Together, these insights suggest that the revival of Chinese poetry in contemporary contexts is multifaceted, involving technological, pedagogical, and psychological dimensions.

Outside of Malaysia, Tang poetry occupies a key position in the global identification of Chinese culture. Tang poetry is one of the peaks of Chinese literary history. It combines artistic creation, historical memory, and social reality. Reciting Tang poetry is not only a literary activity but also a cultural practice that embodies the aesthetics and ideological ideals of the Tang dynasty (Klein, 2021). Its unique musicality, achieved through a meticulous consideration of rhythm, rhyme, and tonal structure, endows Tang poetry with an aural dimension that complements its semantic content (Zhixi & Schoenberger, 2018). This musicality is inseparable from its phonetic foundation, particularly the characteristics of Middle Chinese, which enable it to faithfully convey emotion, imagery, and artistry.

However, in modern practice, Tang poetry is often recited using standard Mandarin pronunciation. While practical, this often results in a disruption of rhyme and metrical symmetry. Just as music relies on precise pitch and rhythm to achieve coherence, the artistic integrity of Tang poetry relies on the precision of phonetics to maintain its aesthetic rhythm and harmony. Consequently, scholars and practitioners have increasingly focused on the role of Middle Chinese pronunciation in restoring the original musicality of Tang poetry. Middle Chinese, close to the common spoken language of the Tang dynasty, is believed to restore the resonance and formal beauty sought by poets (Goh, 2009; Pulleyblank, 2011). Despite growing academic and cultural interest in poetry, little attention has been paid to how poetry enthusiasts in Malaysia, a country steeped in both a strong Chinese cultural heritage and a broader multicultural framework, perceive and engage with Middle Chinese phonetics in Tang poetry recitation. While extensive research has been conducted on the historical significance and aesthetic qualities of Tang poetry, the lived experiences, attitudes, and practices of contemporary Malaysian poetry enthusiasts remain underexplored. This lack of research hinders our understanding of how classical Chinese phonology and poetic traditions are reinterpreted and passed down within a multicultural context.

Amidst this backdrop, this study aims to fill this gap by examining the knowledge, attitude, and practice (KAP) of Malaysian poetry enthusiasts in the use of Middle Chinese pronunciation in Tang poetry recitation. This study will empirically investigate how poetry enthusiasts perceive and deploy the pronunciation of Middle Chinese, the extent of their active involvement, and the factors that constrain their practices. The results will enhance scholarly understanding of the cultural development of Tang poetry in Malaysia and how it can be conserved, promoted, and transmitted as a culture. It will also contribute to the global discourse. Ultimately, the research highlights the importance of reviving and restoring classical poetry in modern society. It also demonstrates that classical forms remain relevant in contemporary Malaysia and worldwide.

1.1. Statement of the Problem

1. Poetry recitation has been a cultural tradition in Malaysia. However, how familiar enthusiasts are with pronouncing the Middle Chinese sound system, and the extent to which it can be used to recite Tang poetry, remains under-documented. This dimension is important because it provides a clearer picture of what the participants already know and how they interpret it.
2. Although Tang poetry remains popular, the attitude of Malaysian poetry enthusiasts towards the use of Middle Chinese in recitation remains unstudied. A study of how poetry enthusiasts understand, negotiate, and practice this tradition in different cultural environments is important.
3. Moreover, no in-depth description has been provided for the practice of adopting Middle Chinese pronunciation in Tang poetry by some Malaysian poetry enthusiasts. By investigating how enthusiasts engage in this activity and the motivation behind participating in these activities, we can gain a better understanding of how Tang poetry is being preserved and revived at present.

1.2. Research Objectives

Based on the identified research questions, the following research objectives were proposed:

1. Assess the knowledge and awareness among Malaysian poetry enthusiasts regarding Middle Chinese pronunciation in the recitation of Tang poems.
2. Examine the attitudes and perceptions of Malaysian poetry enthusiasts towards the use of Middle Chinese pronunciation in the recitation of Tang poems, including their perceived benefits and challenges.
3. Investigate the current practices and adoption of Middle Chinese pronunciation among Malaysian poetry enthusiasts in their recitation of Tang poems and identify the factors influencing their usage.

1.3. Theoretical Framework

1.3.1. KAP Model

The KAP model is rooted in learning theory (Bandura & Walters, 1977) and diffusion of innovation theory (Rogers, 1995). According to Rogers, individuals within a social system go through a series of stages over time, including knowledge acquisition, persuasion, decision, and confirmation, in accepting innovation. Bandura and Walters (1977) emphasize the role of the social context in individual behavior learning. Another relevant perspective is the theory of planned behavior by Ajzen (1991) which explores the relationship between behavioral intention and attitudes. Previous research has identified interconnections among knowledge, attitudes, and practices (Valente, Paredes, & Poppe, 1998). Gaining the knowledge and skills needed to address the issue will help instigate action that brings about behavior change. Hungerford and Volk (1990). Practices influenced by attitudes, where individuals who have a positive attitude towards a behavior will be more motivated to engage in it (Ajzen, 1991).

1.3.2. Conceptual Framework

A KAP model permits the evaluation of knowledge, attitudes, and practices within a subject population, enabling the quantification and analysis of what is known, believed, and done (Andrade, Menon, Ameen, & Kumar Praharaj, 2020; Nguyen, Seddaiu, & Roggero, 2019). KAP Model permits the identification of knowledge gaps, barriers of attitude, and patterns of practices related to the issue, increasing understanding of the actions regarding the issue (World Health Organization, 2008).

