

# The Influences of the Rich English Musical Environment in Childhood on Sense of English Efficacy

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**Abstract:** This study examined the extent to which a rich English musical environment in childhood influences English learning self-efficacy. In the context of globalization, English has become an important language, and teachers often use English songs as teaching aids. The research employed a quantitative research method and collected data through a questionnaire survey distributed to 500 undergraduate students of all grades via the Wenjuanxing platform. The data were analyzed using SPSS 22.0. First, analyzing the basic conditions of childhood music exposure and English learning self-efficacy among college students by descriptive statistics. Second, variance analysis was conducted to identify differences in the main variables across demographic variables such as grade. Finally, regression analysis was used to test the predictive impact of childhood music exposure on English learning self-efficacy.

**Keywords:** English music; influence; English efficacy.

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## 1. Introduction

With the development of cognitive science in the 20th century, more and more scholars have conducted research on the relation between language and music. They explored the interaction between language and music, analyzed the transfer phenomenon in the process of foreign language learning and music learning, and achieved valuable results. On the whole, the relevant studies have shown a trend of in-depth expansion of the subject matter, from focusing on the relationship between language and music to exploring the interaction between foreign language learning and music, and from the study of musical qualities to the study of musical media. Early studies were conducted through experimental design that combined behavior and electrophysiology found that systematic music training can indirectly optimize the efficiency of foreign language learning by enhancing the perception of speech tones[1]. Studies in children have shown that music interventions can significantly improve language skills by reinforcing phonological awareness, such as rhythm and tonal sensitivity[2], a finding that supports cross-age research on the association between music and language. As a Chinese student, I have also found that teachers like to use foreign language songs to attract students' interest in learning foreign languages. In addition, there is still room for more detailed research, such as research on the influence of childhood musical environment, and the role of various musical elements such as rhythm, pitch, and timbre on which part of the language ability is affected.

## 2. Ease of Use

### 2.1. Selecting a Template

Empirical evidence demonstrates developmental linkages between rhythmic processing abilities and auditory segmentation competence in early childhood[3]. This seminal work on auditory skill development reveals that deliberate auditory-motor training enhances metalinguistic capabilities, yielding foundational benefits for linguistic acquisition pathways. Building upon these psycholinguistic frameworks,

our investigation evaluates how environmental music exposure density during early development modulates English phonological processing efficiency through neurocognitive mechanisms governing cross-domain skill transfer.

### 2.2. Maintaining the Integrity of the Specifications

Nowadays, in the form of rapid globalization, everyone has started to learn a second language consciously. The importance of English can also be seen through the fact that English has been the first choice as a second language in countries in the Asian region. Even in Iceland, the usage of English was once higher than the native language of Iceland. In recent years, with the development of cognitive science, the relationship between language and music has been mined, and has even been a major tool used in language classrooms. Among other things, the experiments have been emphasizing more on the positive transfer of musical training, including vocal training, and instrumental training for language learning. In biology, the importance of the environment has never been neglected, therefore, this study will focus on the duty of the environment on language learning.

### 2.3. Literature review

Regarding the research on college students' English learning motivation, the following articles can show that: the results of the study "Empirical Research on College Students' English Independent Learning Ability and Self-Efficacy" published by Li Heng in 2016 indicate that self-efficacy affects to a certain extent college students' potential in English independent learning[4]. Students with higher academic achievement in English have a stronger sense of self-efficacy and better independent learning ability; they are also more skillful in using learning strategies and so on to improve their learning efficiency. From "The Effects of Adverse Childhood Experiences on College Students' Academic Burnout: The Mediating Role of Temporal Perspective" published by Xuan Hu, Zhiguo Hu, and Hong Luo in 2024, it can be understood that adverse childhood experiences can significantly and

