



The Influence of Picture Card Games on the Emotional Intelligence of Children Aged 5-6 Years

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ABSTRACT

This study aims to determine the effect of a picture card game on increasing emotional intelligence in children aged 5-6 years at TK Citra Sakti I Cangkringan Sleman . The methodology used in this study was a pretest-posttest one group design experiment. The research sample consisted of 10 children aged 5-6 years at TK Citra Sakti I Cangkringan Sleman. Data collection techniques were through using emotional intelligence test instruments before and after treatment. The data obtained were analyzed using a paired sample T-test to compare differences in emotional intelligence scores between before and after treatment. The results showed that there was a significant increase in the average score of emotional intelligence with a significance value obtained through the paired sample T-test which was $0.001 < 0.05$. From the results of this study, it can be concluded that picture card games can be an effective alternative in increasing emotional intelligence in early childhood. However, further research is still needed to broaden understanding of the effectiveness of picture card games in increasing the emotional intelligence of children aged 5-6 years in different environments.

Keywords: Emotional Intelligence, Picture Card

1. INTRODUCTION

Age 5-6 years is period important development _ in life child , where are they experience growth and change emotional significance. In period here , child start Study recognize emotion in self yourself and others as well learn method manage it . that process can called as a maturity process intelligence emotional child . Intelligence emotional, is one intelligence only discovered at the start in 1990 by Salovey and Mayer. Intelligence emotional related with ability somebody in solution related problems with emotion like understand emotion self and others, understanding expression emotions and managing emotion [1]. Intelligence emotional consists from four branch . First branch is perception emotional , showing ability For identify and express emotion in a way accurate and discriminating expression feeling. Second branch is assimilation emotional , showing priority thinking emotion with direct attention to information important . Third branch is understanding emotional, which shows ability labeling and recognizing emotions between words and emotions That yourself . Fourth branch is management emotion , show ability For still open to pleasant feelings and not

fun , for involved or release self in a way reflective, monitoring, and managing emotion in relationship with self yourself and others. Fourth branch works in a way hierarchical with perception emotion Act as the most basic branch or bottom , and management emotion as most complex branch or top (Mayer, Salovey, Caruso, & Sitarenios , 2001) in [2]. Goleman in [3] prove that intelligence emotional influence a number of aspect life somebody like function social , educational , success in work as well as health and well-being .

Importance intelligence emotional in a number of aspect life man Not yet balanced with development intelligence emotional since early. Intelligence emotional No lowered through genetics, but is strongly influenced by context social and environmental . A number of study prove that intelligence emotional can trained in adolescence and adulthood through lecture daily , exercise or discussion group during a number of Sunday [4]. Stimulation For intelligence emotional suboptimality in children age early child will give rise to a number of problem like behavior aggressive , disobedient , timid , anxious , low self as well as lack of affection [5].

Problems that arise consequence low intelligence emotional in children 5-6 years old influenced by several factors, one of which is that is lack of parental awareness [6] and teachers regarding importance notice aspect intelligence emotional in children . This thing result lack of stimulation and development intelligence emotional in children age that . Besides that , several other factors such as change style life , demands complex social and environmental conditions [7] as well as dependency technology like games [8] also has potential influence development intelligence emotional in children 5-6 years old .

Research results measurement intelligence emotional in children 5-6 years old in Bantul Regency shows that 49% of children Still show intelligence low emotionality [9]. Survey research conducted by [10], also found that generation moment This more Lots experience difficulty emotional and social like tend more lonely, mood, easy anxious, impulsive or aggressive compared to with generation before . Based on studies the researcher 's introduction do through interview nor observations at Citra Sakti I Kindergarten still there is a number of experienced child difficulty in manage emotion they with good . That thing seen from level tending aggressiveness high , difficult children focus within learning as well as how difficult it is child in express emotion they with right , as well difficulty in understand other people's feelings . Based on interview matter the caused by a lack of stimulation provided by parents as well as teachers as well Lots children who are addicted to online games with some games contain violence . Therefore that is necessary a development program that can help increase intelligence emotional children at Citra Sakti I Kindergarten.

