International Journal of Science and Research (IJSR)
ISSN: 2319-7064
Index Copernicus Value (2016): 79.57 | Impact Factor (2017): 7.296

The Effect of *Karuta* Game Method on the Introduction to Various Musical Instruments in Third-Year Primary School Students

Rizdkika Gusti Putra S. Hadi

Universitas Negeri Surabaya, Pascasarjana Pendidikan Seni Budaya, Surabaya, Indonesia

Abstract: ***Karuta game is a learning method using two types of cards, one is for reading (yomifuda) and the other for grabbing (torifuda). The aim of this research is to discover the effect of Karuta game method on the introduction to various musical instruments, and to identify the students' responses to the selected learning method. This research used True Experimental Design as quantitative approach. The selected populationwasthird-grade students from Unesa Elementary Lab School, class III-A (experimental group) and class III-B (control). We performedpre-test and post-test evaluations,andquestionnairesusing language that can be easily understood by the students. The results revealedthat the difference between the two meansfrom the control and the experimental groupsshowed 30 students strongly agreed the use of Karuta game was an interesting andfun learning method.Students felt that the Karuta game method may help them overcome the difficulty of memorizing the musical instruments.***

Keywords: Influence, Karuta Game, Active Learning Method, Introduction to Musical Instruments

1. Introduction

The education of music art is an art activity that can be heard, enjoyed perceived through the presentation of music, whether in form of vocals or instrumental musical performance. All forms of music represent an integral part of the aesthetic value of art. In general, man has acquired the ability tocreate art since birth. Intellectuality and human anatomy are the basic modalities in practicingart, however, these inborn abilities are not the key factors. Memorizing the names of musical instruments is fundamental in learning music. Teachers arechallenged to think creatively on how toteach students musical instruments to counter difficulties. Such difficulties lie in the type or class of a musical instrument, and the technique of playing. In addition, memorizing musical instruments that are alike in type and technique of playing but have different names is another difficulty experienced by some students.

Cultural Arts and Creativity subject has been implemented in the national curriculum in Indonesia. This indicates that the government recognizes the importance of initiating art activities from an early age. Learning Cultural Arts and Creativityhas been able toenhance the creativity of children, as revealed by Musbikin (2006:6). Creativity is the ability to present an idea, generate new connections, or unexpectedly, the ability to formulate concepts without memorizing, create new answers to existing questions, and create new questions that need answers. The subject of Cultural Arts and Creativityof third-grade students at Elementary Schools include music, dance, drama, and workshops. Each school has different art and cultural materials and workshops, depending on the teacher's resources.

The researcher held a pre-study in form of interviews with teachers at Unesa Elementary Lab School on February 1st, 2018, with the aim to identify the method of learning used by teachers in teaching. The researcher encountered a problem inthird-gradestudents who were studying arts and culture, particularly musical art. The lack of tools and supporting books is the main obstacle faced by the school, which was in Ketintang. Third-grade students perceived the subjectof arts and culture, especially the art of music,to be difficult to memorize and understand.

There has been extensive research on the effectiveness of learning tools using the Karuta game method. An example was proposed Student Activity Programat Gajah Mada University lead by ShaffiraMuna entitled*Tatepat: Perpaduan Permainan Jepangdengan Macapat Asthabrata* (Blending Japanese Games with *Macapat Asthabrata*), which successfully received funding from the Ministry of Research, Technology, and Higher Education in 2014 (referred from http//pkm.dirmawapage.ugm.ac.id). The program aimed to integrate local culture with foreign culture.*Karuta*, which was originally derived from Japanese *Haiku*, was replaced by *macapat* verses which originated from Java.

Based on the above, the researcher chose*Karuta*, a traditional game originated from Japan, as a learning method of introduction to various musical instruments. Findings will be presenttoed in form of a journal entitled "Effect of Using the *karuta* Game Method on the Introduction to Various Musical Instruments in Third-Year Primary School Students".

2. Method

A. Type of Research

The research useda quantitative method. According to Sugiyono (2009:7), it is categorized as quantitative research because the data is in numerical form and is analyzed using statistics.

B. Research Model

The type of experiment used in this research was True Experimental Design. This type of experiment is considered credible, as it meets the necessary requirements (Arikunto, 2010:125), namely setting up a group that is not exposed to

the chosen intervention (control group). This method reveals the relationship between two variables and other variables.

