# THE COMPARATIVE STUDY BETWEEN REFLECTIVITY AND IMPULSIVITY COGNITIVE STYLE IN USING LEARNING STRATEGY IN READING AND READING COMPREHENSION

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**Abstrak:** Tujuan penelitian ini adalah untuk mengetahui Kelompok mana antara murid yang reflektif atau impulsif yang lebih baik dalam pemahaman membaca dan apakah ada perbedaan yang significant antara kedua kelompok murid saat menggukan strategi belajar untuk membaca. Subjek dari penelitian ini adalah 35 siswa kelas X1 MIA 1 di MAN 2 Bandar Lampung. Alat ukur yang digunakan adalah Matching Failiar Figure Test (MFFT) untuk mengelompokkan siswa ke dalam kelas reflektivitas/impulsivitas, kemudian Language Learning Strategy Questionnaire (LLSQ) untuk mengetahui kecenderungan strategi belajar yang digunakan saat membaca, dan tes membaca. Data penelitian dianalisis menggunakan One Way ANOVA dan Independent Sample T-Test pada signifikansi level 0.05. Hasilnya menunjukan bahwa siswa reflektif lebih baik dalam pemahaman membaca dibandingkan siswa impulsif. Hasilnya juga menunjukan bahwa hipotesis 2 ditolak karna tidak ada nya perbedaan yang signifikan antara siswa reflektif dan impulsif dalam menggunakan strategi belajar. Peneliti dapat menyarankan bahwa penelitian ini sangat penting untuk siswa dapat mengetahui kecenderungan strategi belajar yang mereka gunakan untuk memaksimalkan proses belajar dalam memahami tes membaca.

Abstract: The aims of this study were to find out whether i) reflective or impulsive students had better comprehension in reading and ii) there was a statistically significant difference between impulsive and reflective students in using different learning strategy in reading. The subjects were 35 students of XI MIA 1 at MAN 2 Bandar Lampung. The instruments are Matching Familiar Figure Test (MFFT) employed to classify the students into reflectivity/impulsivity, Language Learning Strategy Questionnaire (LLSQ) distributed to find students' preferences in learning strategy, and the reading comprehension test. The data were analyzed by using One Way ANOVA and Independent Sample T-Test at the level of significance 0.05. The result showed that reflective students did better in reding comprehension than the impulsive students. It also showed that the hypothesis was rejected that there was no a statistically significant difference between reflective and impulsive students in using different learning strategy. This suggests that it is very important for the teachers to know students' dominant learning strategies to maximize their learning process in comprehending reading test.

**Keywords:** learning strategies, impulsivity, reflectivity, reading comprehension.

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## INTRODUCTION

This research was focused on two different objectives. Firstly, to compare students who were reflective and impulsive in cognitive style in reading comprehension test. Secondly, to find out whether there was any significant difference between reflectivity/impulsivity group in using different learning strategies. The point is on reflective/impulsive students react to reading comprehension test and using learning strategy. Reflectivity/impulsivity has been defined by Kagan (1966) primarily as a conceptual tempo, or decision time variable, representing the time the subject takes to consider alternative solutions before committing to one of them in a situation with high response uncertainty.

As Kagan (1966) explains that the impulsive students reach decision and report them very quickly with little concern for accuracy; others of equal intelligence are more concerned with accuracy and consequently take more time to reach a decision. In other words, impulsive people tend to jump at the first response whereas reflective people think about their answers. While according to Fontana (1995) in Bazargani and Larsari (2013) states that reflective children tend to make fewer errors than impulsive ones particularly on challenging and difficult tasks, since they show a strong desire to be right first time, and seem able to tolerate the ambiguity of a long silence in front of the class.

Even in completing tasks, among reflective learners have different way on approaching problems encountered during the process of language learning and so do impulsive learners. This approach is usually known as learning strategy. Learning strategies sometimes do not get much teachers' attention since it is privately possessed by students. Since the amount of information to be learnt by language learners is high in the language classroom, learners—use—different strategies in performing tasks and processing new input.