positively predict college students' academic burnout, which also mentions that it can be ameliorated and facilitated by positive thinking therapy[5]. In "A Study on the Influencing Factors of English Learning Motivation Deterioration of Non-English Major College Students and Its Relationship with Academic Achievement" published by Guangfeng Li and Meng Wang in 2016[6], it can be understood that student factors are the main factors affecting learning outcomes, while teaching content and environmental factors are not related to academic achievement. Liu Cuiping, Chen Xinmiao in 2018, "A Survey Study on the Independent English Learning Ability of Non-English Major College Students" can understand that non-English majors' independent learning ability in English still needs to be improved and the use of learning strategies is also low[7]. In "Research on Multiple Interactions and Their Influencing Factors of College Students' English Learning: based on the Perspective of Psychological Network Analysis" by Jinfen Xu and Xiaoli Feng in 2024, it is pointed out that interactions are the core elements in the domain of second language acquisition, and the article explores the co-occurring roles of dialogic, structural, and learner autonomy factors on multiple interactions[8]. In "An Empirical Study on the Factors Influencing College Students' English Online Independent Learning Ability" published in 2023, Cheng Jianfeng explained that self-efficacy has the greatest total effect on English online independent learning ability, and the others are learning strategy, learning motivation, learning anxiety and teacher support in that order[9]. In "Research on Influencing Factors of the Decline of College English Learning Motivation" published by Li Chenghua and Sun Hui in 2017, the questionnaire data concluded that the main motives for the decline of college students' English learning motivation include teacher factors, teaching content, student factors and environmental factors[10]. Yao Xiaojun, Chen Jing, and Yang Yamin's "Research on English Learners' Learning Methods: Based on Educational Psychology Perspectives" published in 2010 mentions that the experiment adopts the method of examining both motivation and strategies; deep motivation and deep strategies are significantly and positively correlated with English proficiency, while the opposite is true for shallow motivation and shallow strategies. At the same time, strategies are also affected by the students' learning stage[11].

Empirical investigations into childhood music-language interactions reveal distinct developmental mechanisms. Gustavson et al. employed a twin-adoption design to demonstrate hereditary overlap between instrumental practice and verbal aptitude ( $r_{g} = 0.34$ ), contrasting with non-significant associations for vocal or kinesthetic musical engagement. Their longitudinal analysis identified persistent cross-domain effects, where adolescent musical participation predicted 14% variance in later language task performance[12].

Complementary research by Gordon's team established rhythm perception as a grammatical competence predictor ( $\beta = 0.41, p < 0.001$ ), independent of phonological awareness measures. Neurodevelopmental evidence suggests acoustic rhythm sensitivity facilitates morphosyntactic pattern recognition through shared temporal processing mechanisms, particularly in parsing prosodic boundaries that demarcate syntactic units[13]. Regarding the relationship between the two, music and language, there are the following related studies that show that: "The impact of musical experience on second language processing" published by Deng Shanwen et

al. in 2023 can be understood as a large number of summarized generalizations in the article about the positive role of musical experience in second language processing[14]. Nan Yun's "The Facilitation of Language Processing by Music Learning" published in 2017 can be understood that music learning plays a positive role in language processing; the study also set up three sets of experiments: a comparative study of language processing between musicians and non-musicians, the possible effects of people with music learning disabilities on language processing, and the effects of music learning in facilitating language processing found in the Music Learning Longitudinal Follow-Up Study[15]. In "The Use of Songs and Music in Language Teaching" written by Clement LaRoy and excerpted and translated by Liu Jingxiang in 1994, you can learn about the teaching experience as a foreign language teacher in non-English-speaking countries, in which songs and music play a great role in teaching and learning according to the different points of knowledge to choose the music is particularly important[16]. A Review of International Research on the Correlation between Foreign Language Proficiency and the Medium of Music, published by Ruonan Cao in 2019, summarizes the research on the correlation between foreign language proficiency and the medium of music, in terms of interactivity, enhancement of foreign language proficiency, and the effects of its application in the foreign language classroom[17]. Anthony Brandt, Molly Gebrian and L. Robert Slevc published a report on "music and music and teaching in non-English-speaking countries," in 2012 [18]. L. Robert Slevc, Nicholas S. Davey et al. published in 2016, Tuning the mind: exploring the connections between musical ability and executive functions" explored the relationship between musical ability and executive functioning, with particular relevance to the ability to update working memory; and that musical ability is not comprehensively related to cognitive ability[19]. Daniel E. Gustavson, Srishti Nayak, Peyton L. Coleman et al. 2023, "The heritability of musical engagement in childhood and its association with language and executive function: insights from a study of adolescent brain cognitive development (ABCD), it is understandable that language and EF proficiency are primarily related to exposure to instrumental lessons (or other activities). At the same time, this study does not rule out that certain combinations of the two influences (genetic and environmental) and training-based neural plasticity drive these associations[20].

