

## **Relationship between EFL young learners' multiple intelligences and English Achievement in Bilingual School**

Ulfatul Ma'rifah

[ulfamarifah@umg.ac.id](mailto:ulfamarifah@umg.ac.id)

(Universitas Muhammadiyah Gresik)

Received: July 10, 2019

Accepted: August 17, 2020

Published: August 31, 2019

### **Abstract**

This research set out with the aim of assessing whether EFL young learners' multiple intelligence in bilingual school in Intensive Cambridge Program (ICP) has influence on their English proficiency as the important determining factors. The total number of participant was 76 students which consist of 38 male and 38 female students of 2<sup>nd</sup>, and 5<sup>th</sup> grade of bilingual primary school. The instrument used to elicit information for this study is multiple intelligences survey for kid by Laura Candler and Cambridge Progress Test (CPT). The result shows that there is no significant relationship between EFL young learners' multiple intelligences and English proficiency. To find the predictor of type of multiple intelligences which have strength to effect toward English achievement also showed no significant since the probability was small. It can be caused that in bilingual classroom since English is used not only as a subject but also as classroom instruction and language in the text book for science, mathematics and English itself. So student's English proficiency had been influenced not only by how teacher conduct the class based on multiple intelligences, but by other input outside English subject.

**Keywords:** intelligence, multiple intelligences, English proficiency

### **Introduction**

Multiple intelligences is one important part of students that should be explored to support students' learning. It influences students' learning style, emotion social, motivation, academic achievements, language proficiency (Arabah, Wu, & Alotaibi, 2018; Suliman, 2010; Ahvan & Pour, 2016; Nakhbi, 2016; Madkour, Ahmed, & Moati, 2016)

The issues about relationship between multiple intelligences and language achievement have developed many researchers interested to investigate. One of them showed that there was significant relationship between multiple intelligences and students' critical skill (Alqatanani, 2017). Another research report that the implementation of multiple intelligences in the classroom had assisted to improve students' reading achievement (Mcmahon, Rose, & Parks, 2014) and reading comprehension (Sabet&Kiace, 2016). The next investigation is about implementation of multiple intelligences in teaching Basic English to children which the results found knowing children' multiple intelligences at varying levels helped teachers to presents content in comprehensible way (Setiawati, 2018). Vocabulary knowledge in reading comprehension can be increased by multiple intelligence which it had been as the predictors (Zarei&Shokri, 2014).

As Thomas Armstrong stated in his book (Armstrong, 2009), multiple intelligences can be concluded as follows:

#### *Verbal / Linguistic Intelligence*

This type of intelligence has better ability to memorize the information that come to them. They enjoyed telling the story or poetry and also prefer to spend most of their time to read. They have highly skilled in listening as well as



learning new words, vocabularies and enable to concentrate in grammar. They are really an efficient person to explain and to entertain. The appropriate activities for this kind of children is writing, reading and presenting.

*Mathematical/logical intelligence*

Having this kind of intelligence in line with the ability to calculate and making pattern. Their favorite class is math. They prefer challenging activity to solve problems in logical, step-by step manner, such as playing logic puzzle, strategy games and organizing things into logical order.

*Musical*

The children with this kind of intelligence like to sing or play a musical instrument. They understand well the pitch, rhythm, and timbre of music and can convey their emotion through it. They usually able to read music, critique performances and use musical- critical categories. They can act well to represent their feeling, knowing and understanding feeling which is important in education. This type of intelligence is tied into other intelligence since it contains element of ration and regularity that usually represent in mathematic.

*Visual*

This type of intelligence would enable children to manipulate and create mental image to solve the problems. They prefer to art class, doing puzzle, playing game and have good sense of direction. They perceive the visual word accurately and are able to recreate images and faces easily.

*Kinesthetic Intelligence*

We can observe children with this type of intelligence quite commonly because they use their body expressively especially in playing physical games. They have good skill in balance and coordination of their body. They are interested in arts, crafts and hands-on as well as enjoying watching sport games. They would rather play a sport than read or study.

### *Intrapersonal*

The children with this type of intelligence usually have good social communication. They have more friends since they prefer to work in group and care toward their friend more. They also like meeting new friends and care about what happening around them.

### *Interpersonal*

Those children who have this type of intelligence prefer to work alone rather than as part of a group. They really enjoy writing their thoughts in journal or spend a lot of time playing computer or video games. This kind of children has good self confidence of their own abilities and deep personal beliefs.

### *Naturalistic Intelligence*

Having the ability to understand the nature' symbol and respect nature is one of characteristic of children with naturalistic intelligence. They love playing with pets, spending a lot of time outside and protecting the environment by recycling, conserving or exploring alternative energy. They also enjoy gardening and visiting zoos. They are very comfortable with hand-on activities that involve natural objects.