Wenden and Rubin (1987) in Sholatunisa (2016) state that language learning strategy refers to language learning behaviors that learners actually engage in to learn and regulate the learning of second or foreign language. It means that the strategies are able to change the learners' behavior especially positive behavior. But in the real condition we can see many language students were passive and accustomed to learn only from the teacher. Language learning strategies play important roles in one of receptive skills, such as, reading skill. Some strategies are found to impede the readers' process to determine meaning (Sutarsyah, 2013). It is assumed that the students who used good strategies will be able to answer the reading test items and to comprehend the received message well.

In a research conducted by Kesuma (2015) was interested in the effect of cognitive style – field-dependent and field-independent – on reading comprehension in eight graders of junior high school show there was no significant effect of cognitive style on students' reading coprehension. While Sari (2015) focused on the effect of students' learning strategies used by second graders in Senior High School. However, there is no research on finding the effects of learning strategies used by impulsive and reflective learners in reading comprehension.

Based on the explanation above, writer addressed the following research questions:

- 1. Which group of students do better in reading comprehension?
- 2. Is there any significant difference between reflective and impulsive students in using learning strategies?

### **METHODS**

Ex-post facto design called a criterion group design was used in this research for answering both questions. In collecting the data, Matching Familiar Figure Test was given to classify students into reflective/impulsive criteria. Then Language Learning Strategy Questionnaire of reading skill was administered to measure students' preferences of learning strategies. Lastly, to obtain the reading score, reading comprehension test was administered. All the instruments had been proved to be valid and reliable tests. The population of the research was XI MIA 1 of MAN 2 Bandar Lampung with 35 samples of students which had been determined using simple random sampling. The data were analyzed using One Way ANOVA and Independent Sample Test at the significant level of 0.05 in which the hypothesis is approved if Sig.  $< \alpha$ .

### RESULTS AND DISCUSSION

# **Research Question 1**

 $H_0$  = Reflective learners did better in reading comprehension than impulsive learners

 $H_1$  = Reflective learners did not do better in reading comprehension than impulsive learners

## **Independent Sample T-Test**

reading test

					95% Confid Mean			
			Std.	Std.	Lower			
	N	Mean	Deviation	Error	Bound	Upper Bound	Min	Max
Reflective	12	7.6917	.60069	.17341	7.3100	8.0733	7.00	8.60
Impulsive	10	7.4700	.67995	.21502	6.9836	7.9564	6.00	8.30
Total	22	7.5909	.63239	.13483	7.3105	7.8713	6.00	8.60

Table 1. Comparison of Mean Score of Reading Comprehension Tets between Impulsive and Reflective Learners

The result shows that the mean score of reflective learners were higher than the impulsive. Therefore, reflective learners did better in reading comprehension than the impulsive learners. The result supported Bazarghani and Larsari (2013) study which was done to 82 graduate and undergraduate students from different fields of study who took the placement test for TOEFL preparation classes held at Tehran University, Iran. The participants were all within the age range of 19-33. Their

study came to result that supports this research that reflective participants performed better than the impulsive ones on the multiple – choice test.

According to the previous study, the most tangible and important reasons were the features of each style and also the nature of the reading tests. Having characteristics of impulsive or reflective and features of reading test items, it could be concluded that the result of the present study was able to be predicted. In answering a multiple choice item, it just required the psychological process of recognition, and in responding to such an item, there was no "obstacle" (utilizing other psychological processes) to the hurried and spontaneous decisions of impulsive learners. Thus, in this type of reading test item, the speed with which the impulsive learners took a decision was very high and this added to the probability of having more mistakes.

As stated by Doron (1973) in Bazarghani and Larsari (2013), She discovered that reflective students were slower and more accurate than impulsive students. Reflective learners, conceptually, tend to make fewer errors in reading than impulsive ones by attending to the detailed information of a stimulus and processing information analytically. As they always thought more before making a decision and the time given was quite long, so the presence or absence of the difficulties of the test items made no (or little) difference.