Regarding the influence of the home music environment, the following studies have shown that: "A Case Study of Infants' Home Music Environment and Parent-Child Musical Interaction Based on the Community Theory" published by Hang Su, Yue Luo, and Tingting Li in 2022, in which the study used the LENA recording technology to track and analyze the music soundscape files of a baby girl from 8 to 14 months of age, and conducted tracking interviews with the baby's parents; it can be concluded that it can be concluded that the home music environment can promote the development of musical ability in infants[21]. A Review of Research on Factors Influencing the Development of Children's Musical Ability, published in 2006, shows that mother-infant interaction is the basis of an infant's love of music, and that the home environment influences the following factors: family affluence, and the home musical environment. 2024, the home music environment of preschoolers was related to their home literacy environment and parental self-efficacy[22].

It is mentioned that the home music environment can be excellent for providing atmosphere and motivation for learning, and there is a strong correlation with shared family reading in particular. Children's music perception is all positively linked to language and emergent literacy skills in early childhood. Laura W. Wesseldijk's 2019 publication *Gene-Environment Interaction in Expertise: The Importance of Childhood Environment for Musical Achievement* exemplifies the paucity of studies that have conducted gene-environment interactions. The study examined this question using a large Swedish twin cohort (N=6,610) with musical achievement as the domain of study; it tested whether the richness of the musical environment in childhood moderates adult musical achievement and the extent to which genetic and non-genetic factors influence individual differences in achievement[23].

### 3. Material and Methods

In this study, we indexed the richness of the childhood environment through the scale Richness of the childhood English music environment using principal components derived from the number of English music recordings in the home (including the number of home CDs), the number of people playing musical instruments in the home environment, the frequency of visits to English concerts, and the music education before 12 year old [23]; The English Efficacy Questionnaire for Secondary School Students compiled by Zhang Ye and Zhang Huan on the The Questionnaire Star platform distributed 500 questionnaires to the Internet to verify whether the richness of childhood music environment plays a role in English efficacy [24]. What kind of role does it play?

#### 3.1. Research tools

The richness of childhood English music environments: A measure of childhood richness from Laura W. Wesseldijk's study was used to learn primarily about (a) the number of records available in the family, (b) how many people in the twins' environment played an instrument, (c) how often they listened to concerts, and (d) whether or not they had received music education by the age of 12[23].

English Efficacy Questionnaire. This study used the

English efficacy assessment tool developed by Zhang Ye and Zhang Huan, which has a total of 29 questions and uses a five-point Likert scale, covering four dimensions: subject competence confidence and goal-setting effectiveness, with split-half reliability coefficients ranging from 0.75 to 0.93 for each subscale, and 0.95 for the total scale; the internal consistency coefficients ranged from 0.79 to 0.94, and the internal consistency coefficient of the total scale was 0.96; the retest reliability coefficients of the subscales ranged from 0.74 to 0.90, and the internal consistency coefficient of the total scale was 0.93; and the indexes of the parameters of the validated factor analyses were:  $\chi^2 = 770.70$ ,  $df = 371$ ,  $\chi^2/df = 2.08$ ,  $NFI = 0.96$ , the  $TFI=0.98$ ,  $GFI=0.98$ ,  $IFI=0.98$ ,  $RFI=0.95$ ,  $RMSEA=0.06$ . It shows that the questionnaire has good reliability and validity, and it can be used as a measurement tool of English efficacy for secondary school students[24].

#### 3.2. Data collection and analysis

A survey was conducted on a group of college students, freshmen through seniors, to examine the effect of the richness of the childhood English music environment on English efficacy through the results of the English Efficacy Questionnaire for Middle School Students and the Questionnaire on the Richness of the Childhood Music Environment.

In total, 314 valid questionnaires were returned. SPSS22.0 was used to process and analyze the data. Firstly, descriptive statistics was used to analyze the basic status of college students' childhood music richness and English learning self-efficacy, secondly, ANOVA was used to understand the differences of the main variables in terms of demographic variables such as grade, and finally, regression analysis was used to test the predictive effect of childhood music richness on English learning self-efficacy.

### 4. Results

#### 4.1. Figures and Tables

(1) An analysis of variance (ANOVA) was conducted on English language efficacy and the number of musical recordings (e.g., CDs) in the childhood musical environment, and the results are shown in Table 1.

