



Original Research Article

## Comparing Two Modes of Instruction in English Passive Structures (Processing and Meaning-Based Output Instruction)

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### ABSTRACT

This research compared the effects of two types of instruction: Processing Instruction (PI) and Meaning-based Output Instruction (MOI) on the interpretation and production of English passive structures. Ninety EFL intermediate tertiary level female students (PI group= 30, MOI group= 30 and control group = 30) participated in this study. The instruments were a proficiency test, a test to assess English passive structures and two instructional materials (PI and MOI). The data were analyzed by running one-way analysis of variance (ANOVA) and mixed between-within ANOVA. The study indicated the effectiveness of PI and MOI on English passive structures. PI had considerable enhancement on interpretation tasks all the time. It supported the use of PI rather than the use of traditional instructions in which mechanical components were emphasized. Also, the PI and MOI had long term effects on the interpretation and production of English passive sentences. This study supported the use of PI and MOI rather than the use of traditional instruction (TI) in EFL settings. The implication for particularly classroom teaching is that successful grammar instruction has to related to ultimate learning outcomes. Also, creating communicative tasks to offer opportunities for teaching grammar can lead to long-lasting learning effects.

**Keywords:** processing instruction (PI); meaning-based output instruction (MOI); English passive

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### 1. Introduction

In order to focus on form in a communicative way, different approaches have been proposed in language teaching and learning. These approaches of L2 instruction are described in many ways in which the learners' attention is drawn to form or meaning or both (Benati & Schwieter, 2017; Ellis, 2001; Lee, 2015; Moradi & Farvardin, 2016; Shintani & Ellis, 2013;

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Szudarski & Carter, 2016; Arbain & Nur, 2017). It seems to be generally accepted that SLA is dependent on input (Lee, 2015; Shintani, 2015; VanPatten, 2004a, 2004b). There are grammar-teaching approaches based on input hypothesis as well as output hypothesis. The approaches based on input give more priority to input (i.e., exposure) whereas the approaches based on output give more priority to output (i.e., production).

Processing instruction (PI) is an approach based on input hypothesis. It focuses on how a learner processes input. In particular, it deals with the conversion of input to intake and specifically focuses on form–meaning relationships (VanPatten, 1996; VanPatten & Cadierno, 1993; VanPatten & Sanz, 1995; VanPatten, Collopy, Price & Borst, 2013).

VanPatten (2007b) summarized three basic features of processing instruction:

1. Give learners information about a structure or form.
2. Notify learners about a particular processing strategy that may get in the way of selecting the form/structure during comprehension.
3. Structure input so that learners must rely on form/structure to get meaning and not rely on natural processing tendencies.

Also, VanPatten (2007a) presented three premises that are the basis of processing instruction:

1. Learners need input for acquisition.
2. A major problem in acquisition might be in the way that learners process input.
3. If we can understand how learners process input, then we might be able to devise effective input enhancement or focus on form to aid acquisition of formal features of language.

MOI (meaningful output-based activities) excludes the mechanical component of traditional instructions (TI), and includes only meaningful output-based activities. This instruction is different from TI in that there is no mechanical component. MOI includes grammatical explanation, meaningful output-based activities. MOI activities are all meaning-based and require learners to use both meaning and form at some levels during production. In focus on meaning, learners concentrate on the message for communicating or extracting the message from input (Shintani & Ellis, 2013).

A lot of studies have focused on PI (processing instruction) and MOI (a meaning-based output technique) as two modes of teaching. A number of related studies have shown different results because of the qualitatively different nature of the contexts of each study (settings, learners, etc.) (Benati & Schwieter, 2017; Lee, 2015; Moradi & Farvardin, 2016,

Shintani, 2015; Shintani & Ellis, 2013; Szudarski & Carter, 2016; VanPatten et al., 2013). For example, Benati and Schwieter (2017) showed that PI had a superior effect than MOI in helping L2 learners comprehend English past simple tense while VanPatten et al. (2013) indicated that PI and MOI had similar consequences in helping L2 learners comprehend and produce subjunctive forms. Therefore, it is necessary to find the plausible effects of PI and MOI on linguistic structure acquisition of EFL learners. The majority of EFL teachers and learners teach and learn through Traditional Instruction (TI) (Moradi & Farvardin, 2016; Irmawati, 2016) In addition, authorities are negligent to PI, MOI, and other types of instructions (Szudarski & Carter, 2016). Therefore, it is essential to change the usual instructions in EFL settings, TI to PI and/or MOI, which may affect accuracy of EFL learners in a communicative way.