Using the KAP model, this study evaluates Malaysian poetry enthusiasts' knowledge, attitude, and practices towards the recitation of Tang poems with Middle Chinese pronunciation. Understanding aspects related to Tang poetry recitation constitutes knowledge. Attitude refers to positive or negative evaluations of the recitation of Tang poetry as an art form. Recitation practice involves activities performed by poetry enthusiasts in engaging with and performing Tang poetry.

2. LITERATURE REVIEW

According to Gao and Pan (1997) the importance of reciting Tang poetry cannot be overstated, as the rhythm, tempo, and tonal structure, among other elements, are highly relevant to the poetry itself: pronunciation represents the essential drive; other elements are secondary. Accurate pronunciation enhances the vividness and depth of a poem, allowing the poet's intentions and emotions to be more faithfully conveyed. Conversely, inaccurate pronunciation obscures rhythm, disrupts metrical symmetry, and diminishes formal beauty. Recent discussions on recitation often focus on the selection of standard pronunciations or regional variants. These discussions are informed by the recognition of the inherent fluidity of living languages: the phonological system evolves over generations. Therefore, reciting Tang poetry in any modern variant (including Standard Mandarin) cannot fully recreate the phonetic conditions presupposed by the original prosodic design, which helps explain the unrhymed or misplaced tonal patterns observed in modern translations. An analysis of the official/standard language of the Tang Dynasty Middle Chinese is crucial to understanding the historical phonological landscape of the Tang Dynasty and the literary forms that corresponded to it.

Within this context, historical phonology has made substantial progress in establishing the phonological system and specific sound values of Middle Chinese. Scholars have used rhyme tables and rhyme books to restore phonological categories; they have also triangulated descriptions from premodern texts, foreign accounts of Chinese phonology, and principled rules of phonetic change to reconstruct segmental values. Landmark studies include Pulleyblank (1991) reconstruction of 8,201 Middle Chinese entries, Gao and Pan's (1997) reconstruction of 7,685 entries, Wang (1999) reconstruction of 25,521 entries, and Baxter's (2014) reconstruction of 5,229 entries. More recently, Yan (2023) synthesized previous phonological research to derive pronunciations for 25,333 words. Taken together, these findings suggest that the pronunciation of Middle Chinese is now widely established, with only a small portion of the vocabulary still under discussion (Norman, 1988). This corpus-scale development provides a solid foundation for examining how historical phonology influenced the literary form of Tang poetry.

From a literary perspective, Tang Dynasty regulated verse relies on fixed tonal categories, balanced parallelism, and rhyme structures. Because these features are designed to reflect the tonal and rhythmic system of Middle Chinese, the choice of pronunciation during recitation has formal implications: it influences whether rhyme placement aligns, whether the alternation of level and oblique tones creates the desired contrast, and whether the rhythmic symmetry between couplets is perceptible. From this perspective, reciting with a pronunciation close to Middle Chinese primarily aims to restore the textual constraints and aesthetic effects inherent in the prosodic matrix of that period.

In Malaysia, the creation and appreciation of Chinese poetry unfold within a unique multicultural environment. The country's large Chinese community maintains the intergenerational transmission of cultural values within families and community organizations, fostering a love of Chinese artistic expression, including poetry (DeBernardi, 2004). Educational institutions and cultural associations regularly organize poetry readings, literary lectures, and festivals, providing platforms for creation and exchange (Raman & Yao, 2015). At the same time, digital media and social platforms have broadened communication channels, enabling enthusiasts to disseminate performances, explore techniques, and share their creative output across geographic boundaries (Yaqub & Alsabban, 2023). These social, educational, and technological conditions support a vibrant community of poetry enthusiasts, whose activities contribute to the broader cultural landscape of Malaysia and to the preservation and contemporary interpretation of Chinese poetic traditions.

Against this backdrop, significant progress has been made in the academic fields of historical reconstruction of Middle Chinese and the study of overseas Chinese literary practices, but their convergence in applied recitation research remains underrepresented. Specifically, the systematic use of reconstructed Middle Chinese in Tang poetry recitation, along with a literary-critical assessment of its impact on rhythm, tonal structure, and canonical form, remains underrepresented in current scholarship. In the Malaysian context, how poetry enthusiasts understand the pronunciation and literary significance of Middle Chinese, how they view its application in contemporary recitation,

and how they engage with it in practice, remains underrepresented. A KAP analysis can show what is already known and gives a chance to reflect on the attitudes in a multicultural environment. Moreover, identifying practice patterns and the reasons driving them. The linguistic development in the reconstruction of Middle Chinese is made available in the current literary practice. It also serves as a reference for Tang poetry as a living tradition in Malaysia and part of a bigger world heritage.

3. METHODOLOGY

3.1. Research Design

A quantitative research design with a cross-sectional survey approach was adopted. The design aimed to gather evidence on the knowledge, attitude, and practice (KAP) of Malaysian poetry enthusiasts regarding the recitation of Tang poetry with Middle Chinese pronunciation.

