

# The Influence Mechanism of Shanghai Dialect Inheritance Willingness Among Shanghai Permanent Residents: Based on Structural Equation Model

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**Abstract:** Using the ABC Attitude Model theory, the five variables of perceived functional value, perceived emotional value, linguistic emotion, local emotion and inheritance willingness are introduced to construct a theoretical model of Shanghai dialect inheritance willingness. Structural Equation Model can examine the influence and transmission mechanism of Shanghai residents' cognition and emotion on their inheritance willingness behavior. The results demonstrate that according to the structural equation model, linguistic emotion and perceived emotional value have the greatest influence on the willingness to inherit, while perceived functional value and local emotion have a negative influence on the willingness to inherit. Finally, based on the relationship between the variables, suggestions are provided to optimize the inheritance of the Shanghai dialect.

**Keywords:** Shanghai dialect, Inheritance Willingness, Structural Equation Model.

## 1. Introduction

With a long history, Shanghai, while preserving its traditional heritage, also shows an open and tolerant modern atmosphere. As an important language carrier of Shanghai culture, Shanghai dialect carries rich cultural connotations and reflects the historical changes, social customs and the characteristics of people's life in Shanghai. Through learning Shanghai dialect, people can have a deeper understanding of the unique charm and characteristics of Shanghai culture.

Shanghai residents are the main speakers of the Shanghai dialect nowadays, and their willingness to pass on the language has a profound impact on the development of the language. The willingness to pass on the language refers to the willingness of people to use and teach the language to the next generation. In turn, the method of language transmission is an important factor influencing the willingness to inherit a language. The study of this issue can help to solve the crisis of 'fault' in the transmission of the Shanghai dialect.

## 2. Literature Review

Li (2005) [1] suggested that dialects, as carriers of culture, can provide a more direct understanding of the meanings expressed among local residents and help to better investigate local customs and folklore. In the context of today's rural revitalisation, the importance of dialects for local cultural construction is even more evident (Huang, 2023) [2]. In the context of the national promotion of Mandarin, the dialect transmission environment across the country has suffered a certain impact, which is manifested in terms of the narrowing of the survival space of the dialect, the intergenerational transmission of the dialect breaking down and the reduction of the population of dialect speakers (Shi, 2017) [3]. At the same time, the dialect inheritance dilemma encountered varies from region to region. Ye (2023) [4] pointed out that due to Hainan's unique industrial structure, the rise of tourism has caused the Hainan dialect to face the problem of diminishing communicative value. Qingdao, on the other hand, is faced with the problem that the dialect is facing a

shrinking space of use and a decrease in functional value (Hou, 2023) [5].

However, the use of Mandarin should not become a tool to suppress dialects. Moreover, the complementarity between dialects and Mandarin is more conducive to national unity, and the pattern of linguistic plurality and coexistence is a symbol of social tolerance (Lin, 2023) [6]. In terms of dialect inheritance and protection, Stanford (2019) [7] utilized phonetics, dialect maps to systematically record the characteristics of the major dialects in England and their current usage; based on the established dialect authentic text and speech corpus data, it explored for the conditions that would affect the change of the language, so as to better protect the dialects (Benedikt et al., 2014) [8]. At the same time, there is also the problem of difficulty in grasping the exclusivity scale of the dialect and the need to explore its balance (Huang, 2022) [9].

Some scholars studied influence mechanism. The larger the number of speakers of a language, the more favorable it is for its transmission (Zeng, 2019) [10]. Accordingly, Hypothesis H1 is proposed: perceived functional value of Shanghai dialect positively affects residents' willingness to inherit. Shanghai, as an important super-tier one city with population inflow, has a large number of foreign populations who fulfil their psychological needs by integrating into the city and obtaining a sense of belonging (Zheng, 2019) [11]. As an important carrier of Shanghai culture, the emotional value of the Shanghainess to the local dialect can objectively motivate the foreign population to learn the local dialect and promote the willingness of dialect inheritance. Accordingly, hypothesis H2 is proposed: perceived emotional value of Shanghai dialect positively affects residents' inheritance willingness. Local emotion is a person's emotional experience of a specific place, which mainly includes the aspects of local identity, local dependence, and social connection (Kyle et al., 2005) [12]. Accordingly, hypothesis H3 is proposed: local emotion positively affects residents' willingness to inherit Shanghai dialect. Strong linguistic emotion can enhance the desire of local residents to spread it outward (Chen, 2015) [13], which plays a positive role in the willingness to inherit.

