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THE EFFECTIVENESS OF UTILIZING SONG MEDIA IN ENHANCING MANDARIN LANGUAGE VOCABULARY PROFICIENCY AMONG STUDENTS

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Abstract: This study was conducted to analyze the effectiveness of using song media in developing students' Chinese vocabulary skills. The design used in this research is quasi experimental with the form of non-equivalent control group design. The population in the study were Kinderfield School East Jakarta students. The sample in this study used all members of the population, totaling 35 students, consisting of 19 experimental class students and 16 control class students. The research approach used is quantitative with a Quasi Experiment design, which involves two groups, namely the experimental group and the control group. Data and data sources in this study include data obtained from interviews, field notes, and tests given to students. Data collection techniques were conducted through documentation, structured interviews, and tests consisting of pre-test and post-test. The sampling technique used was non-probability sampling with saturated sampling type. Data analysis techniques were carried out using quantitative experimental techniques, including validity tests, reliability, normality tests, homogeneity tests, and hypothesis testing using the Independent Sample Test with the help of IBM SPSS Statistics version 22 software. The study showed that students in the experimental class experienced a significant improvement in Chinese speaking skills based on the post-test results, and the mean score of the experimental class was higher than the control class, indicating the effectiveness of the teaching method using song media in improving Chinese language skills at Kinderfield School East Jakarta

Keywords: Early Childhood; Mandarin; Music; Vocabulary

INTRODUCTION

The Mandarin language has become increasingly popular worldwide due to China's strong economic growth. This popularity has also had an impact on the people of Indonesia. Since the Indonesian government lifted the ban on learning Mandarin and recognized Chinese culture in 1998, there has been a growing interest in becoming proficient in the language. This interest is not limited to the Chinese community in Indonesia, as regional government officials have also made it a requirement in the post-Suharto era (1998-present) (Chen & Gu, 2019; Setijadi, 2016).

When learning Mandarin, mastering four language skills is essential: listening (听力 tīnglì), speaking (口语 kǒuyǔ), reading (阅读 yuèdú), and writing (写作 xiězuò) (Rajali et al., 2023; Sakti, 2021). These skills are vital for effective communication in the language. Tarigan (2019) also emphasizes the importance of vocabulary mastery in achieving success in speaking. In other words, how well a person can communicate greatly relies on how well they grasp vocabulary (Pardede et al., 2022). If someone has a restricted vocabulary, it's probable that their capacity to convey and comprehend others' thoughts will be limited as well (Panjaitan et al., 2022). Having a strong vocabulary is essential for enhancing communication skills, whether it's speaking or writing (Anggasta, 2018; Hartatiningsih, 2022; Koropasi & Retnantiti, 2023; Wulansari & Biduri, 2021). However, building a vast vocabulary requires dedicated effort and memorization, which can be quite daunting for students (Munir, 2016; Setiawan & Wiedarti, 2020). Thankfully, the use

of various media platforms can greatly contribute to achieving educational objectives, particularly when it comes to learning new words. Language learning apps, textbooks, (Rosell-Aguilar, 2017), and other resources can serve as valuable tools for expanding vocabulary and promoting better comprehension. Consequently, incorporating suitable media into foreign language learning can be a viable solution for improving vocabulary acquisition (Saragih, 2022).

In Jakarta, there are several schools, both private and public, that have incorporated Mandarin into their curriculum starting from kindergarten. This is done to familiarize children with the language from a young age, especially if they come from a Chinese background. Interestingly, even families without Chinese heritage choose to enroll their children in these schools to learn Mandarin between the ages of 4-6.

Teaching young children a foreign language, such as Mandarin, can be quite challenging. It requires a teacher to be both skilled and creative (Qi, 2019; Yang & Welch, 2023). The goal of teaching Chinese to children aged 4-6 is to enhance their language abilities. It's important to introduce language skills to kids in this age group, as they are like sponges, absorbing information through listening, imitating, and eventually speaking.

Shakerian et al. (2016) discovered that enhancing students' motivation to learn can be accomplished by establishing a stimulating environment. Utilizing music, this stimulating environment can be fostered in the classroom as it adds a fun element to the context. Moreover, defining motivation is challenging as it varies for each individual. Children require personalized and group inspiration. Teachers foster and cultivate interest in English by motivating each student. The teacher not only motivates but also diversifies the dynamics of the classroom, promoting social interaction within the student group (Džanić & Pejić, 2016).