3.2. Sampling Strategy

In order to select interested subjects in Tang poetry and Chinese language, the purposive sampling technique was used. The researchers collected data on-site at the 17th Overseas Chinese Book Fest held at KLCC Park, which attracted Chinese literature enthusiasts from all around Malaysia. Surveying such a large cultural event ensured the participants would not be from just one institution, but a larger base that represented many people interested in poetry. A total of 255 valid responses were collected, providing a broad enough and representative sample for analysis.

3.3. Research Instrument

The structured questionnaire contained 19 items, which were developed through the KAP model. The questionnaire collected demographic information, the participants' knowledge of Middle Chinese pronunciation, their attitudes towards its use in Tang poetry recitals, and their practices. Table 1 presents the structure of the questionnaire, which consists of demographic information and three dimensions knowledge, attitudes, and practices derived from the KAP model. The knowledge items assess awareness of Middle Chinese pronunciation, the attitude items evaluate interest and beliefs about its use in Tang poetry, and the practice items capture respondents' actual recitation experiences and participation in related activities.

Table 1. Structure of the questionnaire items based on the KAP model.

Demographic	Knowledge	Attitudes	Practices
Gender	I believe that the pronunciation of languages changes over time. (K1)	I am interested in listening to the sound of Tang poems recited in Tang Dynasty phonetics. (A1)	I have been reciting Tang poems for a long time. (P1)
Age	I know what Middle Chinese pronunciations are. (K2)	I think knowing the original pronunciation is essential for reciting Tang poems. (A2)	I can often distinguish words in Tang poems where there is no rhyme. (P2)
Degree	I think the way Tang Dynasty people recited Tang poems sounds different from how we read them in Standard Mandarin today. (K3)	I believe reciting Tang poems in Tang Dynasty phonetics is better than using Standard Mandarin. (A3)	I have heard Tang poems recited in Tang Dynasty phonetics. (P3)
Major	I believe the relationship between poetry and music is achieved through phonetics. (K4)	I am willing to tell my friends about the performance of reciting Tang poems in Tang Dynasty phonetics. (A4)	I have used Tang Dynasty phonetics to recite Tang poems. (P4)
	I know that poetry in the past was meant to be sung. (K5)	I think there is a need for systematic learning to recite Tang poems in Tang Dynasty phonetics. (A5)	I have participated in courses, conferences, or events related to the theme of Middle Chinese pronunciation. (P5)

Before using the questionnaire, we pilot-tested it on a small group of respondents to check clarity, understandability, and internal consistency. Little changes were made after comments before the final administration.

3.4. Data Collection Procedure

The population of this study refers to individuals who show interest in Tang poetry and who can understand the Chinese language. Thus, the sampling method used for this study is purposive sampling. Researchers approached participants at the event and invited them to take part in the study. Questionnaires were distributed in hard copy or QR code formats, which can be linked to online formats (e.g., Facebook, WeChat, Gmail) to enable participation in various ways. Before filling out the questionnaire, the researchers informed the participants of the study's objective, assured them of their anonymity and confidentiality, and reminded them that they could withdraw at any time and that participation was entirely voluntary. The completed questionnaire submission signified implied informed consent, and no personally identifiable information was collected. This approach allowed the researchers to collect information efficiently and widely during the festival.

3.5. Data Analysis

Data were analyzed using SPSS and AMOS software to ensure methodological rigor. To better understand the demographics and response patterns of the participants, results will first be summarized by descriptive statistics. After that, confirmatory factor analysis (CFA) was used to test the measurement model to examine the reliability and validity of the KAP instrument. In order to gain a holistic understanding of the interactions among knowledge, attitudes, and practices, structural equation modeling (SEM) was used to test the hypothesized relationships after having established the measurement properties. Ultimately, a mediation assessment was executed using the bootstrap method in AMOS, intended to investigate the possibilities of attitudes acting as a mediator between knowledge and practices of classical Chinese recitation of Tang poetry among Malaysian poetry enthusiasts.

4. RESULTS

In this research, the main factors were measured using scales. Therefore, checking the data quality of the measured results is an important prerequisite to ensure that subsequent analysis is meaningful. The CFA model is established as shown in Figure 1.

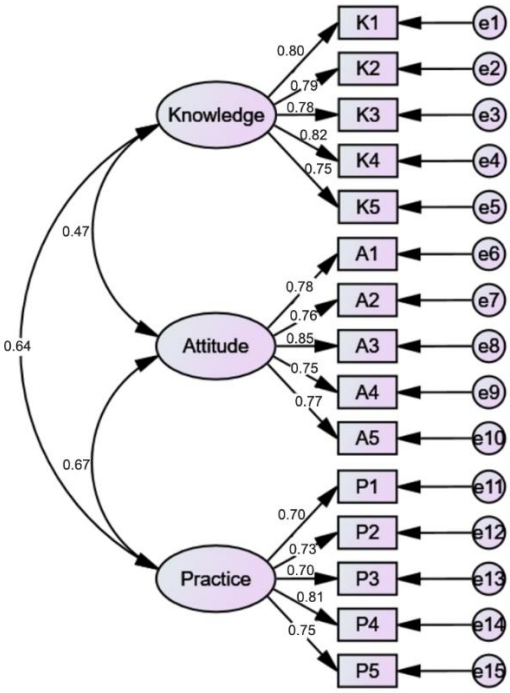

Figure 1. CFA of the KAP scale for middle Chinese pronunciation in the recitation of tang poetry.