Accordingly, hypothesis H4 is proposed: linguistic emotion towards Shanghai dialect positively affects residents' willingness to inherit. Shan and Ru (2023) [14] demonstrated that there is a strong relationship between the variables that affect the willingness to inherit. When the functionality of a language is improved, such as gaining economic and social benefits, it will enhance the willingness to communicate, thus improving the emotional experience of both communicators. What is more, the perceived pragmatic value of a language affects people's evaluation of a language to a large extent. On the other hand, affective attitudes towards dialects are closely linked to local emotions. Accordingly, three hypotheses H5, H6 and H7 are proposed. H5: The perceived functional value of Shanghai dialect positively affects the perceived emotional value of Shanghai dialect. H6: the perceived functional value of Shanghai dialect positively affects residents' affective attitudes toward the language. H7: the perceived functional value of Shanghai dialect positively affects residents' local emotions. Some scholars have argued that place emotion positively guides cultural preservation behaviors, and language transmission is one of them (Wang and Zhao, 2019) [15]. Accordingly, Hypothesis H8 is proposed: local emotion positively affects residents' linguistic emotion.

### 3. Data Selection and Model Setup

#### 3.1. Data Source

The survey was conducted in Shanghai. The content of the survey consists of two parts. The first part is basic personal information, including gender, age, occupation, identity, and place of residence; the second part is the perceived functional value of Shanghai dialect, the perceived emotional value, the

local emotion of Shanghai, the linguistic emotion of Shanghai dialect, and the willingness to inheritance. 2024, during the winter holiday, we visited 16 administrative districts of Shanghai using the offline and online method, invited the staffs of neighborhood committees to fill in the paper questionnaires, and then asked them to assist with the survey, and sent the electronic version of the questionnaires to the local community. In the end, a total of 918 questionnaires were collected, and after eliminating the invalid questionnaires, 878 valid questionnaires were recovered, with a recovery rate of 96%>90%, which basically meets the needs of the market survey. The Cronbach's  $\alpha$  coefficient of this questionnaire is more than 0.8, and the KMO is more than 0.95, so the questionnaire reliability is high.

#### 3.2. Variable Selection and Model Setup

Friedman's ABC Attitude Model is a model widely used in market research and consumer behavior studies. ABC refers to Attitude, Behavior and Cognition. In linguistics, it is believed that linguistic emotion comes from linguistic cognition, which in turn influences linguistic behavior. Based on the theory of this model, this part selects appropriate research variables to construct a structural equation model of the Willingness to inherit Shanghai dialect from three dimensions, namely, cognition, emotion and behavior, in order to explore the influencing mechanism of the Willingness to inherit Shanghai dialect of the permanent residents in Shanghai area.

This study applies it to the research of dialect transmission, based on previous related literature specific variable selection and relationship hypothesis, as shown in Table 1:

**Table 1.** Measurement index system and reference sources

Basic Dimensions	Sub-dimensions	Observed Variables	Sources
Cognition	Perceived Functional Value	Communicative value	(Jin et al., 2015) [16]
		Increased income	
		Enhance the competitiveness of entrepreneurial employment	
	Perceived Emotional Value	Networking value	(Jin et al., 2015) [16]
		Social Identity	
		Psychological culture	(Chu et al., 2014) [17]
		Cultural Attitude	
Attitude	Local Emotion	Sense of belonging to the city	(Chen et al., 2021) [18]
		Restorative environmental perception	
		Place dependence	
		Place identity	
	Linguistic Emotion	Loyalty	(Zhou et al., 2018) [19]
		Affective component	
		Cognitive component	
Behaviour	Inheritance Willingness	Behavioral component	(Li et al., 2021) [20]
		Overall Attitude	
		Willingness to recommend or pass on Shanghai culture to others	
		Willingness to be the inheritor of Shanghai culture	
		Willingness to participate in cultural heritage activities without payment	
Willingness to pay for the inheritance and protection of the Shanghai language			

According to the ABC Attitude Model, the cognitive component includes perceived functional value and perceived emotional value, the affective component includes linguistic emotion and local emotion, and the behavioral tendency is the

willingness to inherit. Through the above analyses and hypotheses, this study constructs a conceptual model of the influence mechanism of Shanghai dialect inheritance willingness as shown in Figure 1.