C. Research Subject

The population in this research was third-grade students from Unesa Elementary Lab School in Surabaya. Sampling was done by random sampling using a lottery. The result determined class III-Aas the control class and class III-B as the experimental class.

D. Data Collection

Data collection process in this study were as following: (1) Consulting with teachers from class III-A and III-B to allow the conduction of the research, (2) Requesting permission from the headmaster of Unesa Elementary Lab School to conduct research, (3) Conducting literaturereview to collect theories relevant to the research topic, (4) Preparing the research instruments, (5) Preparing cards to be used for *Karuta*game. There are 15 musical instruments in *Karuta* with two sets of cards. One set contains cards with a picture, while another set displays name of the musical instrument.

E. Data Analysis

There were several steps involved in analyzing the data, (1) Conducting normality test on control class and experiment class, to identify whether the obtained data from the study presentednormal distribution or not, (2) Determining the t-significance of control class and experimental class, to explore the effectiveness of each group, (3) Analyzing student's responses in the distributed questionnaire regarding the *Karuta*game method.

3. Results and Discussion

To answer the research question, we reviewed the results of pre-tests and post-tests taken by both groups. Prior to the analysis, we performed normality test on both groups to observe the normality of the frequency distribution of both data, which showed normal distribution. The data were analyzed using t-significance to observe the effectiveness of learning inboth classes by evaluating the differences inthe pre-test and post-testdata.

An analysis to compare the mean between the control class and the experimental class was performed. Hypothesis testing was done in accordance with predetermined criteria.

1. Normality Test for Experimental Class

Normality test was performed to test whether the data in the control class and experimental class werenormally distributed or not, hence, the analyzed data used to explore the effectiveness of learning in the control class and the experimental class could be implemented.

Table 1: Normality Test of Experimental Class

Class interval	Class limit	Z-Score	Outer limit	Surface Area	Fh	fo
	100,5	1,26	3962			
96-100				1139	3,41	10
	95,5	0,78	2823			
91-95				1644	4,93	3
	90,5	0,30	1179			
86-90				504	1,51	4
	85,5	-0,17	0675			
81-85				1747	5,24	6
	80,5	-0,65	2422			
76-80				1286	3,85	4
	75,5	-1,13	3708			
71-75				755	2,26	1
	70,5	-1,61	4463			
66-70				354	1,06	0
	65,5	-2,09	4817			
61-65				132	0,39	2
	60,5	-2,57	4949			

If calculated x^2<table x^2 then the data fulfills the criteria of a normal distribution. The result obtained was table x^2(1%, 7) = 18,5. The calculated x^2 = 2.61 <18.5,therefore, the post-testdata distribution from the experimental class did not deviate from the normal distribution.

2. Normality Test for Control Class

Table 2: Normality Test of Control Class

Class interval	Class limit	Z-Score	Outer limit	Surface Area	Fh	fo
	100,5	2,99	4986			
96-100				0037	0,11	3
	95,5	2,57	4949			
91-95				0107	0,32	5
	90,5	2,15	4842			
86-90				0251	0,75	7
	85,5	1,74	4591			
81-85				0525	7,5	7
	80,5	1,32	4066			
76-80				0907	2,72	7
	75,5	0,90	3159			
71-75				1280	3,84	1
	70,5	0,49	1879			

The criteria for normally distributed data is when calculated x^2< table x^2. The result obtained was table x^2(1%, 5) = 15,1. The calculated x^2 = 6, 29 < 15,1, hence,the post-test data distribution from control class did not deviate from the normal distribution.

3. Data Analysis of Experimental Class

Prior to giving the material on music instrument names using *Karuta* game method, the researcher held pretest that aimed to assess the students' prior knowledge. After intervention, the researcher held post-test to evaluate the result following the intervention.

Table 3: Learning Effectiveness in Experimental Class

Attd. No.	Pre-Test	Post-test	D	X_d	Xd^2
1	50	100	50	18	324
2	50	100	50	18	324
3	50	100	50	18	324
4	55	65	10	-22	484
5	60	100	40	8	64
6	45	80	35	3	9
7	65	90	25	-7	49
8	55	85	30	-2	4
9	65	80	15	-17	289
10	65	100	35	3	9
11	45	80	35	3	9
12	50	85	25	-7	49
13	30	85	55	23	529
14	45	75	30	-2	4