Accordingly, this study compared PI, an input-based technique, with MOI, a meaning-based output technique, to assess their relative effects in helping EFL learners acquire passive sentence formation in terms of both interpretation and production. In addition, this study investigated whether the benefit of instructions held in due course or not. Addressing the question of how long the instructional effects can last is very important for any instructional treatment. As Wong (2004b) mentioned long-term effects of a study can make any real claim about the utility of its instructional treatment.

Several studies compared PI with MOI instruction on the acquisition of linguistic features in EFL and ESL settings (Benati, 2005; Benati & Schwieter, 2017; Farley, 2004; Lee, 2015; Moradi & Farvardin, 2016, Morgan-Short & Bowden, 2006; Shintani, 2015; Shintani & Ellis, 2013; Szudarski & Carter, 2016; VanPatten et al., 2013). Benati and Schwieter (2017) compared PI to MOI. They showed that PI had a greater effect than MOI in helping L2 learners comprehend English sample forms. Morgan-Short and Bowden (2006) concluded that, for interpretation, groups on PI and MOI instruction did better than the control group and that neither PI nor MOI surpassed the other.

VanPatten et al. (2013) represented that MOI instruction was unlike TI in that there was no mechanical component. MOI included grammatical explanation, and meaningful output-based activities. MOI activities were all meaning-based and required learners to use both meaning and form at some levels during production. In focus on meaning (FonM), learners concentrated on the message for communicating or extracting the message from input.

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Shintani (2015) found that PI was not just another comprehension-based approach to language instruction (i.e., FonM) such as total physical response (TPR) or immersion; PI was a focus on form (FonF) instruction that served as a supplement to existing communicative and acquisition-oriented approaches. Whereas with regard to the essential differences between FonF, FonFS, FonM, and PI approaches, Szudarski and Carter (2016) showed that PI could not be strictly called a FonF treatment because it tried to alter the principles underlying processing mechanisms. Shintani (2015) demonstrated that PI was an explicit type of instruction, which helped learners to process information via comprehension practice which might be more effective than instructions which required learners to produce language too soon. Lee (2015) recognized PI as “the pedagogical intervention that draws insights from a model of input processing” (p. 1). Wong (2004a) has summarized that PI was a pedagogical tool that was notified by a model of input processing. PI was a type of instruction that was based on a model of IP (input processing). Moradi and Farvardin (2016) made a distinction between the terms IP and PI. IP refers to what is presupposed to take place in the brain on perceiving input. PI refers to what a teacher force learners do in order to notice the grammar of input and it is predicated on the teacher’s providing explanation and understanding of the underlying grammar of input to be practiced.

Shintani and Ellis (2013) concluded PI with reference to two main principles that direct learner attention to linguistic form in the input: Primacy of meaning principle and the first noun principle. In the former, learners processed input for meaning, by concentration on prosodic cues (that signaled content or more meaningful words than functions), before they could process it for form. The first noun principle forced learners to process the first noun or pronoun in a sentence as the subject/agent. PI facilitated drawing richer intake from input for L2 learners by engaging them in structured input activities which they normally used to make form-meaning connections.

Shintani (2015) described three characteristics for PI, which were defined as “the only type of FonF instruction to date that is informed by strategies that learners use to initially parse input to make form-meaning connections” (p. 62):

1. Explicit information about the target structure,
2. Explicit information about processing strategies, and
3. Structured input activities.

Shintani and Ellis (2013) identified characteristics of structured input tasks as:

1. Structured input tasks are sequences of carefully crafted input sentences.

2. Structured input tasks are coupled with a given task demand, i.e., the information that learners must extrapolate from that input.
3. Structured input tasks attempt to cause learners to process mechanisms in order to fail to interpret a sentence, and to become aware of such a failure.
4. Structured input tasks encourage learner to adopt a processing strategy that does not affect such a failure.

Collentine (2004) marked after working with structured input tasks, PI affected learner during PI treatments and after such treatments. He identified two types of input: input type A (specialized intervention), and input type B (authentic input). In input type A, learners take delivery of the structured input during a PI treatment. As a result, input type A ultimately modifies the fundamental processing mechanisms relevant to the phenomenon. In his view, the effect of input type A is important on the developing system. Input type B follows input type A and learners process the authentic input after input type A. This type of input has a strong consequence on the arrangement of the targeted grammatical phenomenon within the learner's underlying developing system.