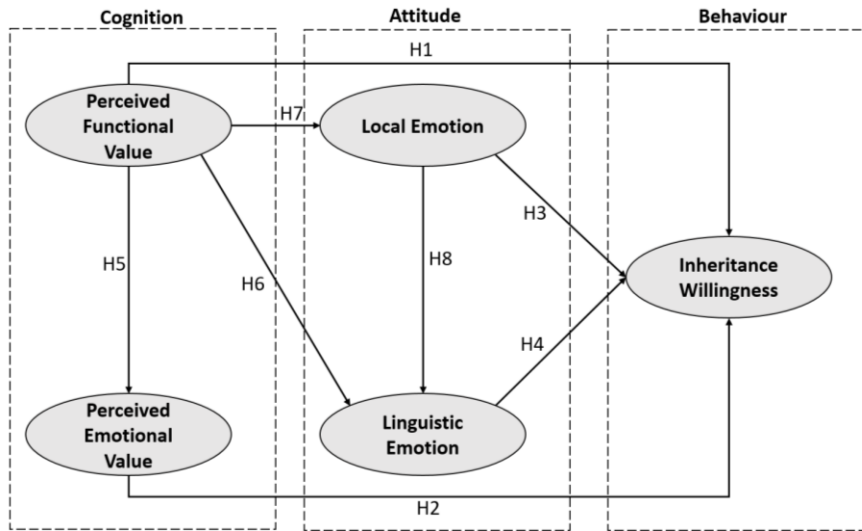


Figure 1. Conceptual model of the influence mechanism of the inheritance willingness of Shanghai dialect

#### 4. Regression Result

Using Amos to analyses, the results of the Structural Equation Model Fit Indicators are obtained: the IFI, TLI and CFI indices are excellent, and the CMIN/DF and RMSEA

indices are good. It indicates that the fit of the sample data to the model is good and the theoretical model has reasonable applicability, and the specific values are shown in Table 2.

Table 2. Model Fit Test

Index	Standard	Results
CMIN/DF	1-3 is excellent, 3-5 is good	4.385
RMSEA	<0.05 is excellent, <0.08 is good	0.062
IFI	>0.9 is excellent, >0.8 is good	0.965
TLI	>0.9 is excellent, >0.8 is good	0.937
CFI	>0.9 is excellent, >0.8 is good	0.956

Table 3. Descriptive statistical analysis of observed variables

Observed Variables	N	Mini	Max	Mean	SD	Variance
Communicative value	878	1	5	3.847	0.892	0.795
Increased income	878	1	5	3.460	1.107	1.225
Enhance the competitiveness of entrepreneurial employment	878	1	5	3.509	1.043	1.087
Networking value	878	1	5	3.774	0.978	0.957
Social Identity	878	1	5	3.978	0.833	0.694
Psychological culture	878	1	5	3.902	0.923	0.852
Cultural Attitude	878	1	5	3.926	0.874	0.764
Sense of belonging to the city	878	1	5	3.863	0.912	0.832
Restorative environmental perception	878	1	5	3.966	0.824	0.678
Place dependence	878	1	5	4.163	0.887	0.786
Place identity	878	1	5	4.003	0.890	0.792
Loyalty	878	1	5	3.935	0.906	0.820
Affective component	878	1	5	3.909	0.817	0.667
Cognitive component	878	1	5	3.878	0.996	0.992
Behavioral component	878	1	5	3.699	0.964	0.929
Overall Attitude	878	1	5	3.503	1.144	1.308
Willingness to recommend or pass on Shanghai culture to others	878	1	5	3.899	0.869	0.755
Willingness to be the inheritor of Shanghai culture	878	1	5	4.040	0.855	0.732
Willingness to participate in cultural heritage activities without payment	878	1	5	3.931	0.871	0.758
Willingness to pay for the inheritance and protection of the Shanghai language	878	1	5	3.546	1.058	1.119

The observed variables were analyzed by descriptive statistics by using SPASS and the results in Table 3 were obtained. The data indicate that the three variables of local dependence, local identity, and willingness to become a bearer of Shanghai culture have more prominent effects. At

the same time, the standard deviation and variance of all variables are low, expressing that the data are comparatively stable.

Hypotheses H1-H8 were tested with the help of Amos and the data in Table 4 was obtained. All the path coefficients of

the model are significant, which indicates that the theoretical model of inheritance willingness has some stability and

generalizability.