4.1. Reliability and Validity Test

First, through the reliability test method of Cronbach's coefficient, the internal consistency of each dimension is tested and analyzed, and the results are shown in Table 2. The reliability coefficients of each scale range from 0.8 to 1, and the overall Cronbach's alpha coefficient of the scale is 0.955, which falls between 0.9 and 1. Therefore, it indicates that the scales used in this research have good internal consistency.

Table 2. Model reliability test.

Variable	Cronbach's alpha	N of Items
Knowledge	0.892	5
Attitude	0.886	5
Practice	0.857	5

According to the model fitting test results shown in Table 3, the chi-square degree of freedom ratio CMIN/DF is 2.235, well within the accepted range of 1 to 3. The root mean square error RMSEA is 0.070, within the excellent range of less than 0.08. Additionally, the GFI, CFI, NFI, RFI, and IFI reached an excellent level above 0.9, while the rest of the indicators were within the good range. Therefore, based on the test results, it can be concluded that this scale model has a good degree of fit.

Table 3. Goodness of fit indices for the model.

Fit Indices	Recommended value	Authors	Value
p-value	> 0.50	Meyers, Gamst, and Guarino (2016)	0.000
CMIN/DF	< 5.0	Marsh and Hocevar (1985)	2.235
	< 5.0, reported if n >200	Bentler (1990)	
	< 3.0 Good; <5.0 sometimes permissible	Hair, Black, Babin, and Anderson (2009)	
RMSEA	< 0.08	Byrne (2013)	0.070
	<0.05	Hu and Bentler (1998)	
	< 0.08 Good fit; 0.8-0.1 moderate fit; >1 poor fit;	Meyers et al. (2016)	
GFI	> 0.90	Chau (1997)	0.908
	> 0.90	Segars and Grover (1993)	
CFI	> 0.90	Bentler (1990)	0.950
	> 0.90	O'Rourke and Hatcher (2013)	
TLI	> 0.90	Meyers et al. (2016)	0.940
NFI	> 0.90	Bentler and Bonett (1980)	0.914
CMIN	Reported if *n* is between 100 and 200	Tabachnick and Fidell (2012)	194.456
IFI	> 0.90	Meyers et al. (2016)	0.950
PNFI	> 0.50	Meyers et al. (2016)	0.757
PCFI	> 0.50	Meyers et al. (2016)	0.787
AGFI	> 0.80	Hair et al. (2009)	0.872

Given the prerequisite of a well-fitting confirmatory factor analysis (CFA) model for reciting Tang poems using Middle Chinese phonetics, further examination of the convergent validity and composite reliability of each dimension of the KAP scale is conducted.

The testing procedure involved the calculation of standardized factor loadings of each measure item to their respective constructs in an established CFA model. Then, the estimation of average variance extracted (AVE) and

composite reliability (CR) was based on the formulas used to assess the convergent validity as well as the composite reliability of the construct. Factor loadings for indicators of the latent variables are expected to exceed the threshold of 0.5, indicating adequate validity (Byrne, 2013). In a similar vein, the AVE values should be a minimum of 0.5, and the CR values should not be less than 0.6 for good convergent validity and internal consistency reliability (Hair et al., 2009).

According to Table 4, all dimensions of the KAP scale fulfill these criteria, as factor loadings and AVE values are greater than 0.5, while CR values are greater than 0.6. The analysis of the measurement model shows that the underlying model supporting this study, which underpins the structural model, is robust.

Table 4. Regression weights of full model SEM.

Label			Factor loading > 0.5	AVE > 0.5	CR > 0.6
K1	<---	Knowledge	0.802	0.623	0.892
K2	<---	Knowledge	0.794		
K3	<---	Knowledge	0.782		
K4	<---	Knowledge	0.815		
K5	<---	Knowledge	0.753		
A1	<---	Attitude	0.782	0.612	0.887
A2	<---	Attitude	0.759		
A3	<---	Attitude	0.846		
A4	<---	Attitude	0.753		
A5	<---	Attitude	0.769		
P1	<---	Practice	0.699	0.548	0.858
P2	<---	Practice	0.731		
P3	<---	Practice	0.699		
P4	<---	Practice	0.813		
P5	<---	Practice	0.753		

According to the analysis results in Table 5, it can be seen that in this discriminant validity test, the standardized correlation coefficients between each dimension are smaller than the square root of the AVE value corresponding to the dimension. Therefore, it shows that each dimension has good discriminant validity.

Table 5. Discriminant validity test.

Variables	Knowledge	Attitude	Practice
Knowledge	0.623		
Attitude	0.471	0.612	
Practice	0.637	0.668	0.548
AVE square root	0.789	0.782	0.740

4.2. Descriptive Statistics and Normality Test

A total of 255 poetry enthusiasts from Malaysia participated in this study. The characteristics of respondents vary by gender, age, educational background, and major.

Table 6 shows that the majority of respondents were female, specifically 58.8%. Most of them are aged 18 to 34 years, at 54.5%.

Regarding the highest level of education, 46.2% have a bachelor's degree, while 44.3% have completed secondary school. About a third of the respondents, the largest group at 31.3%, majored in the natural sciences.

Table 6. The characteristics of respondents.