15	70	95	25	-7	49
16	50	95	45	13	169
17	45	65	20	-12	144
18	60	80	20	-12	144
19	50	90	40	8	64
20	55	85	30	-2	4
21	75	90	15	-17	289
22	80	100	20	-12	144
23	80	95	15	-17	289
24	75	100	25	-7	49
25	65	100	35	3	9
26	55	90	35	3	9
27	60	100	40	8	64
28	80	100	20	-12	144
29	45	85	40	8	64
30	35	85	50	18	324
Total	**1710**	**2680**	**960**		**4430**

Description:
d : the difference calculated between pre-test and post-test
X_d : deviation of each subject
Xd^2 : the squared value of each subject

According to the predetermined criteria, the calculated t-value (experimental class) = 14,2> t (table) = 2,04. Therefore, H_o was rejected and H1 was accepted, indicatinga significant difference between M_{pre} and M_{post} from the experimental class. This analysis showed that the learning method using *Karuta* game was effective.

4. Data Analysis of Control Class

Prior to being given material on musical instrument names using direct instruction learning, the researcher held pre-test to assess the students' prior knowledge. After learning by direct instruction, the researcher held post-test to evaluate the result of learning.

Table 4: Learning Effectiveness in Control Class

Attd. No.	*Pre-Test*	*Post- Test*	*D*	X_d	Xd^2
1	50	80	30	8,84	78,14
2	65	85	20	-1,16	1,34
3	70	90	20	-1,16	1,34
4	65	80	15	-6,16	37,94
5	70	75	5	-16,16	261,14
6	65	85	20	-1,16	1,34
7	45	85	40	18,84	354,94
8	85	95	10	-11,16	124,54
9	45	80	35	13,84	191,54
10	70	95	25	3,84	17,74
11	45	90	45	23,84	568,34
12	80	100	20	-1,16	1,34
13	70	80	10	-11,16	124,54
14	70	95	25	3,84	17,74
15	75	90	15	-6,16	37,94
16	65	85	20	-1,16	1,34
17	50	80	30	8,84	78,14
18	75	90	15	-6,16	37,94
19	50	100	50	28,84	831,74
20	70	90	20	-1,16	1,34
21	65	85	20	-1,16	1,34
22	65	95	30	8,84	78,14
23	75	80	5	-16,16	261,14
24	75	80	5	-16,16	261,14
25	60	85	25	3,84	17,74
26	85	95	10	-11,16	124,54
27	85	100	15	-6,16	37,94
28	80	90	10	-11,16	124,54
29	70	90	20	-1,16	1,34
30	60	85	25	3,84	17,74
Total	**2000**	**2635**	**635**		**3696**

Based on the predetermined criteria, the obtained t-value (control class) = 10,3> t (table) = 2,04. Therefore, H_o was rejected and H1 was accepted, revealinga significant difference betweenM_{pre} and M_{post} in control class. The analysis showed that learning process in the control class was effective.

5. Data Analysis in Experimental Class and Control Class

This research was conducted using True Experimental Design that involved two groups which were compared and analyzed to identify the difference in the result of students' learning.

Table 5: Learning Effectiveness of Control Class and Experimental Class

Control Class				Experiment Class				
Attd. No.	*Pre-Test*	*Post-Test*	X	X^2	*Pre-Test*	*Post-Test*	Y	Y^2
1	50	80	30	900	50	100	50	2500
2	65	85	20	400	50	100	50	2500
3	70	90	20	400	50	100	50	2500
4	65	80	15	225	55	65	10	100
5	70	75	5	25	60	100	40	1600
6	65	85	20	400	45	80	35	1225
7	45	85	40	1600	65	90	25	625
8	85	95	10	100	55	85	30	900
9	45	80	35	1225	65	80	15	225
10	70	95	25	625	65	100	35	1225
11	45	90	45	2025	45	80	35	1225
12	80	100	20	400	50	85	25	625
13	70	80	10	100	30	85	55	3025
14	70	95	25	625	45	75	30	900
15	75	90	15	225	70	95	25	625
16	65	85	20	400	50	95	45	2025
17	50	80	30	900	45	65	20	400
18	75	90	15	225	60	80	20	400
19	50	100	50	2500	50	90	40	1600
20	70	90	20	400	55	85	30	900
21	65	85	20	400	75	90	15	225
22	65	95	30	900	80	100	20	400
23	75	80	5	25	80	95	15	225
24	75	80	5	25	75	100	25	625
25	60	85	25	625	65	100	35	1225
26	85	95	10	100	55	90	35	1225
27	85	100	15	225	60	100	40	1600
28	80	90	10	100	80	100	20	400
29	70	90	20	400	45	85	40	1600
30	60	85	25	625	35	85	50	2500
	2000	2635	635	17125	1710	2680	960	35150