Some researchers have carried out on the efficacy of using multiple intelligences activities to support learning English in the classroom. One research reported that multiple intelligence had significant influence toward language learning strategies which finally can improve students' English achievement (Ansarin&Khatibi, 2018). Yuliawati and Nuriyanti (2018) has found that the implementation of multiple intelligences activities in the classroom had improved students in comprehending oral and written expression. Multiple intelligences had important influence in increasing writing proficiency for college students (Rad, Khojasteh, &Kafipour, 2014). The same finding is also found in listening proficiency in which multiple intelligences can improve it (Davoudi&Chavosh, 2016). Those research had done for secondary and college students. This paper investigates whether the relationship of Multiple intelligences and English achievement are exist in EFL younglearners.

### Research Questions

1. What is the relationship between EFL young learners' strength in each their multiple intelligences and their EnglishAchievement?



2. Which type of multiple intelligences predict the strongest influence on EFL young learners' English Achievement?

Methodology

This study is trying to explore in nature since no treatment done for the subject in formulating hypothesis. Descriptive and inferential method is used to analysis the data. They include correlation and multiple regressions to answers research question about the relationship between EFL young learners' strength in each their multiple intelligences and their achievement in learning English.

There are two variable in this research, first is multiple intelligences test score and second is EFL young learners English final exam. They are chosen to make the interpretation more meaningful based on theoretical basis and the form of personal experiences.

The participant is EFL young learners in 2<sup>nd</sup> and 5<sup>th</sup> grade of primary school. The amount is 76 students, 38 male and 38 female students in academic year 2019-2020. They are randomly selected. The purpose of choosing 2<sup>nd</sup> and 5<sup>th</sup> grade is to make representation of participants from lower grade and upper grade. 2<sup>nd</sup> grade as the lower grade had been learning English for two years while 5<sup>th</sup> upper grade had been learning English for five years. This is to differentiate whether different group represent different multiple intelligences.

A multiple intelligence instrument was used to get data of EFL young learners' multiple intelligences. It is adopted from multiple intelligences for kid by Laura Candler It has been translated into Indonesian which bilingual translator specialized in English and Indonesia was asked to translate to ensure the validity. The instruments consist of 68 items with 6 items for each of the eight intelligences. Every items is a description of one multiple intelligences that represent children' behavior, attitudes and feelings. In collecting data for young learners' MI, students asked to give score for every statement in questionnaire. If the statement strongly describe the child = 3, if the statement mostly describe child = 2, if the statement somewhat describe child = 2, and if the statement does not describe the child = 0. To check validity and reliability of the instruments, first two EFL specialists were asked to check if the items were relevant and appropriate to the context. Then to check reliability, the questionnaire distributed to 10 students who were asked to fill the items in questionnaire twice with the range of time is

about two weeks. The results were analyzed and showed that the correlation coefficient between the first and second time was 0.82, while the Cronbach alpha was 80. English test is used as the second instrument to collect EFL young learners' English achievement.

### Findings

A descriptive analysis involving the use of means and standard of deviation was done firstly to get the description of EFL young learners' multiple intelligences. On the table 1 below, we can see statistical examination on EFL young learners' multiple intelligences on each type. At this point the correlation has not seen yet since it just to see the strength of each type of multiple intelligent for each grade and both of the two grades. This analysis data reveal that participant from both of grade have highest disposition on Interpersonal (Mean=2.19), visual (Mean=2.17), naturalistic (Mean=2.16) and kinesthetic (Mean=2.13). While for EFL young learners multiple intelligences that were less used is intrapersonal (Mean=1.61), musical (Mean=1.69) and mathematical (Mean=1.82). The similar distribution pattern could be seen for both 2<sup>nd</sup> and 5<sup>th</sup> grade. Even the difference among of each type of intelligence is small. This can reflect that the type of intelligence for both the two group are the same.

Table 1

Mean scores and standard deviations of respondents multiple intelligences

Multiple intelligences	2nd & 5th Grade		2nd Grade		5th Grade	
	(n=76)		(n=38)		(n=38)	
	Mean	SD	Mean	SD	Mean	SD
Verbal Linguistic	1.91	0.47	1.98	0.49	1.85	0.43
Mathematical	1.82	0.52	1.87	0.48	1.77	0.54
Musical	1.69	0.66	1.74	0.69	1.64	0.62
Visual	2.17	0.42	2.17	0.46	2.15	0.38
Kinesthetic	2.13	0.44	2.13	0.42	2.13	0.45
Interpersonal	2.19	0.46	2.14	0.45	2.23	0.47
Intrapersonal	1.61	0.43	1.58	0.44	1.63	0.42



Naturalistic	2.16	0.56	2.21	0.60	2.09	0.52
--------------	------	------	------	------	------	------

To investigate the relationship between EFL young learners' multiple intelligences and English proficiency as stated in first research question, the researcher used Pearson Correlation to analyze between those two variables. From the table 2 below, it is indicated none of type of EFL young learners' multiple intelligences has correlation with EFL English proficiency. It could be seen in the last row of table 2 that none of sig. of EFL young learners' English achievement less than 0.05. Meanwhile there are some significant correlations among of each type of multiple intelligences.