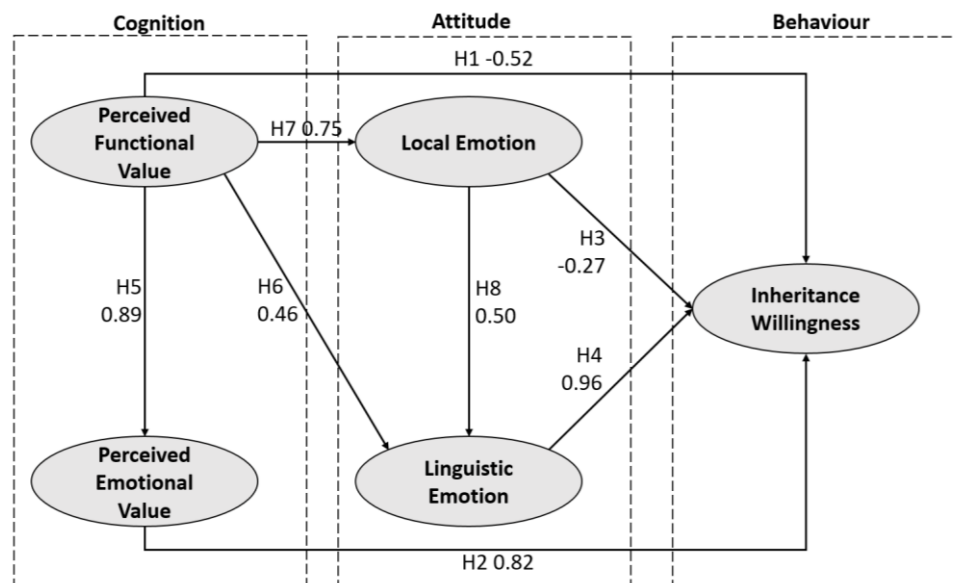
**Table 4.** Path Analysis Results

Hypothesis	Impact Path		Estimate	S.E.	C.R.	P	Results	
H1	Perceived Functional Value	→	Inheritance Willingness	0.688	0.051	13.449	***	Negative
H2	Perceived Emotional Value	→	Inheritance Willingness	0.727	0.173	4.203	***	Positive
H3	Local Emotion	→	Inheritance Willingness	-0.289	0.136	-2.130	**	Negative
H4	Linguistic Emotion	→	Inheritance Willingness	0.842	0.117	7.228	***	Positive
H5	Perceived Functional Value	→	Perceived Emotional Value	0.990	0.058	17.038	***	Positive
H6	Perceived Functional Value	→	Linguistic Emotion	0.522	0.063	8.233	***	Positive
H7	Perceived Functional Value	→	Local Emotion	0.688	0.051	13.449	***	Positive
H8	Local Emotion	→	Linguistic Emotion	0.604	0.069	8.802	***	Positive

Note: \* $p < 0.1$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$

Perceived functional value has a negative effect on the inheritance willingness of Shanghai dialect. Interpreted in a deeper way, the perceived functional value of Shanghai dialect is perceived to be relatively low, meaning that the functional value of Shanghai dialect, such as its usefulness and importance, is recognized to a lesser extent. For young people, the main driving force of Shanghai's functioning, the most appropriate language for functional value is

undoubtedly Mandarin. With its comprehensive promotion and high frequency of use, it is a good language tool. In terms of acquiring communicative value and increasing income, proficiency in English undoubtedly leads to quick access to a higher income of economic interest. Within the modern and international metropolis of Shanghai, the perceived functional value of Shanghai dialect seems to be gradually cut down by the progress of time.



**Figure 2.** Model analysis of the influence mechanism of willingness to pass on the Shanghai dialect

As shown in Figure 2, the perceived emotional function has a large positive effect on the willingness to inherit. As the first super first-tier city to develop in China, old Shanghai residents have an innate sense of mission for their city and their culture, which makes them attach great importance to the Shanghai inner group. As for the new Shanghai residents or foreigners, in order to get a sense of belonging to the city and to integrate into the life of the locals, they have a strong willingness to learn about the local culture. The willingness to pass on the Shanghai dialect is a very obvious representative.

Local emotion has a mildly negative effect on the willingness to learn. This can be explained in two aspects. For the older generation living in Shanghai, as their native land,

there may be a strong local attachment, which leads to a complex of difficulty in accepting foreign languages or cultures, and an emphasis on local languages and cultures. It may impede the understanding and development of languages and cultures. For the younger generation in Shanghai, who have been exposed to a variety of foreign languages and cultures since they were young and have received systematic education in Mandarin, their emotional attachment to the local area is not as deep as that of the older generation; At the same time, even though part of the younger generation has a deep attachment to the local emotion, there may be a hint circulating that speaking Shanghai dialect is regarded as xenophobic, which leads to a lower willingness to use Shanghai dialect. Thus the willingness to inherit is relatively

lower.