Description:
X : standard deviation of the control class
X2 : the squared value of standard deviation of the control class
Y : the standard value of the experimental class
Y2 :the squared value of standard deviation of the experimental class

The result of t-test was 3,55> t (0,01,58) = 2,39 > t (0,05,58) = 1,67. Therefore, H_o was rejected, and H1 was accepted, indicatinga significant difference in the effectiveness in

introducing various musical instruments between students who learned using *Karuta* and students who learned using PowerPoint slide.

T-test value acquired was higher than t-table. Therefore, *Karuta*game method had a positive influence on the ability in naming Japanese musical instruments in experimental class.

6. Data Description on Students' Responses to Questionnaire

Questionnaire data quantified responses from Class III-A students regarding the intervention. It consisted of five set of questions focused on the student's ability to understand musical instrument naming and student's motivation for learning.Analysis of the questionnaire data was calculated based on the following scale: 4 = "strongly agree", 3 = "agree", 2 = "slightly disagree", 1 = "disagree".

The total number of data acquired was 30, in accordance with the total number of students from class III-A. All students who participated in the experiment filled in the questionnaire. Data analysis was retrieved by calculating the frequency of each response of the questionnaire using the following formula:

$$P = \frac{f}{n} \times 100\%$$

Description:
P : percentage
F : frequency
n : number of respondents

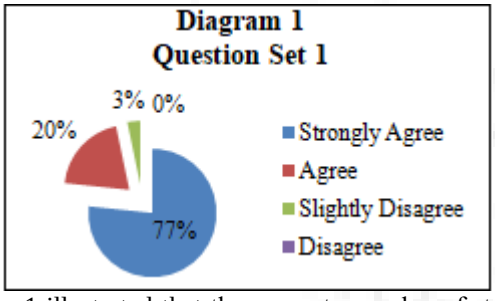

Diagram 1 illustrated that the percentage value of students' responses to set of questions number 1 showed the learning process of naming musical instruments using *Karuta* game method was easily understood.

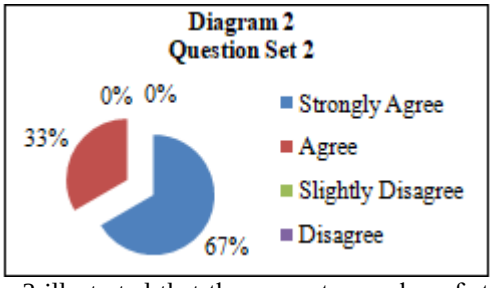

Diagram 2 illustrated that the percentage value of students' responses to set of questions number 2showedthe learning process of naming musical instruments using *Karuta* game method was interesting and fun.

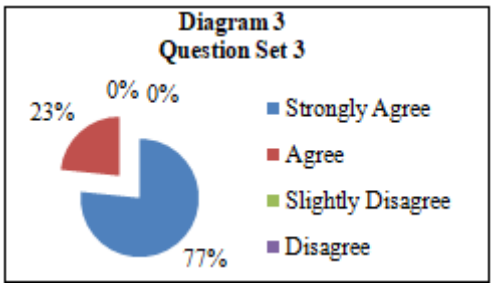

Diagram 3 illustrated that the percentage value of students' responses to set of questions number 3showed the learning process of naming musical instruments using *Karuta*game method helped to memorize and understand names and types of musical instruments.

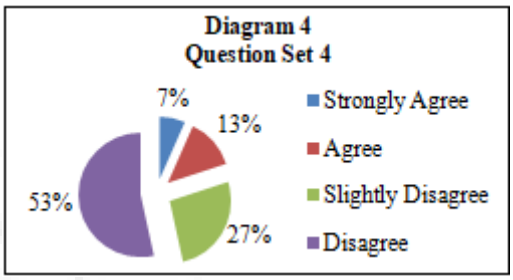

Diagram 4 illustrated that the percentage value of students' responses to set of questions number 4showed responses regarding difficulties in memorizing and understanding names of musical instruments experienced after using *Karuta*game method.