## **Research Question 2**

 $H_0$  = There was significant difference between students' cognitive style and their choices of learning strategy

 $H_1$  = There was no significant difference between students' cognitive style and their choices of learning strategy

Independent Samples Test

independent bampies Test												
		Levene's for Equa Variance	ality of	t-test for Equality of Means								
									95% Confidence Interval of the Difference			
		F S	Sig.	t			e		Lower	Upper		
learning strategy	Equal variances assumed	.590	.451	.635	20	.533	.12000	.18895	27414	.51414		
	Equal variances not assumed			.620	16.86 7	.543	.12000	.19343	28835	.52835		
	11 410 T 1			<u> </u>		<u> </u>			L			

Table. 4.10. Independent Samples Test of Learning Strategy and Cognitive Style

According to the result, there were differences between reflective and impulsive students but it was not significant. This finding is in line with Razmjoo and Mirzaei (2009) study which indicated that there was no relationship between reflectivity/impulsivity and language proficiency of the learners. In contrast, this finding is not in line with Brown's (2007), who found that learners' preferences and tendencies play a great role in language learning for example students who are reflective can perform some kinds of learning activities better than students who are impulsive.

The students chose the different learning strategies which facilitate the learning task to be better language learners. The differences were seen in graph 4.2 (pp. 51) saying that there is a trend that reflective learners use more metacognitive strategy than the other strategies, cognitive and social. This finding is in line with the previous research of Mokhtari, et al. (2008) who said that greater metacognitive awareness of learners leads to better reading comprehension. Then, based on the results of Hadidi, et al. (2017) said that reflective learners are more metacognitively aware of reading strategy use so the more reflective they are, the more metacognitively aware they become of their reading strategy use. This statement also supports the first hypothesis that reflective learners are better in reading comprehension than impulsive learners.

On the other hand, according to the study conducted by Naimie et al.(2010), the result of their study showed that among the six pairs of cognitive styles, synthesizing style, and impulsive style, it was found that there were significant influence on the choice of learning strategies, namely the memory strategies of grouping and imagery, the cognitive strategies of practicing, analyzing and summarizing, the compensation strategies of guessing, the metacognitive strategies of planning, paying attention and self-evaluating, the affective strategies of anxiety-reduction and self-encouraging and the social strategies of cooperation, turning out to be the most influential styles in present study (Naimie et al.: 2010).

With impulsive style, learners would react quickly in acting or speaking without thinking the situation thoroughly. Moreover, with likings for reacting quickly, it is not unusual for impulsive learners do a lot of practice through talking in English, or watching English movies and TV programs in their study as revealed in the previous research. As their characteristics, it is inevitable for impulsive learners to make some mistakes. In this case, they using social strategy, with their courage, would ask others to help them correct their mistakes, which indicates they might have good cooperation with others, such as practicing English with others. Then, the metacognitive strategies of planning, paying attention and self-evaluating, the social strategies of asking questions and giving the impressions – with a few well-chosen words – that students speak on certain language anxiety-reduction and self-encouraging. Lastly, in order to process information at high speed, they tend to use strategies namely the cognitive strategies of organization, inference, imagery, transfer and elaboration in the present study very often to grasp and store message quickly.

## CONCLUSION AND SUGGESTION

Based on the results of the data analysis and discussion, there are two conclutions in line with the research questions. Firstly, In comparing the two groups of students, reflective and impulsive learners, the study came to the result that reflective learners were better in reading comprehension than the impulsive learners. This happens since their charecteristics of cognitive style Reflectivity/Impulsivity. Secondly, while seeking for the significancy of each variable, researcher found that between reflectivity/impulsivity cognitive style there was no significant differences in using different learning style. The signicant value was 0.689 and was more than 0.05.

Therefore, the research found that there was no significant differences in using different learning style between reflectivity/impulsivity cognitive style.

In order to help students to gain successful target of language learning, language teacher should insert the individual differences among students as the main consideration of creating a successful learning process. In addition to maintain better learning process, language learning strategy as an important factors affecting the success of learning can help teacher produce a learning situation in which students can properly apply their preffered strategy to support the language learning process. Furthermore, to motivate the further research on this field, researcher suggests to conduct a research in other skills to reveal the whether impulsive learners' characteristics can help them be succesful in other skill. As well, the way each group of students applies their language strategies to help them to be success in language learning can be a juicy idea for further research.

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