Development program implemented by researchers _ that is game card illustrated . Learning based game depicted as “ learning through game than Study play ” (Wu et al. 2012). Through game child can produce knowledge them , share experience learn , and train Skills For survive in the real world (De Freitas 2006) in [11]. Game No only can fill in time free , but also can give rise to change knowledge , attitudes , behavior and skills [12]. Game card pictorial is modification game card with objective For develop intelligence emotional child . With game card expected child will recognize emotion yourself and how method manage emotion self . This thing in line with research conducted by [13] stated that game guess picture capable increase believe self child Where aspect believe self is one part from intelligence emotional . Research conducted by (ELISTIKA et [14]also shows that the medium of drawing capable increase intelligence emotional in a way significant . That thing show that the media as well as game card pictorial capable increase intelligence emotional

Study This aim For know influence game card pictorial to enhancement intelligence emotional child aged 5-6 years at Citra Sakti I Kindergarten. Research This expected can give contribution for development of educational programs that can increase intelligence emotional child age early . Besides that , research This expected can give useful information _ for parents and teachers in help child they develop intelligence emotional .

2. RESEARCH METHODS

Method research used _ that is method quantitative study experiment pseudo (*quasi experiment*) with design *one group pretest-posttest design* (Sugiyono, 2019) . Study This give description about influence from the independent variable (game card pictorial) against variable bound (intelligence emotional). Population study This is all over child 5-6 years old at Citra Sakti I Kindergarten, totaling 10 children . Researcher take sample use Saturated sampling technique . Sampling fed up is method taking sample with notes all over element population is created as sample [16]. So, subject study that is all over child 5-6 years old at Citra Sakti I Kindergarten, totaling 10 children . Instrument study This use Instrument Intelligence Emotional Age 5-6 years [17] with mark validity 0.000 where No There is items that pass more factor loading small from 0.30 (<0.30) and more big from -0.30 (>-0.30) so can stated valid. For mark stratified alpha reliability 0.799 > 0.700 so can is said to be a reliable instrument . Construct instrument intelligence emotional 5-6 years old consists from dimensions knowledge emotion , expression emotions and regulation composed emotions _ of 40 items. Procedure study held through one group pretest-posttest design scheme with two treatments in class experiment . Procedure study can explained as following :

1. PreTest

Pretest was carried out with using intelligence instruments emotional For 5-6 years old against 10 children in Kindergarten class B Citra Sakti I. PreTest done To use see level intelligence emotions in children of Kindergarten B Citra Sakti I.







2. Treatment

Treatment or treatment in class experiment done use game card illustrated . Card pictorial designed For develop intelligence emotional child with load introduction emotion basic and some incident For stimulating expression and regulation emotion . Card pictures used _ as following :

Table 1. Cards Introduction Basic Emotions

			
LIKE	AFRAID	ANGRY	SAD

Table 2. Cards Incident

			
MANAGING NEGATIVE EMOTIONS	 SOSPONIBILI	TOLERANCE	 EMPATHY
MOTIVATE YOURSELF			

Treatment uses game card pictorial held in two treatments_ First use card introduction emotion basic and second treatment use card event . Steps _ in game card namely :

- a. Teacher prepares card introduction emotion base and card incident with size A5.
- b. Collect child in circle big and the teacher gives One object For played alternately , then invite child For sing A song . When the song finished , the child is holding it object requested For take card prepared by the teacher and narrated to other friends are related with image obtained . _
- c. When round introduction emotion basic , besides tell children are also requested For express in accordance with acquired emotions . _
- d. Game card pictorial can done at the time activity opening .

3. PostTest

Post test done in class experiment after given treatment. Post test done For see enhancement intelligence emotional in children .