Benati and Schwieter (2017) asserted not all input-based activities are structured input activities and not all input-based instructions are PI instruction. For instruction to be PI, the processing strategy that learners apply to process a particular form must be recognized. For an activity to be a structured input, the activity must be considered with the ineffective strategy in mind. When this happened, the activity can assist learners use more efficient strategies to process input. In addition, a structured input activity is required to lead learners to process form correctly to acquire meaning. If learners do not need to pay attention to meaning or if they do not need to rely on form to get meaning, the activity is not a structured input activity.

The mentioned studies relevant to the studies of PI and MOI instructional modes suggested evidences of support as well as dissimilar results in their effectiveness in different settings. For that reason, it seems necessary to do further studies on the effectiveness of these two approaches in different EFL settings on particular linguistic structures. As well, the present study attempted to compare the possible effects of PI and MOI on the acquisition of English passive sentence formation, exclusively. Consequently, these specific questions were posed to attain the objectives of the study:

1. Do PI and MOI lead to any significant difference in the interpretation of English passive sentences?

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2. Do the effects of PI and MOI on the interpretation of English passive sentences hold over time?
  3. Do PI and MOI lead to any significant difference in the production of English passive sentences?
  4. Do the effects of PI and MOI on the production of English passive sentences hold over time?

To find answers to these research questions, the following null hypotheses were formulated:

1. PI and MOI do not lead to any significant difference in the interpretation of English passive sentences.
2. The effects of PI and MOI on the interpretation of English passive sentences do not hold over time.
3. PI and MOI do not lead to any significant difference in the production of English passive sentences.
4. The effects of PI and MOI on the production of English passive sentences do not hold over time.

## **2. Methods**

### **3.1 Participants**

The participants of the study were ninety intermediate tertiary level female students, from six intact classes of two high schools aging 16-17 in an EFL setting, Shiraz, Iran. Two of these six classes were randomly assigned to PI group, the other two were assigned to MOI group and the last two classes were assigned to control group. Although the total number of potential participants was 96, due to homogeneity and proficiency level of the participants, 90 intermediate participants were chosen based on Oxford Placement Test (OPT) and were randomly assigned to three groups. The total number of participants who received the treatments, the immediate post-test, and the delayed post-test was 90 participants, four participants were excluded from the study for their outlier scores in the pre-test and two participants were excluded to balance the number of groups. These participants were assigned to PI (N = 30), MOI (N = 30) and control group (N = 30). It may be said that assessing control group was not necessary, but it was done only for confirming the results of the study and showing that groups' improvement was unaffected by test familiarity or any other potential intervening variables.

### **3.2. Instruments**

A proficiency test, OPT (Oxford Proficiency Test): This test was designed to assess students' knowledge of the key language as well as their receptive and productive skills. The

cut point for intermediate level of this test was 47 out of possible 70. According to guidelines of the test, students whose scores fall below 47 should be considered as below intermediate level.