Table 2

Pearson Correlation analysis on EFL young learners' multiple intelligences and English language achievement

		VL	math	music	visual	kines	inter	intra	natural	EA
Verbal Linguistic	Pearson Correlation									
	Sig. (2-tailed)									
mathematical	Pearson Correlation	.290 <sup>*</sup>								
	Sig. (2-tailed)	.011								
Musical	Pearson Correlation	.559 <sup>**</sup>	.198							
	Sig. (2-tailed)	.000	.086							
Visual	Pearson Correlation	.320 <sup>**</sup>	.362 <sup>**</sup>	.281 <sup>*</sup>						
	Sig. (2-tailed)	.005	.001	.014						
Kinesthetic	Pearson Correlation	.424 <sup>**</sup>	.102	.522 <sup>**</sup>	.300 <sup>**</sup>					
	Sig. (2-tailed)	.000	.383	.000	.008					
interpersonal	Pearson Correlation	.306 <sup>**</sup>	.220	.430 <sup>**</sup>	.141	.374 <sup>**</sup>				
	Sig. (2-tailed)	.007	.056	.000	.224	.001				
intrapersonal	Pearson Correlation	.440 <sup>**</sup>	.146	.374 <sup>**</sup>	.446 <sup>**</sup>	.406 <sup>**</sup>	.087			
	Sig. (2-tailed)	.000	.209	.001	.000	.000	.456			
Naturalistic	Pearson Correlation	.329 <sup>**</sup>	.068	.312 <sup>**</sup>	.271 <sup>*</sup>	.282 <sup>*</sup>	.342 <sup>**</sup>	.181		
	Sig. (2-tailed)	.004	.558	.006	.018	.014	.003	.118		
English Achievement	Pearson Correlation	.199	.195	-.011	.084	.016	-.106	.115	.014	
	Sig. (2-tailed)	.086	.091	.922	.472	.893	.363	.322	.906	

To answer the second research question about type of multiple intelligences which can predict the strongest influence on EFL young learners' English Achievement, the analysis could be seen in table 3. It shows that there is no one of the type of EFL young learners' multiple intelligence



gives significant influence toward English achievement. It is also supported with output table ‘ANOVA’ (as in table 4) which sig. value of F is 0.415 which could be concluded that each type of EFL young learners’ multiple intelligences do not influence simultaneously toward English proficiency. This is also supported with the value of R Square = 0,110 which mean that variable of EFL young learners’ multiple intelligence simultaneously has probability to influence English achievement is only 11%, while the rest (100% - 11% = 89%) from extended variables that was not researched.

Table 3

Multiple regression analysis on the influence of EFL young learners’ multiple intelligences on English language achievement

	B	Beta	t	Sig.
(Constant)	72.970		8.302	.000
Verbal Linguistics	5.417	.251	1.643	.105
mathematical	3.734	.190	1.468	.147
Musical	-2.064	-.134	-.855	.396
Visual	-.776	-.033	-.231	.818
Kinesthetic	.253	.011	.075	.941
interpersonal	-3.872	-.177	-1.284	.203
intrapersonal	1.161	.049	.343	.733
naturalistic	.311	.017	.133	.894
R=0.332      R Square=0.110      Adj. R Square = 0.004				

Table 4

		ANOVA <sup>a</sup>				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	850.265	8	106.283	1.040	.415 <sup>b</sup>
	Residual	6846.261	67	102.183		
	Total	7696.526	75			

This analysis is in line with the analysis of first research question in which there is no correlation between EFL young Learners’ multiple intelligences with English achievement.

**Discussion**

The two research question have resulted in the revelation of the finding as follows: Generally for both of 2<sup>nd</sup> and 5<sup>th</sup> grade has similar strength types of multiple intelligences even

though they have different study period about three years, but since it still in the same level of primary school. Those strength types of EFL young learners multiple intelligence are interpersonal, visual, natural and kinesthetic (Tsurayya, Ghani, & Melati, 2019). However the EFL Young learners' multiple intelligence does not show its relationship with English proficiency.