Listening to songs is a fantastic way to engage students in learning (Bsharat et al., 2021). Music has the power to captivate children's attention, and teachers can cleverly incorporate songs into lessons to make learning more enjoyable (Littleton, 2015). Songs not only introduce language patterns but also enhance listening skills, rhythm, and pronunciation. The best part is that students never seem to tire of listening to songs, making them a valuable tool in the classroom. Whether used as fillers, warm-ups, or the main focus of a lesson, songs create a lively and fun atmosphere that enhances the language learning (Džanić & Pejić, 2016).

Teachers generally have a positive perception of using music and songs in second-language classrooms (Tse, 2015). However, in practice, the use of music and songs seems to be infrequent (Ludke & Morgan, 2022). Despite this, applied researchers consistently recommend incorporating music-related activities, such as listening to songs, to teach new vocabulary or grammar (Degrave, 2019; Pavia et al., 2019). Nevertheless, many teachers view the use of music as merely a motivational and entertaining activity, providing students with a "break" from more demanding tasks where actual learning should take place (Zhang et al., 2023). However, it is important to recognize that songs and music can contribute significantly to language learning (Saragih, 2022), just as much as other more "serious" activities. Research has shown a clear connection between musical ability and language proficiency (Ribeiro Daquila, 2021). (Choi, 2021) explains that the "transfer effect" occurs between music and language, meaning knowledge

or skills acquired in one context can be applied to another. This term refers to the application of knowledge or skills from one context to another context or task.

On the other side, some studies suggest that singing songs may not offer more advantages for vocabulary learning when compared to simple repetition. (Baills et al., 2021) delved into the impact of listening to songs and singing versus rhythmically reciting lyrics on French pronunciation and vocabulary learning among 108 young Chinese adults. While singing songs helped with pronunciation, it did not outperform rhythmical recitation in terms of vocabulary recall. One possible reason for this could be the challenge of tackling an unfamiliar foreign language and melody simultaneously within a limited timeframe, which may hinder participants' vocabulary acquisition. In a different research, Davis & Fan (2016) examined the effects of a 15-session singing training program on vocabulary learning with 64 Chinese ESL kindergarten students. The students were exposed to singing, speaking, and control conditions (no treatment). The findings revealed that the singing condition did not show a significant difference in impact compared to the speaking condition, although both led to significantly greater improvements than the control condition. Heidari & Araghi (2015) conducted a study comparing the use of songs and pictures as instructional tools for vocabulary learning with 68 Iranian children learning English. The results of the post-test showed that children who were exposed to pictures performed better in vocabulary recall than those who were taught through singing songs.

According to this explanation, it can be concluded that incorporating music into education positively impacts students' vocabulary skills. By integrating music into teaching, teachers can find a fresh approach to enhance students' Chinese proficiency, ultimately leading to improved vocabulary skills. This study aims to examine the effectiveness of using song media in improving students' Chinese vocabulary. In addition, this study contributes to the existing literature by demonstrating the potential of song media in language learning, particularly in the context of the increasing popularity of Mandarin in Indonesia following the recognition of Chinese culture by the Indonesian government.

METHOD

This research uses quantitative research, which is an approach that deals with the size of the number in the form of numbers. This study uses an experimental method with a quasi-experiment design, which is a non-equivalent control group design. In this design, there are two groups, namely the experimental group and the control group, both of which are given the same test, namely the pre-test at the first meeting and the post-test at the last meeting. Researchers gave a pretest to determine students' writing ability before being given treatment.

The population in this study was Kinderfield School East Jakarta students, totaling 35 students. The sampling technique used by the author is non-probability sampling. The type of non-probability sampling used in this study is saturated sampling. According to Sugiyono (2017), saturated sampling is a sampling technique when all members of the population are sampled; this is done when the population is relatively small, less than 30, or the research wants to make generalizations with very small errors. Another term for the saturated sample is census, where all populations are sampled. The sample is part of the population Sugiyono (2017). The

samples of this study were class 4A, 19 students, as the experimental class and class 4B, 16 students, as the control class.

In collecting data in this study, researchers used the same written test for both groups (Experimental Group and Control Group) in the pre-test and post-test. The pretest was used to determine the ability of students before treatment. It aims to find out the students' vocabulary. The post-test was conducted after the treatment and was only for the experimental group. This aims to determine the increase in students' vocabulary given the same test as the pre-test. Then, this post-test is used to determine whether the music-listening approach is effective in increasing students' Chinese vocabulary.