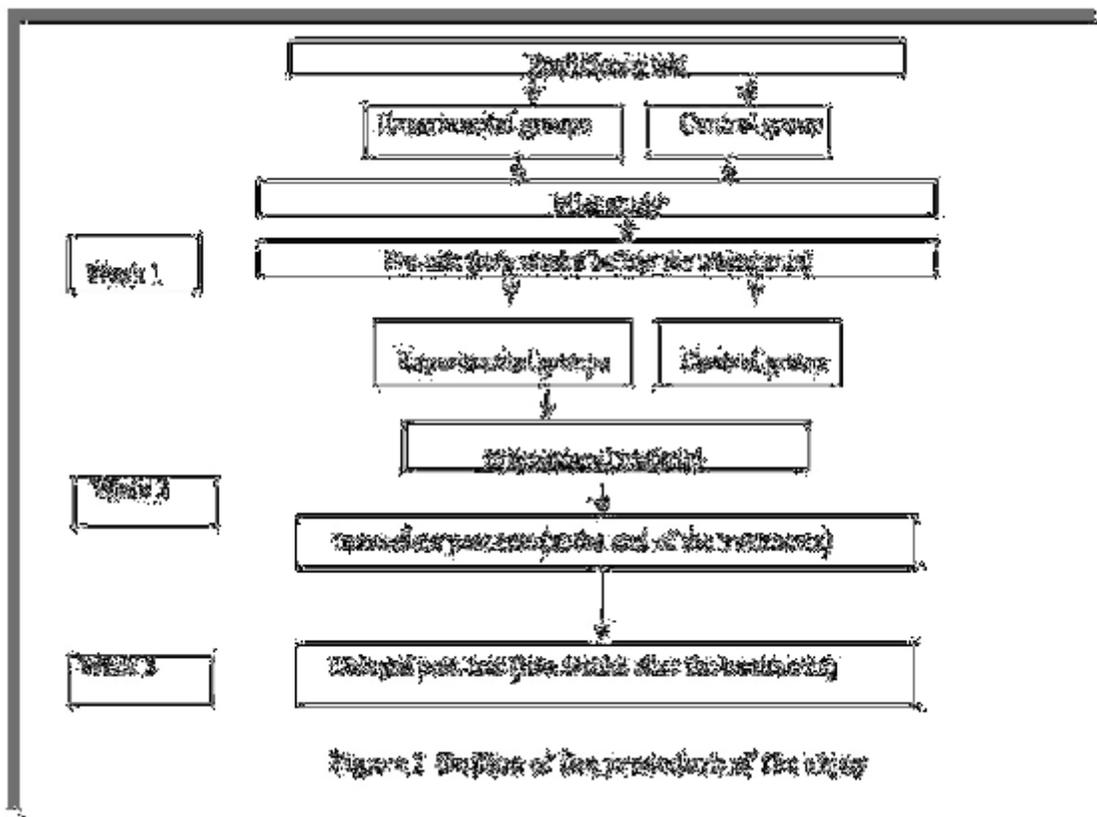
A test (as pre-test, immediate and delayed post-test): This test was used to assess the participants' ability to interpret and produce English passive sentences. They had two tasks, interpretation task and production task. To construct these tests, a table of specifications of tertiary-level course book was prepared in order to contribute to the content validity. It is necessary to mention *Advanced Grammar in Use* (Hewings, 2005). Out of 60 interpretation and 60 production items, finally 25 interpretation and 25 production items were selected for the final version of the test. The vocabularies of the interpretation and production task were high-frequency vocabularies that the participants had already learned. They were based on the participants' textbooks (secondary and tertiary levels).

There were two instructional materials (PI and MOI): Each instruction was intended to reflect a different treatment on teaching the rules of English passive sentence formation. The PI package consisted of a five page handout about explicit information, problem strategy, and structured input activities in relation to English passive sentences (simple present passive and simple past passive). The handout contained explicit information about: General information on passives, types of passive sentences (simple present passive and simple past passive), when we use passive sentences and processing problems (problems that learners encounter in using passive sentences). The MOI packet consisted of the same five-page handout used in PI, and production oriented activities without mechanical components, i.e., the students provided their own content or information, in relation to English passive sentences. Both instructional packets were controlled to have identical subject matter, and vocabulary.

The instructional materials (PI and MOI) and the test (pre-test, immediate post-test and delayed post-test) were piloted. The purpose of the pilot study was to determine item characteristics and gain insights about the plausible problems that the participants might encounter in the test administration and treatments. In the pilot study, some students (twenty) were involved, they were parallel to the participants' characteristics, but they were not involved in the main study. The pilot study was done before the genuine experiment in order to balance them in terms of vocabulary used during the instructional period, assessing enough time for tests and treatments and calculating reliability and validity of the tests. The reliability of the instruments were 0.71 and 0.73 respectively.

### 3.3 Data Collection Procedures

Figure 1 illustrates data collection procedures of the whole study. Participants did not receive explicit grammar instruction or homework assignments on the passive sentences during previous weeks of the course.



### 3.4 Data Analysis

Gain scores from pretest to immediate post-test and to delay post-test were taken as an indication of learning effects. The data were analyzed by running one-way analysis of variance (ANOVA) and mixed between-within ANOVA.

## 4. Findings and Discussion

### 4.1 Proficiency Measure

In this study, participants were divided randomly into three groups based on their proficiency level. Scores on the proficiency test were analyzed in order to check homogeneity of the three participating groups in terms of their receptive and productive skills. It is evident from Table 1 that three groups were approximately equivalent and homogeneous and the mean scores of the three groups were close together. Table 2

indicates that there is no significant difference between groups.

**Table 1. Descriptive statistics for the proficiency measure across the three groups**

Group	N	M	SD
PI	30	49.1	3.11
MOI	30	49.9	3.15
C	30	50.1	3.09
Total	90	50.03	3.00

Note. PI = processing instruction, MOI = meaning-based output instruction, C = control.