**Table 1.** ANOVA of English efficacy and the number of music recordings (e.g., CDs) in the childhood music environment

	4. Number of music recordings in the household, e.g. CDs (mean ± standard deviation)				F	p
	0~3 (n=91)	3~5 (n=105)	5~10 (n=75)	More Ln=43)		
English Sense of Efficacy	3.07±0.49	3.39±0.59	3.39±0.52	3.45±0.61	8.058	0.000**

As can be seen from the above table, the ANOVA (all known as one-way ANOVA) was used to study the variability of 4, the number of music records in the family, such as CD-ROMs, on a total of 1 item of the sense of English efficacy, as can be seen from the above table: the number of music records (such as CD-ROMs) samples in different families for the sense of English efficacy all showed significance ( $p < 0.05$ ), meaning that different families in the number of music records (such as CD-ROMs) samples for the sense of English efficacy have differences. samples are all significant ( $p < 0.05$ ), meaning that the number of music records (e.g., CD-ROMs) in different families has a different effect on English efficacy. Specific analysis shows that the number of music records (e.g.

CD-ROMs) in the family is significant at the 0.01 level ( $F=8.058$ ,  $p=0.000$ ), and specific comparisons of the differences show that the mean scores of the groups with more obvious differences are "3~5>0~3; 5~10>0~3; more>0~3", "3~5>0~3; 5~10>0~3; more>0~3", and "more>0~3". To summarize, it can be seen that the number of music records (e.g., CD-ROMs) in different families showed significant differences in all the samples on English efficacy.

(2) An analysis of variance (ANOVA) was conducted on English language efficacy and the number of people who played musical instruments in their childhood musical environments, and the results are shown in Table 2.

**Table 2.** ANOVA on English language efficacy and the number of people who played a musical instrument in their childhood musical environment

	Number of people in the living environment who play a musical instrument (mean ± standard deviation)				F	p
	0~3 (n=119)	3~5 (n=109)	5~10 (n=62)	More (n=24)		
English Sense of Efficacy	3.16±0.52	3.43±0.60	3.34±0.50	3.38±0.64	4.926	0.002**

A one-way ANOVA analysis of musical instrument engagement across residential environments revealed significant differences in English learning efficacy ( $p < 0.05$ ). The data demonstrate distinct variations in self-perceived language competence among five residential groups with different levels of musical practice participation. Post-hoc analysis indicates these environmental differences substantially influence learners' psychological perception of English mastery.

The number of people playing musical instruments in the living environment showed a 0.01 level of significance ( $F = 4.926$ ,  $p = 0.002$ ) for English efficacy, as well as the

specific differences in the comparisons showed that the group mean scores with more significant differences were "3~5>0~3; 5~10>0~3". The results are "3~5>0~3; 5~10>0~3". To summarize, how many people play musical instruments in different living environments showed significant differences in all of the samples' perceptions of English efficacy.

(3) An analysis of variance (ANOVA) was conducted on English language efficacy and frequency of listening to concerts in childhood musical environments, and the results are shown in Table 3.

**Table 3.** ANOVA on English language efficacy and frequency of concert attendance in childhood musical environments

	6. Frequency of listening to concerts at family events (mean ± standard deviation)				F	p
	Almost none (n=125)	Less frequent, e.g., once a month (n=108)	Appropriate, about three times a month (n=66)	More frequent, weekly (n=15)		
English Sense of Efficacy	3.11±0.48	3.43±0.60	3.44±0.55	3.44±0.61	8.748	0.000**

As can be seen from the above table, the use of ANOVA (all known as one-way ANOVA) to study the frequency of listening to concerts in family activities for the English sense of efficacy of a total of 1 items, as can be seen from the above table: different family activities to listen to concerts in the frequency of the samples for the sense of English efficacy of all show significance ( $p < 0.05$ ), which means that the frequency of listening to concerts in different 6 family activities for the sense of English efficacy of all have differentiation. The frequency samples of listening to concerts in different 6. family activities have differences in the sense of English efficacy. Specific analysis shows that the frequency of listening to concerts in family activities is important at the 0.01 level ( $F = 8.748$ ,  $p = 0.000$ ), As well as the specific comparison differences, it can be seen that the average score of the groups with more obvious differences is

"less, such as once a month > almost none; proper, about three times a month > almost none; More frequent, weekly > almost none" summary shows that 6. The frequency samples of family activities to attend concerts all showed significant differences in English efficacy.