Variable		Frequency	Percent
Gender	Female	154	58.8
	Male	108	41.2
Age	12-17	3	1.2
	18-34	139	54.5
	35-54	78	30.6
	55 above	35	13.7
Degree	Secondary education	116	44.3
	Bachelor's degree	121	46.2
	Master's degree	19	7.3
	Doctorate degree	6	2.3
Major	Natural Sciences	82	31.3
	Social Sciences	52	19.8
	Engineering	11	4.2
	Computer Science/Information Technology	10	3.8
	Business Administration/Management	16	6.1
	Medicine/Health Sciences	11	4.2
	Arts/Humanities	12	4.6
	Education	10	3.8
	Communication/Media Studies	8	3.1
	Environmental Science Studies	9	3.4
	Other	41	15.6

Table 7 shows the results of descriptive statistical analysis and normality tests of the factors used in this study. On a positive scale of 1 to 5, the average score of each variable falls between 3 and 4. The target group of this study performed above the middle level in each dimension of the KAP scale. The normality test of each measurement item is carried out using skewness and kurtosis. According to Kline (2023) if the absolute value of the skewness coefficient is within ±3 and the absolute value of the kurtosis coefficient is within ±8, the data can be considered to meet the requirements of an approximately normal distribution (Kline, 2023). According to the analysis results in Table 7, the absolute values of the skewness and kurtosis coefficients for each item in this study are within the standard range. Therefore, it can be demonstrated that the data for each measurement item approximately follow a normal distribution and meet the prerequisites for confirmatory factor analysis.

Table 7. Normality Test.

Variable	Items	*M*	*SD*	Skew	Kurt
Knowledge	I believe that the pronunciation of languages changes over time. (K1)	3.560	1.240	-0.636	-0.471
	I know what Middle Chinese pronunciations are. (K2)	3.560	1.299	-0.704	-0.648
	I think the way Tang Dynasty people recited Tang poems sounds different from how we read them in Standard Mandarin today. (K3)	3.590	1.273	-0.839	-0.358
	I believe the relationship between poetry and music is achieved through phonetics. (K4)	3.550	1.294	-0.651	-0.679
	I know that poetry in the past was meant to be sung. (K5)	3.580	1.280	-0.743	-0.508
Attitude	I am interested in listening to the sound of Tang poems recited in Tang Dynasty phonetics. (A1)	3.600	1.269	-0.576	-0.656
	I think knowing the original pronunciation is essential for reciting Tang poems. (A2)	3.570	1.320	-0.698	-0.666
	I believe reciting Tang poems in Tang Dynasty phonetics is better than using Standard Mandarin. (A3)	3.600	1.276	-0.641	-0.635

Variable	Items	*M*	*SD*	Skew	Kurt
	I am willing to tell my friends about the performance of reciting Tang poems in Tang Dynasty phonetics. (A4)	3.580	1.280	-0.722	-0.558
	I think there is a need for systematic learning to recite Tang poems in Tang Dynasty phonetics. (A5)	3.560	1.421	-0.759	-0.742
Practice	I have been reciting Tang poems for a long time. (P1)	3.600	1.183	-0.637	-0.274
	I can often distinguish words in Tang poems where there is no rhyme. (P2)	3.660	1.282	-0.844	-0.334
	I have heard Tang poems recited in Tang Dynasty phonetics. (P3)	3.510	1.295	-0.639	-0.688
	I have used Tang Dynasty phonetics to recite Tang poems. (P4)	3.580	1.230	-0.670	-0.514
	I have participated in courses, conferences, or events related to the theme of Middle Chinese pronunciation. (P5)	3.580	1.305	-0.700	-0.645

4.3. Pearson Correlation Test

As shown in Table 8, an exploratory analysis was conducted on the correlation between variables using Pearson correlation analysis. According to the results, there are significant correlations among the three variables, all significant at the 99% significance level. Additionally, the correlation coefficient *r* between each variable is greater than zero.

Table 8. Pearson correlation test.

	K1	K2	K3	K4	K5	A1	A2	A3	A4	A5	P1	P2	P3	P4	P5
K1	1														
K2	0.638**	1													
K3	0.661**	0.609**	1												
K4	0.664**	0.644**	0.622**	1											
K5	0.616**	0.597**	0.565**	0.609**	1										
A1	0.192**	0.239**	0.231**	0.222**	0.255**	1									
A2	0.284**	0.350**	0.304**	0.375**	0.333**	0.681**	1								
A3	0.247**	0.365**	0.360**	0.355**	0.351**	0.651**	0.614**	1							
A4	0.198**	0.373**	0.298**	0.349**	0.244**	0.557**	0.574**	0.637**	1						
A5	0.179**	0.281**	0.331**	0.263**	0.314**	0.601**	0.516**	0.681**	0.596**	1					
P1	0.235**	0.295**	0.322**	0.323**	0.331**	0.342**	0.280**	0.386**	0.306**	0.375**	1				
P2	0.238**	0.316**	0.423**	0.366**	0.318**	0.296**	0.294**	0.419**	0.355**	0.415**	0.601**	1			
P3	0.287**	0.406**	0.358**	0.443**	0.361**	0.365**	0.483**	0.481**	0.400**	0.352**	0.500**	0.500**	1		
P4	0.346**	0.482**	0.421**	0.469**	0.409**	0.335**	0.413**	0.405**	0.436**	0.384**	0.552**	0.622**	0.543**	1	
P5	0.299**	0.452**	0.440**	0.424**	0.480**	0.387**	0.483**	0.469**	0.441**	0.422**	0.507**	0.488**	0.514**	0.634**	1

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Therefore, it can be shown comprehensively that there is a significant positive correlation among the three variables of knowledge, attitude, and practice in this analysis. Meanwhile, the SEM model established is shown in Figure 2.