**Table 2. One-way ANOVA results for proficiency measure across the three groups**

	<i>S</i>	<i>d</i>	<i>MS</i>	<i>F</i>	Sig.
Between groups	37.13	2	18.56	1.57	.014
Within groups	1100.17	93	11.83		
Total	1137.3	95			

Moreover, to one-way ANOVA, test of normality (Table 3) determined distribution of groups in terms of normality. This test assessed the normality of the distribution of scores. Non-significant results (Sig. value of more than .05) indicated normality of the groups. This test also showed that there was no significant differences between the three groups in proficiency scores ( $p_{PI} = .091$ ;  $p_{MOI} = .254$ ;  $p_C = .304$ ) and the homogeneity of the groups was supplementary proved.

**Table 3. Test of normality for proficiency measure across the three groups**

	Groups	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	d	Sig.	Statistic	df	Sig.
Scores	PI	.111	32	.200*	.922	3	.082
	MOI	.077	32	.200*	.918	3	.171
	C	.108	32	.080*	.911	3	.174

\* = This is the lower bound of the true significance

a = Lilliefors Significance correction

### 3. Findings and Discussion

#### 4.2 Analysis of Interpretation and Production Data

In order to ensure that participants in all three groups began the study with similar ability in terms of interpretation and production of English passive sentences, descriptive statistics and an ANOVA were performed on scores obtained from interpretation and production task of the pre-test. The results are shown in Table 4 and 5. Table 4 shows that PI, MOI and control groups were homogeneous in terms of interpretation and production of English passive sentences; mean scores of the three groups were close together.

**Table 4. Descriptive statistics for interpretation and production task of the pre-test scores**

Type of task	Group	N	M	SD
Interpretation	P	3	8.11	2.06
	MOI	3	7.95	1.72
	C	3	7.92	1.69
	Total	90	7.99	1.82
Production	P	3	3.45	1.51
	MOI	3	2.94	1.80
	C	3	2.99	2.01
	Total	90	3.12	1.52

Table 5 shows the results of one-way ANOVA. It can be seen that there was no statistically significant difference between three groups in terms of the interpretation and production of English passive sentences ( $F(2,87) = .256, p = .763$ ) for interpretation and ( $F(2,87) = .521, p = .576$ ) for production task. This indicated that the three groups' abilities in interpretation and production of English passive sentences were equal at the beginning.

**Table 5. One-way ANOVA results for interpretation and production task of the pre-test scores**

		SS	df	MS	F	Sig.
Interpretation	Between groups	1.612	2	.801	.193	.441
	Within groups	360.11	87	4.14		
	Total	353.88	89			
Production	Between groups	3.44	2	1.72	.42	.376
	Within groups	349.528	87	4.06		
	Total	352.97	89			

The result of one-sample Kolmogorov-Smirnov test, shown in Table 6, indicated that the distribution of pre-test scores was normal for interpretation and production data. This test also showed that there was no significant difference between the three groups in pre-test scores of interpretation task ( $p_{PI} = .059; p_{MOI} = .73; p_C = .177$ ) and of production task ( $p_{PI} = .326; p_{MOI} = .395; p_C = .063$ ) and the homogeneity of the groups in both types of tasks was supplementary proved.

**Table 6. One-sample Kolmogorov-Smirnov test for interpretation and production data of pre-test scores**

		PI	MOI	C	
Interpretation	N	30	30	30	
	Normal Parameters <sup>a,b</sup>				
	Mean	8.12	7.88	8.0	
	Std.	2.15	1.64	1.74	
	Deviation				
	Most Extreme	Absolute	.218	.215	.177
		Positive	.145	.122	.131
		Negative	-.301	-.215	-.174
	Kolmogorov-Smirnov		1.23	1.32	1.09
	Asymp. Sig. (2-tailed)		.061	.063	.154
Production	N	30	30	30	
	Normal Parameters <sup>a,b</sup>				
	Mean	2.99	3.21	3.09	
	Std.	1.56	1.72	2.01	
	Deviation				
	Most Extreme	Absolute	.144	.167	.210
		Positive	.158	.143	.201
		Negative	-.145	-.133	-.156
	Kolmogorov-Smirnov		.891	.91	1.241
	Asymp. Sig. (2-tailed)		.334	.321	.081

a = Test distribution is Normal.  
 b = Calculated from data

As shown in Table 4, means of the two groups' performance in the interpretation of the pre-test were PI = 8.11 and MOI = 7.95 and the means of the two groups' performance in the production of the pre-test were near. In terms of interpretation of English passive sentences, Table 7 shows that PI and MOI improved from the pre-test to the immediate post-test, but the control group did not improve. The means for both immediate and delayed post-tests showed that PI did better than MOI and both did better than control group. The analysis of delayed post-test confirmed that the effects of PI and MOI held over time.