Data analysis is the process of systematically searching and compiling data obtained from interviews, field notes, and other materials so that it can be easily understood and the findings can be informed to others (Sugiyono, 2013). Data analysis was conducted using quantitative experimental techniques. This study uses validity, reliability, normality test, Homogeneity test, and hypothesis testing using the Independent Sample Test.

After evaluating student achievement, the researcher utilized IBM SPSS Statistics version 22 software to statistically analyze and present the data in the discussion and findings chapter. Furthermore, the researcher conducted an independent sample t-test by calculating statistics in accordance with the t-test formula and utilized IBM SPSS Statistics version 22 to compare the average student achievement in the two groups in this study, namely the experimental group and the control group.

Data collection techniques were conducted using documentation, interviews, and tests. The documentation technique was used to obtain the necessary information, such as the syllabus, list of names, and number of students who became respondents. The interview technique used in this research is a structured interview. In structured interviews, researchers already know exactly what information they want to extract from the interviewees. The test technique in this study had two tests, namely at the beginning of the study (pretest) and the end of the study (posttest). A pretest was carried out before treatment or treatment. At the same time, the posttest is carried out after treatment or treatment. Pretests are used to determine the ability of students before treatment, and posttests are used to determine the results of the treatment carried out by researchers. This test will previously be tested first to determine reliability.

The two mean difference tests are used to test for differences in student learning outcomes between experimental and control classes that are not related to each other. A T-test was conducted using SPSS. The menu used is Analyze - Compare Means - Independent Samples T-test to find out the results by looking at the Sig value (2-tailed). The hypothesis used is as follows:

Ho: There is no difference between the Chinese vocabulary skills of control class students and the Chinese vocabulary skills of experimental class students.

Ha: There is a difference between the Chinese vocabulary skills of control class students and the Chinese vocabulary skills of experimental class students. The test criteria is Ho accepted if t table ≤ t count ≤ t table and Ho rejected if t count > t table. Based on

significance, Ho is accepted if the significance value is > 0.05, and Ho is rejected if the significance value is < 0.05.

RESULTS AND DISCUSSION

Results

Pre-test and Post-test scores of students in the experimental group.

Table 1. Pre-test and Post-test of Students in the Experimental Group

Descriptive Statistics				
	Pre-test	**Valid N (listwise)**	**Post-test**	**Valid N (listwise)**
N	19	19	19	19
Minimum	62,70		78,70	
Maximum	93,30		100,00	
Mean	76,568		95,157	
Std. Deviation	9,235		6,430	

Source: Processed Data, 2023

According to the analysis of the data provided (in Table 1), the initial test scores for the experimental group ranged from 62.70 to 93.30, with an average score of 76.568 and a standard deviation of 9.235. After the intervention, the post-test scores ranged from 78.70 to 100.00, with an average score of 95.157 and a standard deviation of 6.430. These descriptive statistics clearly indicate that the students in the experimental group showed significant improvement from the pre-test to the post-test.

Pre-test and Post-test Scores of Students in the Control Group

Table 2. Pre-test and Post-test of Students in the Control Group

Descriptive Statistics				
	Pre-test	**Valid N (listwise)**	**Post-test**	**Valid N (listwise)**
N	16	16	16	16
Minimum	59,30		70,70	
Maximum	87,30		96,70	
Mean	74,412		89,412	
Std. Deviation	7,060		6,980	

Source: Processed Data, 2023

According to the data analysis provided (in Table 2), the control group's pre-test has a minimum value of 59.30 and a maximum value of 87.30. The average is 74.412, with a standard deviation of 7.060. On the other hand, the control group's post-test has a minimum value of 70.70 and a maximum value of 96.70. The average is 89.412, with a standard deviation of 6.980.