For having prediction of type of EFL young learners toward English proficiency also showed that none of those types of intelligences has significant influence toward students' English achievement. The probability influence is only about 11% which is too small to give important effect toward English achievement. It means that another variable (about 89%) out of Multiple intelligences has more significant portion to give influence such as motivation, habit, learning style, etc. Meanwhile the influence of each types of multiple intelligences toward another types shows that most of them have significant influences such as visual toward verbal linguistic, kinesthetic toward music, etc. it is in line with Gardner's' idea that intelligent is not single but consist of a set of intelligent which they support each other simultaneously (Ririn Tutik Faidah1, Endang Fauziati 2, 2019).

### **Conclusion**

This research is trying to investigate the relationship of EFL young learners' multiple intelligence with English achievement. From the result it could be concluded that multiple intelligences for young learner has no big portion to determine the successful of English achievement. Another aspect such as habit, attitude and feeling should be considered for English for young learners teaching. However it can be considered for teacher in teaching EFL young learners to organize the class activities which can develop the strength type of students multiple intelligences in learning language English.

Ahvan, Y. R., & Pour, H. Z. (2016). The correlation of multiple intelligences for the achievements of secondary students. *Academic Journals*, 11(4), 141–145. <https://doi.org/10.5897/ERR2015.2532>

Alqatanani, A. K. (2017). Do Multiple Intelligences Improving EFL Students' Critical Reading Skills? *Arab World English Journal*, 8(1), 309–321. <https://doi.org/https://dx.doi.org/10.24093/awej/vol8no1.22>





- Alrabah, S., Wu, S., & Alotaibi, A. M. (2018). The Learning Styles and Multiple Intelligences of EFL College Students in Kuwait. *International Education Studies*, 11(3), 38–47. <https://doi.org/10.5539/ies.v11n3p38>
- Ansarin, A. A., & Khatibi, S. P. (2018). The Relationship Between Multiple Intelligences and Language Learning Strategies and Gender. *English Language Teaching*, 11(5), 84–94. <https://doi.org/10.5539/elt.v11n5p84>
- Armstrong, T. (2009). *MULTIPLE INTELLEGENCES in the Classroom* (3 rd). alexandria, Virginia USA.
- Davoudi, M., & Chavosh, M. (2016). The Relationship between Multiple Intelligences and Listening Self-Efficacy among Iranian EFL Learners. *English Language Teaching*, 9(6), 199–212. <https://doi.org/10.5539/elt.v9n6p199>
- Madkour, M., Ahmed, R., & Moati, A. (2016). Identifying College Students ' Multiple Intelligences to Enhance Motivation and Language Proficiency. *English Language Teaching*, 9(6), 92–107. <https://doi.org/10.5539/elt.v9n6p92>
- McMahon, S. D., Rose, D. S., & Parks, M. (2014). The Journal of Experimental Multiple Intelligences and Reading Achievement : An Examination of the Teale Inventory of Multiple Intelligences. *The Journal of Experimental Education*, 1(July 2014), 37–41. <https://doi.org/10.3200/JEXE.71.1.41-52>
- Nakhbi, K. A. L. (2016). THE EFFECTIVENESS OF MULTIPLE INTELLIGENCE STRATEGY ON SIXTH GRADE STUDENTS ' ACHIEVEMENTS AND ATTITUDES TOWARD SCIENCE. *Journal of Developing Areas*, 677–691.
- Setiawati, P. (2018). The implementation of multiple intelligences in teaching basic english to children. *English Education Ad Applied Linguistics Journal*, 1(2), 141–150. <https://doi.org/10.31980/eeal%journal.v1i2.159.g176>
- Rad, R. S., Khojasteh, L., & Kafipour, R. (2014). The relationship between multiple intellegences and writing skill of medical students in Iran. *Acta Didactica Napocensia*, 7(3).
- Ririn Tutik Faidah 1, Endang Fauziati 2, S. 3. (2019). Teachers beliefs on multiple intelligence based english teaching for young learners. *Exposure*



*Journal 60, 8(1), 60–72.*

- Sabet, M. K., & Kiace, M. M. (2016). The Relationship between Multiple Intelligences and Reading Comprehension of EFL Learners across Genders. *International Journal of Education and Literacy, 4(1)*.  
<https://doi.org/10.7575/aiac.ijels.v.4n.1p.74>
- Suliman, W. A. (2010). The Relationship Between Learning Styles , Emotional Social Intelligence , and Academic Success of Undergraduate Nursing Students. *Journal of Nursing Research, 18(2)*, 136–143.
- Tsurayya, H., Ghani, A. R. A., & Melati, P. (2019). Multiple intelligence assessment in teaching English for young learners. *Reseach and Evaluation in Educatio, 5(1)*, 21–29.
- Zarei, aabbas, & Shokri, N. afshar. (2014). Multiple intelligences as predictors of reading comprehension and vocabulary knowled. *Indonesian Journal of Applied Linguistics, 4(1)*, 23–38.