In terms of production of English passive sentences, Table 7 shows that means of PI and MOI on the immediate post-test increased to 10.11 and 9.98 respectively. Table 7 shows that means of PI and MOI on the delayed post-test increased to 10 and 9.08 respectively. This means that improvement was due to treatment. The control group had no development.

**Table 7. Descriptive statistics for interpretation and production task**

	Group	N	M	SD	
Immediate post-test	Interpretation	PI	3	15.88	3.23
		MOI	3	13.18	2.92
		C	3	6.44	2.13
		Total	9	11.83	5.11
	Production	PI	3	10.11	4.12
		MOI	3	9.98	4.99
		C	3	3.34	1.98
Total		9	7.81	4.96	
Delayed post test	Interpretation	PI	3	15.45	4.09
		MOI	3	13.01	3.01
		C	3	6.34	2.50
		Total	9	11.6	5.09
	Production	PI	3	10.0	4.99
		MOI	3	9.08	4.20
		C	3	2.98	2.03
		Total	9	7.35	4.99

The results of mixed between-within subjects ANOVA as shown in Table 8 revealed that there was different effect for types of instruction at the .05 level for interpretation ( $F = 73.37, p = .000$ ) and for production task ( $F = 48.99, p = .000$ )

**Table 8. Test of Between-Subject Effects for Interpretation and Production Task**

Source	SS	df	MS	F	Sig.	Partial $\eta^2$
Interpretation Groups	2201.113	2	1100.55	73.37	.000***	.410
Production Groups	1478.54	2	739.27	48.99	.000***	.422

\*\*\* = statistically significant at  $p < .05$

Group differences in tests of interpretation and production task were examined through a Scheffe Post-hoc test, Table 9. This was in order to explain the contrast among the three groups in terms of interpretation and production task of passives. The results revealed that the difference between groups was significant. There was a statistically significant difference between control group and the two experimental groups in terms of interpretation. In addition, PI and MOI groups differ significantly ( $p = .002$ ) from each other. Table 9 shows that there was a statistically significant difference between control group and the two experimental groups in terms of production, moreover, the PI and MOI group did not differ significantly ( $p = .986$ ).

**Table 9: Scheffe Post-Hoc Test (multiple comparisons) for the interpretation and production task**

Type of Task	Group(I)	Group(J)	Mean Difference (I-J)	Std. Error	Sig L	Confidence Interval-95%	
						Lower bound	Upper bound
Interpretation	PI	MOI	1.76*	.61	.003***	.59	3.45
		C	5.99*	.62	.001***	5	7.12
	MOI	PI	-1.84	.57	.001***	-3.16	-.73
		C	3.99	.57	.002***	2.66	5.38
	C	PI	-5.88	.49	.001***	-7.32	-5.11
		MOI	-4.11*	.49	.001***	-6.1	-2.71
Production	PI	MOI	-.17	.71	.784	-1.56	1.99
		C	5.07*	.71	.001***	2.77	6.36
	MOI	PI	-.16	.71	.765	-1.89	1.66
		C	4.23*	.71	.001***	2.25	5.89
	C	PI	-4.27*	.71	.001***	-6.36	-2.48
		MOI	-4.24*	.71	.001***	-6.23	-2.35

\*\*\* = The mean difference is significant at the 0.05 level.

The results of interpretation task, shown in Table 10, revealed that there were statistically significant differences between time1 (immediate post-test) and time 2 (delayed post-test) ( $F = 15.31, p = .000$ ). This result proposed that  $T1 \neq T2$ . However, which time groups outperformed the other can be determined based on descriptive statistics, shown in Table 7. Comparing means of the immediate post-test and delayed posttest verified that the groups in the immediate post-test outperformed the groups in delayed post-test.

The results of production task, shown in Table 10, revealed that the difference between time1 (immediate post-test) and time 2 (delayed post-test) was not statistically significant. The level of  $p$  (.041) was close to level of alpha (.05). However, which time groups outperformed the other can be determined based on descriptive statistics, Table 7. Comparing means of the immediate post-test and delayed posttest verified that the groups in the immediate post-test had approximately similar performance to the groups in delayed post-test.