Data analysis techniques were carried out with carry out a normality test . Normality test useful know whether the data is normally distributed or no . Normality test with

taking decision on terms as following : If value significance (sig) > 0.05 then the data is normally distributed . If value significance (sig) < 0.05 then the data is not normally distributed Hypothesis test in study This use *Paired Sample T-Test* . There are condition For do this test i.e. data must be declared normal. Test this useful For know is there is significant influence _ intelligence emotional before and after done *treatment* . Basis for taking decision on terms as following : If value significance (2-tailed) < 0.05, then Ho is rejected and Ha is accepted . If value significance > 0.05, then Ho is accepted and Ha is rejected .

3. RESULTS AND DISCUSSION

Study done to children 5-6 years old in class B at Citra Sakti I Kindergarten with total 10 children . Implementation pretest and posttest done in a way take turns , then study give a number of question to child . PreTest using intelligence instruments emotional already _ tested its validity and reliability and consists of 40 items matter . Following This score pretest and posttest intelligence emotional children 5-6 years old at Citra Sakti I Kindergarten:

Table 3. Pretest Post Test Average

No	Pre Test	Post Test
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1	82.5	108.6
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Data Analysis

1. Normality Test

Normality test useful For prove the *pre-test* and *post-test* data obtained in influence *treatment* game

card pictorial to ability understanding geometry child 5-6 years old normally distributed or no . Following results from the normality test use *IBM SPSS 25 software*

Tabel 4. Uji Normalitas

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.217	10	.199	.900	10	.220
PostTest	.148	10	.200*	.963	10	.816

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Taking decision based on from *Shapiro-Wilk* because sample study A little or below 100. Based on The results above are visible mark significance (sig) > 0.05 so can concluded that the data is normally distributed then can Hypothesis testing is carried out

2. Hypothesis Testing

Test This useful For know is there is significant influence _ intelligence emotional before and after done *treatment* . Following results from *Paired Sample T-Test* use *IBM SPSS 25 software* :

Tabel 5. Paired Samples Statistics

Pair 1		Mean	N	Std. Deviation	Std. Error Mean
		Pretest	82.50	10	11.530
	PostTest	108.60	10	4.575	1.447

There is average value (mean) after given treatment use game card pictorial more big compared

to with before given treatment using game card pictorial , so can proven that game card picture can increase intelligence emotional child 5-6 years old .

Tabel 6. Paired Samples Test

Pair	Pretest - PostTest	Paired Differences					t	df	Significance	
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference				One-Sided p	Two-Sided p
					Lower	Upper				
1		-26.100	9.433	2.983	-32.848	-19.352	-8.749	9	.001	.001

Based on The results of the *Paired Sample T-Test* above are available seen that mark significance is 0.001 < 0.05, then Ho is rejected and Ha is accepted .

This thing show that there is significant difference _ in score intelligence emotional between before and after children do game card illustrated . In other words, a game card pictorial capable increase intelligence emotional child aged 5-6 years at Citra Sakti I Kindergarten. These results also support study earlier that showed that game can become effective way _ For increase intelligence emotional child age early . Research conducted _ by [13] show that game guess picture capable increase believe

self child Where aspect believe self is one _ part from intelligence emotional . Research conducted by (ELISTIKA et [14]also shows that the medium of drawing capable increase intelligence emotional in a way significant . That thing show that the media as well as game card pictorial capable increase intelligence emotional .

By Specific game card pictorial seldom used For develop aspect social emotional child . Game card pictorial in a number of study used For increase ability language and mathematics child . Like research conducted by ([18]) shows that card media number

pictorial capable increase intelligence logic mathematics child 5-6 years old . Research conducted by ([19]and [20] show that card media pictorial can develop Language child especially in children age early . Based on research previous intelligence emotional developed through play sociodrama , telling a story nor game social others . Research conducted by [21] show that game board can stimulating intelligence emotions in children. Other research shows that intelligence emotional can improved through learning models cooperative [22] specifically for introverted children .