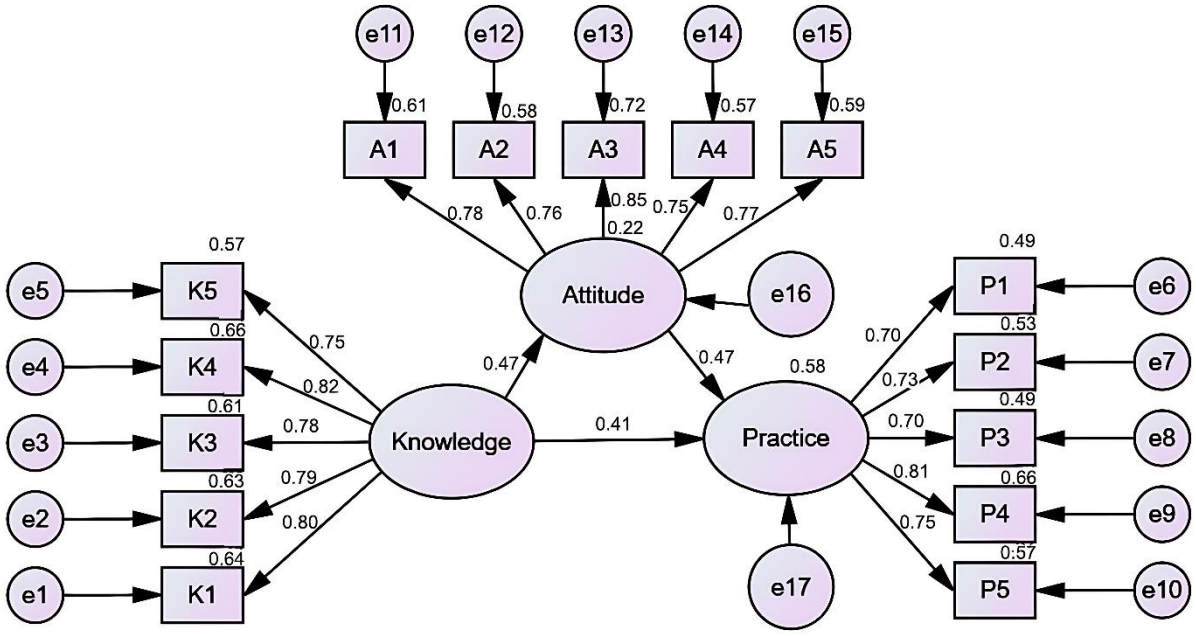

Figure 2. SEM of the KAP scale for middle Chinese pronunciation in the recitation of tang poetry.

4.4. Goodness of Fit Indices of the SEM Model of the KAP Scale for Reciting Tang Poetry in Middle Chinese Pronunciation

Based on the results of the Structural Equation Modeling (SEM) model fitting test (see Table 9), it is evident that the chi-square degree of freedom ratio (CMIN/DF) is 2.235, falling within the favorable range of 1 to 3. The root mean square error of approximation (RMSEA) is 0.070, which is excellent as it is below the threshold of 0.08. Moreover, the GFI, CFI, and TLI all surpass the excellent level of 0.9. Based on these test results, this scale model demonstrates a strong level of fit.

Table 9. Goodness of fit indices for the model.

Fit indices	Recommended value	Authors	Value
p-value	> 0.5	Meyers et al. (2016)	0.000
CMIN/DF	< 5.0	Marsh and Hocevar (1985)	2.235
	< 5.0 reported if n >200	Bentler (1990)	
	< 3.0 Good; <5.0 sometimes permissible	Hair et al. (2009)	
RMSEA	< 0.08	Byrne (2013)	0.070
	< 0.05	Hu and Bentler (1998)	
	< 0.08 Good fit; 0.8-0.1 moderate fit; >1 poor fit	Meyers et al. (2016)	
GFI	> 0.90	Chau (1997)	0.908
	> 0.90	Segars and Grover (1993)	
CFI	> 0.90	Bentler (1990)	0.950
	> 0.90	O'Rourke and Hatcher (2013)	
TLI	> 0.90	Meyers et al. (2016)	0.940

4.5. Path Analysis of the SEM of the KAP Scale for Reciting Tang Poetry in Middle Chinese Pronunciation

Table 10 displays the results of the path analysis for the model. Knowledge significantly influences Attitude ($\beta = 0.47$, SE = 0.071, CR = 6.614, $p < 0.001$). This indicates that an individual's level of knowledge has a strong positive impact on their attitudes. Attitude, in turn, significantly influences Practice ($\beta = 0.394$, SE = 0.06, CR = 6.523, $p < 0.001$). This suggests that an individual's attitudes play a crucial role in shaping their practices. Additionally, Practice is significantly influenced by Knowledge ($\beta = 0.344$, SE = 0.058, CR = 5.947, $p < 0.001$). This implies that an individual's level of knowledge also has a direct positive effect on their practices.

Table 10. SEM path testing results.

Regression			Estimate	S.E.	C.R.	P
Attitude	<---	Knowledge	0.47	0.071	6.614	***
Practice	<---	Attitude	0.394	0.06	6.523	***
Practice	<---	Knowledge	0.344	0.058	5.947	***

Note: *** indicates $p < 0.001$ (highly significant).