**Table 10. Repeated measures ANOVA for interpretation and production task of immediate versus delayed post-tests**

	Effect		Value	F	Sig.	Partial
Interpretation	Immediate post-test	Wilks' Lambda	.756	15.3	.000**	.165
Production	Immediate post-test	Wilks' Lambda	.899	5.09	.031	.028

Results from mixed between-within subjects ANOVA, shown in Table 11, confirmed that the effect of the interaction between time and the groups was statistically significant ( $F = 30.235$ ,  $p = .000$ ) and ( $F = 30.263$ ,  $p = .000$ ) in interpretation and production task, respectively.

**Table 11. Mixed Between-Within Subjects ANOVA for the effects of interaction between time and groups**

	Effect		Value	F	Sig.	Partial
Interpretation	Time × groups	Wilks' Lambda	.345	30.23	.000***	.374
Production	Time × groups	Wilks' Lambda	.390	30.26	.000***	.360

\*\*\* = statistically significant at  $p < .05$

Results should be clear and concise. The results should summarize (scientific) findings rather than providing data in great detail (Ahmadjayadi, 2003). Please highlight differences between your results or findings and the previous publications by other researchers.

#### 4. Conclusions

The results of the study on the basis of proposed research questions can be summarized as follows:

1. The PI and MOI group outperformed the control group in interpretation of English passive sentences.
2. The PI and MOI group outperformed the control group in production of English passive sentences.
3. The PI group outperformed the MOI group in the interpretation but they did similar in the production of English passive sentences.
4. The PI and MOI have long-term effects on the interpretation and production of English passive sentences.

PI and MOI led participants to improved performance on interpretation of English passive sentences. The control group did not improve. Thus, the response to our first research question was affirmative, so the first hypothesis was rejected.

Regarding the results of interpretation task of both immediate and delayed post-tests of PI and MOI, the second hypothesis was also rejected. In other words, the effects of PI and

MOI on the interpretation of English passive sentences held over time. In addition, interaction between time and groups indicated that the effect of instructions on the interpretation of English passive sentences did not disappear over time. The long-term effect confirmed that form-meaning connections that established by PI and MOI were stored in long-term memory and retrieved, not all of them, when it was needed.

The instructional data collected through the production task and the subsequent statistical analysis revealed that the differences among pre-test and post-tests in the three groups under investigation were statistically significant, as shown in Table 8 and 9. Results revealed that the PI and MOI groups performed better in the production task when compared to control group. So, the third hypothesis was rejected.

Long-term effects of the variables under investigation were measured over a period of two weeks. Comparing production scores of the immediate and delayed post-tests of three groups revealed that PI and MOI had the long-term effects on the production of English passive sentences. In addition, the effect of interaction between time and groups indicated that the effect of instructions on the production of English passive sentences did not disappear over time. So, the fourth hypothesis was refused.

The findings suggest several implications for research on second or foreign language teaching and learning in EFL settings. The study supported other positive or investigative studies on the issue of PI. Therefore, the study supported the use of PI rather than the use of TI in teaching. To keep the communicative nature of the language classes, moreover, teachers need to be introduced to the techniques of teaching grammar. Thus, assigning some time to the training of teachers in this regard would be practical. The implication for particularly classroom teaching is that successful grammar instruction cannot be seen as an end in itself, but has to be related to ultimate learning outcomes. For that reason, teachers must be careful in selecting effective instructions. Of course, instructions that lead to successful performance have their own benefits; they encourage students, make possible classroom interaction and may not be as tiring as more challenging tasks. Teachers should be aware that instructions force learners to operate input with high levels of processing which are more likely to have an effect on acquisition. For materials development, since one of the responsibilities of materials developers is to supply and sequence the content of teaching materials, such as the tasks, creating communicative tasks to offer opportunities for teaching grammar in the other suggested implication.

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Overall, the present study could be considered as a complementary foundation for these two types of instruction. It is worth mentioning that these techniques led to better performance in both PI and MOI groups. Moreover, two substitutes to TI, which is against communicative language teaching, were practiced.