#### 4.2. Linear regression analyses of the dimensions of childhood musical environment richness separately with English language efficacy

(1) Linear regression analyses of English language efficacy and the number of musical recordings (e.g., CDs) in the childhood musical environment were conducted, and the results are shown in Table 4.

**Table 4.** Linear regression analysis of English efficacy and the number of music recordings (e.g., CDs) in the childhood music environment

	Non-standardized coefficient		Standardized coefficient	t	p	covariance diagnosis	
	B	Standard Error	Beta			VIF	Tolerance
a constant (math.)	3.025	0.075	-	40.202	0.000**	-	-
4. Number of musical recordings in the household, e.g. CDs	0.126	0.031	0.225	4.084	0.000**	1.000	1.000
R <sup>2</sup>			0.051				
Adjustment R <sup>2</sup>			0.048				
F			F (1,312)=16.680, p=0.000				
D-W value			1.941				

Note: Dependent Variable = English Efficacy

Linear regression analysis identified household musical media ownership (e.g., CDs) as a statistically significant

predictor of English competency perceptions ( $*\beta = 0.126$ ,  $*t = 4.084$ ,  $*p < 0.001$ ). The established model ( $*F =$

16.68,  $*p^* < 0.001$ ,  $*R^2 = 0.051$ ) demonstrated that each incremental CD unit corresponded to a 0.126-point elevation in language efficacy scores (baseline = 3.025). While the explanatory power remained modest (5.1% variance accounted for), the robust  $*t^*$ -test confirmation ( $*p^* < 0.01$ ) substantiates music resource availability as a positive developmental correlate. Childhood auditory English

exposure, quantified through physical media collections, exhibited measurable impacts on learners' linguistic confidence metrics.

(2) Linear regression analyses were conducted on English language efficacy and the number of people who played a musical instrument in their childhood musical environments, and the results are shown in Table 5.

**Table 5.** Linear regression analysis of English efficacy and the number of people who played a musical instrument in their childhood musical environment

	Non-standardized coefficient		Standardized coefficient	t	p	covariance diagnosis	
	B	Standard Error	Beta			VIF	Tolerance
a constant (math.)	3.137	0.074	-	42.533	0.000*	-	-
5. How many people in the living environment play musical instruments	0.085	0.034	0.141	2.514	0.012*	1.000	1.000
R <sup>2</sup>			0.020				
Adjustment R <sup>2</sup>			0.017				
F			F (1,312)=6.319,p=0.012				
D-W value			1.899				

Note: Dependent Variable = English Efficacy

From the above table, it can be seen that the formula of the model is: English efficacy = 3.137 + 0.085 \* how many people play musical instruments in the living environment, and the model R square value is 0.020, which means that how many people play musical instruments in the living environment can explain the 2.0% change in English efficacy. When the model was tested by F, it was found that the model passed the F test (F=6.319, p=0.012<0.05), which means that how many people in the living environment play musical instruments will have an impact on English efficacy, and finally the specific analysis shows that the regression coefficient value of how many people play musical

instruments in the living environment is 0.085 (t=2.514, p=0.012<0.05), which means that how many people play musical instruments in the living environment will have a significant positive impact on English efficacy. To summarize the analysis, it can be seen that: how many people play musical instruments in the living environment all will have a significant positive influence on the relationship of English efficacy.

(3) Linear regression analyses were conducted on English language efficacy and frequency of attending concerts in childhood musical environments, and the results are shown in Table 6.

**Table 6.** Linear regression analysis of English efficacy and frequency of attending concerts in childhood musical environments

	Non-standardized coefficient		Standardized coefficient	t	p	covariance diagnosis	
	B	Standard Error	Beta			VIF	Tolerance
a constant (math.)	3.021	0.074	-	40.981	0.000**	-	-
6. Frequency of concerts for family activities	0.149	0.035	0.234	4.247	0.000**	1.000	1.000
R <sup>2</sup>			0.055				
Adjustment R <sup>2</sup>			0.052				
F			F (1,312)=18.035,p=0.000				
D-W value			1.953				