Table 3. Independent Sample T-Test Data Analysis

			Equal variances assumed	**Equal variances not assumed**
Post-test	Levene's Test for Equality of Variances	F	,241	
		Sig.	,627	
	t-test for Equality of Means	t	2,533	2,514
		df	33	30,933
		Sig. (2-tailed)	,016	0,17

	Mean Difference		5,745	5,745
	Std. Error Difference		2,268	2,285
	95% Confidence Interval of the Difference	Lower	1,129	1,084
		Upper	10,360	10,406

Source: Processed Data, 2023

The results in Table 3 indicate that there is a mean difference of 5.745 in post-test scores between the student groups, with a significance level of 0.016. As 0.016 is less than 0.05, it suggests a notable variance in vocabulary scores between the groups. Consequently, it demonstrates that students in the experimental group showed greater improvement compared to those in the control group. The results of this study indicate that Ha is accepted, which means that there is a difference between the Chinese vocabulary skills of control class students and the Chinese vocabulary skills of experimental class students. It can be concluded that developing the Chinese vocabulary ability of the experimental class after being treated using song media has increased significantly. Chinese song media is a learning media that teachers can apply by singing in class. The song media applied by researchers aims to eliminate students' boredom with learning activities, increase students' activeness and motivation to learn in class and help students understand Chinese material. Therefore, this media can be said to be a refreshing medium; in other words, this media aims to overcome students' boredom in the learning process and to increase students' understanding through song lyrics and singing.

Discussion

According to the study findings, it is evident that the average post-test scores for Chinese speaking skills among students in the experimental class are higher compared to the control class (95.157 > 89.412). These mean results indicate a notable disparity in the vocabulary of students who were taught using song media versus those who were taught using conventional methods.

The hypothesis testing results reveal that the t-value exceeds the t-table value at the 0.05% significance level. Specifically, the tcount for the final Chinese language development (post-test) is 2.533, with a significance value of 0.016. This indicates that the t-value (2.533) surpasses the t-table value (2.032), while the significance value of 0.016 is lower than the 5% significance level (0.016 < 0.05). Hence, it can be inferred that there is a notable difference in Mandarin language skills development at Kinderfield School East Jakarta between students taught with song media and those taught with conventional methods. The use of songs as a learning tool has proven to be highly effective in enhancing Chinese language proficiency among students.

The data analysis revealed that the mean value of the experimental class surpasses that of the control class, indicating a significant improvement in Chinese vocabulary ability after utilizing song media treatment. This is further supported by the t-test results, where the t-value exceeds the t-table, and the significance value is less than 0.05. Recent research has highlighted the advantages of incorporating songs into foreign language vocabulary learning (Busse et al., 2018). Singing has been proven to enhance vocabulary recall in children, especially in those who are recent immigrants (Good et al., 2015). Additionally, studies have shown that participants who engaged in singing remembered more words compared to those who were in a reading group

(Ludke et al., 2014). Furthermore, research focusing on adults revealed that singing aids in vocabulary learning more effectively than repetition or rhythmic recitation (Christiner et al., 2022). Hence, a positive correlation between singing ability and foreign language pronunciation skills, suggesting that including singing sessions in language learning could enhance pronunciation abilities.

In general, the results offer solid backing for the efficacy of incorporating songs into foreign language vocabulary acquisition and propose that this technique can enhance current learning approaches with favorable outcomes. The utilization of song media in Chinese language instruction at Kinderfield School East Jakarta can be regarded as a successful approach to enhancing students' oral proficiency in the language. This is reinforced by the discovery that learners in the experimental class, who were instructed using song media, demonstrated a noteworthy enhancement in their Mandarin speaking abilities according to the post-test outcomes in comparison to the control class group, who were taught using traditional methods.

CONCLUSION

The findings revealed that students in the experimental group made notable progress in their Chinese speaking abilities, as evidenced by the post-test results, in comparison to the control group. The data analysis demonstrated that the average score of the experimental group was higher than that of the control group. Moreover, the results of the hypothesis test indicated a significant disparity in the Chinese-speaking vocabulary of students between the group taught using song media and the group taught through traditional methods. Therefore, it can be concluded that the utilization of song media as a teaching method effectively enhances Chinese language proficiency at Kinderfield School East Jakarta. This conclusion is further supported by the substantial difference in mean scores between the two groups, as well as the t-test results, which confirm a significant improvement in Chinese vocabulary within the experimental class.

Teaching the Chinese language through songs has proven to be effective. It is suggested that this approach be kept in the curriculum by creating engaging materials, offering teacher training, evaluating progress regularly, promoting teamwork among teachers, and engaging parents and stakeholders in supporting the learning process. Additionally, enhancing students' speaking skills through different techniques is crucial, and conducting further research can provide insights into the lasting benefits of using songs in teaching the Chinese language.

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