Linguistic emotion has the greatest positive effect on the willingness to inherit. As the iconic carrier of Shanghai culture, the positive influence of Shanghai on the willingness to inherit lies mainly in the emotional resonance and the beauty of the language. Shanghai dialect allows speakers to feel friendly, integrated and harmonious, and can better express their emotions. This sense of cultural identity and sense of belonging generated by the language will be transformed into a strong motivation to learn and pass on the Shanghai dialect.

Perceived functional value has a positive and significant effect on perceived emotional value, local emotion and linguistic emotion. According to the cognitive consistency theory, people tend to make their perceptions consistent. If a person has positive perceptions of the perceived functional value of Shanghai dialect, then they are likely to develop positive emotions towards Shanghai dialect, including perceived emotional value, local emotion and linguistic emotion. Affect transfer effect: The affect transfer effect refers to the contagious or transferring influence of one affective state on another. If a person perceives and evaluates positively the perceived functional value of Shanghai dialect, this positive emotion may spread to other aspects related to Shanghai dialect, such as perceived emotional value, place emotion, and linguistic emotion. Consistency in cognitive appraisal: People are usually consistent across perceptions and emotions. If a person perceives the perceived functional value of Shanghai dialect as important or beneficial to them, then they are also likely to develop more positive perceived affective value, place emotion and linguistic emotion towards Shanghai dialect.

Place emotion refers to people's deep affection for a place, while linguistic emotion is people's affection for a certain language. The Shanghai dialect, with its phonetic emotions, tends to evoke local emotions towards Shanghai, which in turn enhances the linguistic emotions towards it. Therefore, there is a positive and significant influence effect between local emotion and linguistic emotion.

## 5. Conclusion and Policy Recommendation

Based on structural equation modelling, latent variables and observational variables are set to study the influencing factors and mechanisms of permanent residents' willingness to pass on the Shanghai dialect in Shanghai. The analysis shows that perceived functional value has a certain negative impact on residents' willingness to inherit, the reason for which is related to the weakening of the communicative value of the Shanghai dialect and the value of enhancing employment competitiveness. Permanent residents with the identity of new Shanghainese or people from foreign provinces and municipalities generally have a low perception of the functionality of the Shanghai dialect. Linguistic emotion and perceived emotional value had the greatest influence on the willingness to transmit, with residents recognizing the role of the Shanghai dialect in the development of society, while old and new Shanghainese generally perceived the language to be approachable. However, local emotions have a negative impact on the willingness to inherit the Shanghai dialect. Although most of the residents want to stay in Shanghai, such local sentiment has a utilitarian mentality. The functional value of the

Shanghai dialect is gradually weakening, there is a certain degree of disconnection between the dialect and the current situation of local development. Moreover, the backwardness of the superstructure fails to arouse residents' willingness to pass on the Shanghai dialect.

First, it is emotional marketing, constantly improving the emotional value of Shanghai dialect. Through emotional marketing techniques, such as the use of authentic Shanghai vocabulary and celebrity endorsements, the link between the Shanghai dialect and the residents' emotions is created. At the same time, the PR department should pay close attention to the commentaries and actively guide the audience's perception of the language. In addition, other media such as radio and advertisement should take the responsibility of Shanghai dialect dissemination, so that the excellent Shanghai dialect works can be empowered by all channels. By showing the emotional meaning and stories behind the Shanghai dialect, it can enhance the audience's awareness and experience of non-functional values.

Second, public service communication to enhance social responsibility. Associate the heritage of Shanghai dialect with social responsibility, for example, by releasing public welfare activities, public service advertisements in Shanghai dialect, and social justice issues to build up the image of social responsibility of Shanghai dialect. This will enhance the residents' sense of identification with the Shanghai dialect and strengthen the education of the social significance of Shanghai dialect heritage.

Finally, create an atmosphere of Shanghai dialect to enhance language emotion. Provide modes of broadcasting in Shanghai dialect in public places, such as subways, buses, hospitals, and community service centers. It is suggested to gradually promote the Shanghai dialect broadcasting mode in all lines of metro and buses, which can not only reflect the characteristics of Shanghai's public transport and community services, but also enhance the exposure of the crowd to the Shanghai dialect.

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