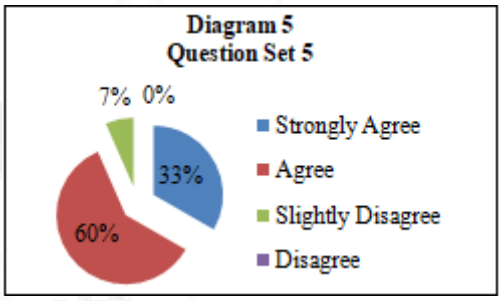

Diagram 5 above illustrated the percentage value of students' responses to set of questions number 5, which showed responses regarding the increase in the ability to memorize and understand names of musical instruments following the use of *Karuta* game method.

4. Conclusion

The research entitled "The Effect of Using the Karuta Game as Method of Introduction to Various Musical Instruments in Third-Year Primary School Students" was completed. Based on the results and discussion, the answer to the research question is the following:

Implementing the *Karuta*game method gave a positive effect on Introduction to Various Musical Instruments for third-year primary students atUnesa Lab. School,asrevealed by the result of the quantified data. There was a difference between the two means (control class and experimental class) and resulted 1,67< 2,39 < 3,55.

Implementing *Karuta*game method for The Introduction to Various Musical Instruments received positive responses from students,9999999999 as shown by the analysis on questionnaires distributed to students, illustrated in table 4.12 and diagram 4.1-4.5, demonstrating67% from 30 students strongly agreed that the *Karuta*game method was interesting and fun. Furthermore, based on the Likert scale scores, the findings resulted in 80,78% of responses included in the strong category (60-80%). This showed that students agreed to the implementation of *Karuta* game method.

References

[1] Adi, TutiTarwiyah, "Perbedaan Efektivitas Antara Penggunaan Notasi Balokdengan Notasi Angkadalam Meningkatkan Keterampilan Memainkan Rekorder Sopran Pada Mahasiswa Pendidikan Anakn UsiaDini (PAUD) Universitas Negeri Jakarta, Jurnal Harmonia Universitas Negeri Semarang Vol. 04, No.02., in press.
[2] Ahmadi, H. Abu danDjaliel, Maman Abl. 1997.*StrategiBelajar Mengajar*. Bandung: CV. PustakaSetia
[3] Arikunto, Suharsini. 2010. *Prosedur Penelitian Suatu Pendekatan Praktek.EdisiRevisi V*. Jakarta: PT. RinekaCipta.
[4] Banoe, Pono. 2003. *KamusMusik*. Yogyakarta: Kanisius,
[5] Bull, David. 1996. *Karuta: Sports or Culture?*, (Online) (http://www.asahi-net.or.jp/, diaksespada 6 januari 2018)
[6] Djohan.2016. *PsikologiMusik*. Yogyakarta:Indonesia Cerdas
[7] Indriana, Dina. 2011. *MengenalRagam Gaya Pembelajaran Efektif*. Jakarta: Diva Press
[8] Musbikin, Imam. 2006. *Mendidik Anak Kreativala Einstein*. Mitra Pustaka.Yogyakarta
[9] Raharja, Budi, "Efek Musikterhadap Prestasi Anak Usia Prasekola: Studi Komparasi Efek Lagu Anak, Dolanan, Jawa, danMusikKlasik."JurnalCakrawalaUniversitasNegeri Yogyakarta Vol. 13, No. 02., in press
[10] Sanjaya, Wina. 2010. *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Kencana
[11] Semiawan, Conny. 2008. *Belajardan Pembelajaran Prasekolahdan Sekolah Dasar*. Indonesia: Indeks
[12] Siregar, Syofian. 2014. *StatistikParametikuntukPenelitian*
[13] *Kuantitatif: DilengkapidenganPerhitungan Manual danAplikasi SPPS Versi 17*. Jakarta: BumiAksara
[14] Sudjiantodan Ahmad Dahidi. 2004. *Pengantar Linguistik Bahasa Jepang*. Jakarta: Kesaint Blanc
[15] Sugiyono. 2009. *Metode Penelitian Pendidikan (Pendekatan*
[16] *Kuantitatif, Kualitatif, dan R&D)*. Bandung: Alfabeta
[17] Sukmadinata, Nana Syaodih. 2010. *Metode Penelitian Pendidikan.*
[18] Bandung: RemajaRosdakarya Suyatno. 2005. *Permainan Pendukung PembelajaranBahasadan Sastra*. Jakarta: PT. Grasindo
[19] Suyatno. 2009. *MenjelajahPembelajaranInovatif*. Sidoarjo: Masmedia BuanaPustaka