Note: Dependent Variable = English Efficacy

From the above table, the frequency of listening to concerts in family activities is taken as the independent variable, while English efficacy is taken as the dependent variable in the linear regression analysis, from the above table, it can be seen that the model formula is: English efficacy = 3.021 + 0.149\* frequency of listening to concerts in family activities, and the model R-square value is 0.055, which means that the frequency of listening to concerts in family activities explains 5.5% of the English efficacy reason for the change. The F-test of the model found that the model passed the F-test (F=18.035, p=0.000<0.05), which means that the frequency of listening to concerts in family activities must have an impact on the

relationship between the sense of English efficacy, and the final analysis of the specific analysis reveals that: the regression coefficient value of the frequency of listening to concerts in family activities is 0.149 (t=4.247, p=0.000<0.01), which means that the frequency of listening to concerts in family activities will have a significant positive impact on English efficacy. To summarize the analysis, it can be seen that all of the frequency of listening to concerts in family activities will have a significant positive impact on the sense of English efficacy.

## 5. Discussions

This study found that the richness of the childhood English music environment (including the number of music recordings, the number of instruments played, and the frequency of concert participation in the home) was significantly and positively related to English efficacy. Music training may enhance auditory sensitivity (e.g., rhythm and pitch discrimination), thereby promoting the development of language-related cognitive functions (e.g., phonological awareness and grammatical sensitivity), which in turn strengthens self-efficacy in English learning. Music training indirectly strengthens language processing skills (e.g., phonological awareness and grammatical sensitivity) by enhancing auditory skills such as rhythm perception and pitch recognition, thus enhancing individuals' self-confidence and sense of efficacy in English learning. In addition, frequent participation in family music activities may create a positive learning atmosphere, stimulate learning interest and intrinsic motivation, and further consolidate self-efficacy in English learning.

The results of this study are highly consistent with established literature. For example, Anthony states that musical listening and competence is crucial for language acquisition [18]. In addition, Gordon et al.'s study on the association between rhythmic discrimination and grammatical competence [13] and Gustavson et al.'s (2021) exploration of the longitudinal relationship between musical engagement and language skills support the conclusion that the musical environment influences language efficacy through cognitive mechanisms [12]. The innovation of the present study is to focus on multidimensional indicators of childhood music environment (e.g., number of recordings, frequency of concerts) to further refine the specific pathways of the music-language association.

It is worth noting that the predictive power of the number of instruments played on English language efficacy ( $R^2 = 2.0\%$ ) was significantly lower than that of the other two dimensions (number of recordings  $R^2 = 5.1\%$ , frequency of concerts  $R^2 = 5.5\%$ ). This may be related to the limitations of the measurement instrument: the count of the number of instruments played did not distinguish between active participation (e.g., personal practice) and passive exposure (e.g., playing by family members), resulting in a weakening of its direct effect on language efficacy. In addition, actual participation in instrument playing may have been lower in the sample of non-English-major college students, limiting the strength of the effect of this variable.

It can be inferred from the combined results that the childhood music environment affects English language efficacy through a dual pathway: first, it directly promotes language-related cognitive skills (e.g., phonological processing, working memory); and second, it indirectly enhances efficacy through affective and motivational mechanisms (e.g., interest in learning, self-confidence). This finding provides empirical support for the theory of "music-language shared neural resources" and suggests the potential value of integrating music elements in language teaching.

The present study has the following limitations: first, the sample was limited to non-English major college students ( $N=314$ ) and used a cross-sectional design, which makes it difficult to infer causality; second, it did not control for confounding variables, such as family economic level and parents' educational background, which may have affected the

explanatory power of the results; and third, the measure of childhood musical environment relied on retrospective self-reporting, which is at risk of recall bias.

Future studies could be extended to different age groups (e.g., children, adults) and professional groups (e.g., English majors), and incorporate longitudinal follow-up designs to clarify causal mechanisms. In addition, more precise measurement tools (e.g., objective recording of music exposure frequency) need to be developed and mediating variables (e.g., executive functions, learning strategies) need to be introduced to reveal the specific pathways through which the music environment affects language performance. Cross-cultural comparisons (e.g., differences in musical environments between Western and Chinese families) may also provide new evidence for the generalizability of the theory.

The finding that the richness of childhood English music environments significantly and positively predicted English efficacy, with the effect realized through both cognitive and motivational pathways, provides an important theoretical and practical basis for the integration of musical elements in language teaching.

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