Besides that's the result study this also delivers implications practical for teachers and parents in choose method or technique teaching that can be done help increase intelligence emotional in children age early .

However , it is necessary remembered that study This conducted on a limited sample , namely children aged 5-6 years at Citra Catur Sakti I Kindergarten . Therefore that is necessary study more carry on with more samples _ wide and from different environment _ For ensure generalization results research . Besides that , research you can do it next too expand use of other media game card pictorial in increase intelligence emotional child age early .

CONCLUSION

Based on results research carried out , can concluded that game card pictorial effective in increase intelligence emotional in children 5-6 years old at Citra Sakti I Kindergarten. This seen from the results of the paired sample T-test show that there is significant improvement _ in average score value intelligence emotional in children after follow game card illustrated .

In study this , researcher use game card designed pictures _ special For increase intelligence emotional in children consisting _ from four card introduction emotion basic and seven card event . Game the consists from 2 sessions activity play is carried out during two week . During period that , children follow game card pictorial with teacher guidance . With exists significant improvement _ in intelligence emotional in children after follow game card picture , yes concluded that game card pictorial can become effective alternative _ in increase intelligence emotional in children age early . However , research more carry on Still required For expand understanding about effectiveness game card pictorial in increase intelligence emotional child 5-6 years old in a different environment.

BIBLIOGRAPHY

- [1] J. D. Mayer, D. R. Caruso, and P. Salovey, "The ability model of emotional intelligence: Principles and updates," *Emot. Rev.*, 2016, doi: 10.1177/1754073916639667.
- [2] C. Prentice, S. D. Lopes, and ..., "Emotional intelligence or artificial intelligence—an employee perspective," *J. Hosp. ...*, 2020, doi: 10.1080/19368623.2019.1647124.
- [3] S. E. Rivers, I. J. Handley-miner, J. D. Mayer, and D. R. Caruso, "29 Emotional Intelligence," pp. 709–735, 2019.

- [4] M. H. E. M. Browning, D. Li, M. P. White, G. N. Bratman, D. Becker, and J. A. Benfield, "Association between residential greenness during childhood and trait emotional intelligence during young adulthood: A retrospective life course analysis in the United States," *Health Place*, vol. 74, p. 102755, 2022, doi: <https://doi.org/10.1016/j.healthplace.2022.102755>.
- [5] S. Sukatin, N. Chofifah, T. Turiyana, M. R. Paradise, M. Azkia, and S. N. Ummah, "Analisis Perkembangan Emosi Anak Usia Dini," *Golden Age J. Ilm. Tumbuh Kembang Anak Usia Dini*, vol. 5, no. 2, pp. 77–90, 2020, doi: 10.14421/jga.2020.52-05.
- [6] P. P. Novitasari *et al.*, "Pola Asuh Orang Tua Tunggal Dalam Menunjang Perkembangan Kecerdasan Emosional Pada Anak Usia Dini Di Kelurahan Unyur, Kecamatan Serang, Kota Serang, Provinsi Banten," *J. Pendidik. Anak*, vol. 4, no. 2, pp. 190–198, 2019.
- [7] E. Widianingsih, "PENGARUH PROGRAM PENDIDIKAN FULLDAY SCHOOL TERHADAP PERKEMBANGAN KECERDASAN SOSIAL EMOSIONAL ANAK USIA DINI TKIT DI DIY," *G-COUNS J. Bimbing. dan Konseling*, vol. 3, no. 1, 2018.
- [8] Y. D. Maxamadaliyeva, "CENTRAL ASIAN JOURNAL OF Features and Types of Game in Preschool Children," vol. 2023, no. c, pp. 0–5, 2023.
- [9] N. R. Utami and S. A. Sakti, "MODEL PEMBELAJARAN PITUTUR LUHUR BERBASIS MULTIREPRESENTASI SEBAGAI PEMBENTUK KECERDASAN EMOSIONAL ANAK USIA 5-6 TAHUN ...," *J. Golden Age*, 2019.
- [10] A. R. Yuliana, S. E. Pujiastuti, and E. Hartati, "Efektifitas Terapi Musik Klasik Mozart Dalam Meningkatkan Kecerdasan Emosi Pada Anak Sekolah Usia Dasar," *J. Keperawatan dan Kesehatan. Masy. Cendekia Utama*, vol. 9, no. 1, p. 46, 2020, doi: 10.31596/jcu.v9i1.514.
- [11] B. Karakoç, K. Eryılmaz, E. Turan Özpolat, and İ. Yıldırım, "The Effect of Game-Based Learning on Student Achievement: A Meta-Analysis Study," *Technol. Knowl. Learn.*, vol. 27, no. 1, pp. 207–222, 2022, doi: 10.1007/s10758-020-09471-5.
- [12] N. K. Lai, T. F. Ang, L. Y. Por, and C. S. Liew, "The impact of play on child development - a literature review," *Eur. Early Child. Educ. Res. J.*, vol. 26, no. 5, pp. 625–643, 2018, doi: 10.1080/1350293X.2018.1522479.
- [13] Y. Izatusholihah and H. Y. Muslihin, "Permainan Tebak Gambar dalam Menstimulasi Karakter Percaya Diri Anak Usia Dini," ... *J. Pendidik. Anak Usia ...*, 2021.
- [14] S. N. ELISTIKA, S. M. Ulfah, and D. Harianto, *MENINGKATKAN KECERDASAN*