## References

- Arbain, A., & Nur, D. (2017). Techniques for Teaching Speaking Skill in Widya Gama Mahakam University. *Script Journal: Journal of Linguistic and English Teaching*, 2(1), 13-25. doi:<https://doi.org/10.24903/sj.v2i1.80>
- Benati, A. (2005). The effects of processing instruction, traditional instruction and meaning-output instruction on the acquisition of the English past simple tense. *Language Teaching Research*, 9, 67– 93.
- Benati, A., & Schwieter, J. W. (2017). Input processing and processing instruction: Pedagogical and cognitive considerations for L3 acquisition. In T. Angelovska, & A. Hahn (Eds.), *L3 Syntactic Transfer: Models, New Developments and Implications* (pp. 253-275). (Bilingual Processing and Acquisition; Vol. 5). John Benjamins Publishing Company.
- Collentine, J. (2004). Commentary: Where PI research has been and where it should be going. In B. VanPatten (Ed.), *Processing instruction: Theory, research, and commentary* (pp. 173–186). Mahwah, NJ: Lawrence Erlbaum.
- Ellis, R. (2001). Form-focused instruction and second language learning. A supplement to *Language Learning*, 51: supplement 1, 122–39.
- Lee, J. (2015). Processing instruction on the Spanish passive with transfer-of-training effects to anaphoric and cataphoric reference contexts. *International Review of Applied Linguistics in Language Teaching*, 53(2), 203-223.
- Irmawati, D. (2016). What Makes High-Achiever Students Hard to Improve Their Speaking Skill?. *JEES (Journal of English Educators Society)*, 1(2), 71-82. doi:<http://dx.doi.org/10.21070/jees.v1i2.442>
- Moradi, M., & Farvardin, M. T. (2016). A comparative study of effects of input-based, meaning-based output, and traditional instructions on EFL learners' grammar learning. *Research in Applied Linguistics*, 7(2), 99-119.
- Morgan-Short, K., & Bowden, H. W. (2006). *Processing instruction and meaningful output-based* Norwood, NJ: Ablex.
- Processing instruction: Theory, research, and commentary (pp. 5-32). Mahwah, NJ: Lawrence Erlbaum.

- Shintani, N. (2015). The effectiveness of processing instruction and production-based instruction on L2 grammar acquisition: A meta-analysis. *Applied Linguistics*, 36(3), 306-325.
- Shintani, N., Li, S., & Ellis, R. (2013). Comprehension-Based Versus Production-Based Grammar Instruction: A Meta-Analysis of Comparative Studies. *Language Learning*, 63, 296–329.
- Szudarski, P., & Carter, R. (2016). The role of input flood and input enhancement in EFL learners' acquisition of collocations. *International Journal of Applied Linguistics*, 26(2), 245-265.
- VanPatten, B. (1996). Input processing and grammar instruction in second language acquisition. Norwood, NJ: Ablex.
- VanPatten, B. (2004a). Input processing in second language acquisition. In B. VanPatten (Ed.),
- VanPatten, B. (2004b). Processing instruction: Theory, research, and commentary. Mahwah, NJ:
- VanPatten, B. (2007a). Input processing in adult second language acquisition. In B. VanPatten and J. Williams (Eds.), *Theories in Second Language Acquisition: An Introduction* (pp. 115–135).
- VanPatten, B. (2007b). Processing instruction. In C. Sanz (Ed.), *Mind and context in adult second language acquisition* (pp. 267–281). Washington DC: Georgetown University Press.
- VanPatten, B., & Cadierno, T. (1993). Input processing and second language acquisition: A role for instruction. *Modern Language Journal*, 77, 45–57.
- VanPatten, B., & Sanz, C. (1995). From input to output: Processing instruction and communicative tasks. In F. R. Eckman, D. Highland, P. W. Lee, J. Mileham, & R. R. Weber (Eds.), *Second language acquisition and pedagogy* (pp. 169–185). Mahwah, NJ: Lawrence Erlbaum.
- VanPattern, B., Collopy, E., Price, J. E., & Borst, S. (2013). Explicit information, grammatical sensitivity, and the first-noun principle: A cross-linguistic study in processing instruction. *The Modern Language Journal*, 97(2), 506-527.

Wong, W. (2004a). The nature of processing instruction. In B. VanPatten (Ed.), *Processing instruction: Theory, research, and commentary* (pp.33–64). Mahwah, NJ: Lawrence Erlbaum.

Wong, W. (2004b). Processing instruction in French: The roles of explicit information and structured input. In B. VanPatten (Ed.), *Processing instruction: Theory, research, and commentary* (pp.187-205). Mahwah, NJ: Lawrence Erlbaum.