Overall, these findings highlight the complex interrelationships between the variables. Knowledge appears to have a significant indirect effect on Practice through Attitude, as evidenced by the significant paths from Knowledge to Attitude and from Attitude to Practice. Moreover, Knowledge also directly affects Practice, independent of Attitude. This suggests that Knowledge and Practice are related through both a direct path and an indirect path. All paths are highly significant ($p < 0.001$), which indicates that there is a strong relationship between all the variables, and they are not due to chance. The findings highlight that individual attitudes and knowledge levels are important considerations when assessing influence on practice.

The Bootstrap technique was used to test the Attitude as a mediation impact in the model presented in Table 11. The value of the attained indirect effect is 0.185. The 95% confidence interval is [0.127, 0.282] and does not include zero. This indicates that the indirect effect is significant, and attitude plays an important mediating role in the model. The DE test results also do not include zero, which means the direct effect is significant as well. The model is identified as a partial mediation model. The impact percentage of attitude has been identified at 34.96%.

Table 11. Bootstrap mediation analysis.

Parameter	Estimate	Lower	Upper	P	Proportion
IE	0.185	0.127	0.282	0.000	34.96%
DE	0.344	0.243	0.471	0.001	65.04%
TE	0.529	0.417	0.69	0.001	

According to the Bootstrap Mediation analysis, there is evidence that the model's indirect effect (IE), direct effect (DE), as well as total effect (TE), of the variable are significant. The indirect effect is significant (IE = 0.185, $p < 0.001$), which shows that Attitude (A) mediates between Knowledge (K) and Practice (P). The confidence interval [0.127, 0.282] indicates that the indirect effect is statistically significant and does not include zero, further supporting the mediating role of Attitude. The direct effect (DE = 0.344, $p = 0.001$) between Knowledge and Practice is also significant, implying that Knowledge has a direct influence on Practice, independent of Attitude.

Based on the results, the model can be identified as a partial mediation model. This means that while Attitude serves as a significant mediator between Knowledge and Practice, there is also a direct relationship between Knowledge and Practice that is not entirely explained by Attitude. The combination of both indirect and direct pathways contributes to the overall effect observed in the model.

5. DISCUSSION

The survey items collectively offered a multi-dimensional perspective on the knowledge, attitude, and practice of Malaysian poetry enthusiasts regarding the practice of reciting Tang poems using Middle Chinese pronunciation. These insights contributed to a comprehensive understanding of the complex dynamics involved in Malaysian poetry enthusiasts participating in this activity.

Many subjects state that pronunciations alter over time in the evolution of languages. Thus, the authors clearly recognize that languages change over time and that changes in sound occur over different periods and according to different languages, as per (Blevins, 2004). According to this view, they can more readily accept the true restoration of the original voice in their recitation of Tang poems. This, in turn, makes it clearer to them that historical variation has a serious impact on poetic rendition (Zumthor & Engelhardt, 1984).

Over 50% of the respondents were aware of the pronunciation of Middle Chinese. This awareness aids them in accurately reproducing historical sounds. Nonetheless, ongoing knowledge gaps that need addressing were highlighted. The two levels of awareness emphasize the need for specific education to resolve the cognitive gap.

Most participants believe that the musicality of poetry is realized through pronunciation, according to the study examining views on the relationship between poetry and sound. They recognized that sounds and the musicality of language are deeply connected according to Brownrigg (1982). Their opinions show that they are aware of the importance of pronunciation in poetry and that pronunciation is a key element in the emotion and artistic conception of poetry. Through a focus on pronunciation when reciting Tang poems, this helps them to express the emotion and meaning of the poem better.

According to the findings of Cai (2015) the applied cognition results showing how poems can be sung in history reveal that most people are aware of it. This shows their comprehension of music's historical role in cultural expression through poetry and a recognition of the diversity of voices in poetic history.

A large part of the participants was curious about how the Tang poems sound in Middle Chinese. Participants were excited to explore the history of sounds reflected in Middle Chinese pronunciation. This is indicated by their attitudes towards applications. The answers showed a strong eagerness to appreciate the phonetic versions of Tang poems from the Tang Dynasty, displaying a communal interest in connecting with the past. Their attitude is open, and they are willing to enrich their understanding of the cultural and linguistic background of Tang poetry with the pronunciation of Middle Chinese. Their growing interest might be due to the authenticity that the mental voices of a reading process bring.

Responses to the questionnaire also showed that they were aware of the original pronunciation to recite Tang poems effectively. The viewpoint suggests that they wish for the truth and precision to convey poetry, emotion, and meaning. For the participants, being aware of original pronunciation practices helped them to enhance the authenticity of Tang poetry reciting. They believe that what words sound like can affect the overall impact of a poetic expression, according to an expert opinion (Cai, 2022). This agreement demonstrates a broader awareness of phonetics and is crucial for developing a musical aesthetic response to verse.

The survey also examined whether participants would prefer to recite Tang poems in Tang dialect or Mandarin. Various opinion statements show how history and the present do not always align. Participants displayed different attitudes, reflecting a trade-off between historical accuracy and acceptability for audiences. Some contestants tended to use Tang Dynasty recitation instead of contemporary Mandarin. This shows that the claim is as authentic as the language (Pulleyblank, 1991). This characteristic presents us with evidence that historical phonetics not only reflects the truth of language but also condenses the spirit of the age.