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EMOSIONAL ANAK USIA DINI MELALUI MEDIA MENGGAMBAR DI RAUDHATUL ATHFAL AL-HIDAYAH KELURAHAN PASAR ... repository.uinjambi.ac.id, 2021.
- [15] Sugiyono, *Metode Penelitian Kuantitatif*. Bandung: Alfabeta, 2019.
- [16] E. Saptutyingsih and E. Setyaningrum, *Penelitian Kuantitatif Metode dan Alat Analisis*. Yogyakarta: Gosyen Publishing, 2019.
- [17] N. Retno Utami, "Pengembangan Instrumen Kecerdasan Emosional Usia 5-6 Tahun," *J. Pelita PAUD*, vol. 4, no. 1, pp. 124–138, 2019, doi: 10.33222/pelitapaud.v4i1.839.
- [18] N. Nasution, *Pengaruh Media Kartu Angka Bergambar Terhadap Kecerdasan Logika Matematika Anak Usia 5-6 Tahun Di Raudhatul Athfal (RA) Al-Hafizh H. Ali Tanjung Morawa ...* repository.uinsu.ac.id, 2020.
- [19] M. Rizkiyana, "Meningkatkan Perkembangan Bahasa Anak Usia Dini Melalui Media Kartu Bergambar Kelompok A Di Tk Aisyiah Bustanul Athfal Wates Gadingrejo Pringsewu." repository.radenintan.ac.id, 2019.
- [20] K. Rahmalya, "Penerapan Media Kartu Kata Bergambar Untuk Mengembangkan Kemampuan Berbahasa Anak di Taman Kanak-Kanak AL-Kautsar Bandar Lampung." repository.radenintan.ac.id, 2019.
- [21] M. R. AMBARITA, *PENGARUH PERMAINAN PAPAN DAN KECERDASAN EMOSIONAL TERHADAP KEMAMPUAN NUMBER SENSE (Studi Eksperimen pada TK BPK Bandar ...* repository.unj.ac.id, 2020.
- [22] E. E. J. Sastradiharja and F. Suratningsih, "MODEL PEMBELAJARAN KOOPERATIF DALAM MENINGKATKAN KECERDASAN EMOSIONAL ANAK USIA DINI INTROVER (Studi di TK Islam Al-Azkar Jakarta ...," *Madani Inst. J. ...*, 2021.

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