Many of the participants are willing to share with their friends what they have learned about reciting Tang poetry in the phonetics of the Tang dynasty. The attitude indicates their fervor for cultural inheritance and dissemination and makes them cultural agents. Their willingness to actively contribute to historical voices and traditional artistic expressions highlights their sense of responsibility to spread cultural heritage.

In exploring whether participants thought it was necessary to systematically learn how to read Tang poems in Tang phonetics, the study showed that this attitude towards the need for systematic education emphasized their awareness of the complexity and depth of ancient phonetics. They understand the value of formal teaching. Accurate and meaningful reading is inseparable from systematic learning, and structured teaching is the basis for effective application of Tang Dynasty phonetic reading (Pulleyblank, 1991).

Moreover, questions on the practical side shed light on the depth of participants' passion for and participation in the art of reading. This behavior underscores their commitment to poetic expression and their passion for preserving the cultural heritage associated with these poems. Participants dedicate time to the art of reciting, demonstrating their willingness to experience and pass on this time-honored art form through hands-on experience.

Some participants said that they had heard Tang poems recited in the Tang Dynasty pronunciation. This shows that Middle Chinese pronunciation has not been forgotten and, in fact, still exists in the lives of poetry enthusiasts. There are participants who use Tang Dynasty phonetics in poetry recitation. This demonstrates that Middle Chinese pronunciation reading still has practical value and demand today.

Some participants are involved in educational and scholarly activities related to Middle Chinese pronunciation. Their participation in these activities demonstrates their desire to deepen their knowledge and practical skills in understanding the historical context of Tang poetry. This engagement reflects their active learning attitude and highlights a growing group of poetry enthusiasts interested in exploring historical voices as a medium for cultural renewal.

In addition, this study successfully applied the mediation effect model, demonstrating the mediating effects of the Knowledge (K), Attitude (A), and Practice (P) model, in which attitudes serve as partial mediators.

First, the findings show a direct effect of knowledge on practice. This means that Malaysian poetry enthusiasts' understanding and knowledge of reciting Tang poetry using Middle Chinese pronunciation directly affect their actual operation. Informed students are often more confident and motivated to give the Middle Chinese sounds a try, which may lead to practical changes. The direct relationship shows that knowledge causes practical behavior, and only knowledge provides the proper foundation for practical action.

In addition, findings in the mediating effect model revealed that attitude played a partial mediating role between knowledge and practice. The finding indicates that attitude has a role in linking knowledge with practice, and attitude influences both knowledge and practice. The inclination to try medieval phonetic reading may be affected by the attitude of Malaysian poetry enthusiasts toward it. The mediating effect of attitudes means that individuals who have positive attitudes and support for medieval phonetic reading will translate knowledge into practical application.

6. CONCLUSION

To sum up, the synthesis of the survey results provides a detailed and three-dimensional understanding of the cognitive perception, attitude, and behavior of participants in the recitation of Tang poems in Middle Chinese. The Knowledge-Attitude-Practice (KAP) model, devised specifically for Malaysian poetry enthusiasts, highlights the importance of these three dimensions and their interrelatedness. This model offers an analytical framework for understanding the complex dynamics of cognitive familiarity, attitudinal perspectives, and the actual use of medieval Chinese pronunciation in Tang poem recitations. Additionally, the assessment of this KAP framework among survey respondents demonstrates the occurrence of partial mediation effects. Attitudes serve as a crucial link between knowledge and action, with the partial mediation indicating that attitudes play a significant role in translating knowledge into practice. This mediation underscores how individuals move from thought to action, guided by pre-existing attitudes. The validated KAP model, along with the explanation of partial mediation effects, enhances understanding of the factors that influence and facilitate the adoption of Middle Chinese pronunciation among Malaysian poetry enthusiasts during Tang poem recitations. The insightful integration of knowledge, attitudes, and

practices reflects the complex interdependencies driving this cultural activity, with implications for similar endeavors in other cultural and linguistic contexts.

In addition, the conclusions derived from these results have important implications for education, culture, and society. Incorporating medieval Chinese pronunciation into courses and workshops can help participants learn and encourage them to actively recite Tang poems with a historical flair. Reciting Tang poems according to medieval Chinese pronunciation also reflects a strong connection with cultural heritage. The study's findings highlight the importance of preserving and renewing this culture, and cultural institutions and organizations can use this information to organize events, exhibitions, and performances that showcase the inherent link between linguistic nuances and poetry through time. Although this study was limited to Malaysian poetry enthusiasts, future research could include a wider range of cultural contexts, as cross-cultural comparisons might reveal interesting differences in attitudes, practices, and motivations behind using Middle Chinese to recite Tang poems. Such comparative studies could further our understanding of both universal and culturally specific aspects of this phenomenon. Overall, the research provides insight not only into why Malaysian poetry enthusiasts perform Tang poetry in Middle Chinese pronunciation, but also into its broader implications for education, culture, and the performance of poetry recitation. Further exploration of these areas will help future research examine the phenomenon in both its traditional and modern dimensions.

Funding: This study received no specific financial support.
Institutional Review Board Statement: The Ethical Committee of Universiti Putra Malaysia (UPM), Malaysia has granted approval for this study on 9 June 2024 (Ref. No. JKEUPM-2023-773).
Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.
Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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