Issue in Language Teaching (ILT), Vol. 7, No. 2, 61-89, December 2018

The Effects of VAK Learning Style and Input Type on Causative Construction Development by Iranian EFL Learners

Motahar Khodashenas Tavakoly
PhD Student of TEFL, Science and Research Branch, Islamic Azad University, Tehran, Iran

Gholamreza Kiany
Associate Professor of Applied Linguistics, Tarbiat Modares University, Tehran, Iran

Seyyed Mohammad Reza Hashemi
Assistant Professor of Applied Linguistics, Kharazmi University, Tehran, Iran

Abstract

Long's Interactional Input Hypothesis and Smith's Input Enhancement Hypothesis hold both foci on Zellig Harris's (1976) formalist approach. Accordingly, the pivotal role of learner's attention as one of the subcomponents of focus-on-form approach may have confused instruction types. However, whether such learning theories on drawing the learners' attention on target language forms suit all types of learners, has not been adequately investigated. Of interest were to explore the significant effect of the two input types as interactionally modified input (IM) and textual input enhancement (TIE) and the interactional effect of learning styles of either visual, auditory, or kinesthetic (VAK) style on knowledge gain of causative constructions. A hundred and twenty female subjects were selected as a homogenous sample out of the 300-member population based on the TOEFL test. A pretest and two posttests were conducted immediately and about one month after the instructional interventions based on either IM technique or TIE technique. To address research questions, two paired samples t-tests and a two-way ANOVA were conducted. Considering the learner's VAK learning style, the results revealed TIE and IM techniques positively facilitated the development of knowledge of the target features immediately after the instructional interventions. The results, however, failed to indicate the merging effect of the two input types of the study with the leaner's VAK learning style and the learner's gain of target grammar knowledge marginally decreased over time. The findings may contribute to the understanding of the integration of learning styles and input-based instructional programs in foreign language education policy.

***Keywords*:** Perceptual VAK learning style; textual input enhancement; interactionally modified input; causative construction

Corresponding author's email: gh.kiany@modares.ac.ir

INTRODUCTION

For over a decade, research on language training concerned that overtly emphasizes linguistic or forms related features of the input in the context of meaningful communication has been central to the study of language learning (Shintani, 2015). The goal of this training, termed form-focused instruction, is to draw learners' attention to a particular problematic linguistic feature, offering learners an opportunity to notice this feature in the input. Such an interest in the form-focused instruction was initiated by research findings that exposure to input alone may not guarantee learners' success in second language L2 acquisition especially with regards to the accuracy of certain grammatical features in learners' speech. Such consideration is indeed at the core of influential pedagogic proposals known as (textual or typographical) input enhancement (Lantolf, 2000; Sharwood Smith, 1993) and interactional input (Doughty, 2000; Radwan, 2005). As Sharwood Smith (1993) hypothesizes, a way to stimulate input processing for form as well as meaning, and therefore language learning, is through improving the quality of input. Specifically, she proposes input enhancement, an operation whereby the saliency of linguistic features is augmented through, for example, textual enhancement (e.g. color-coding, boldfacing) for visual input, and phonological manipulations (e.g. oral repetition) for aural input. The underlying assumption is that noticing is a prerequisite for intake (Gass, 1997; Schmidt, 1990; Sharwood Smith, 1981). On the other hand, there is another input-based instruction technique called interactionally modified input (IM) that aims to facilitate the process of L2 learning through verbal interaction, and out of the interaction syntactic structures are developed (Chaudron, 1988). Based on Interaction Hypothesis (Long, 1982), interaction fosters the acquisition when a communication problem arises and learners are engaged in negotiating for meaning and interactional modifications.

In order to ensure successful outcomes, teachers need to be fully aware of students' cognitive styles for the use of appropriate instructional techniques and strategies. Among different approaches and methods for an individuals' learning, the pivotal role of learning styles is undeniable. Learning style is defined as the composite of characteristic cognitive, affective and physiological characters that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the

learning environment. VAK theory is now a favorite of the accelerated learning community because its principles and benefits extend to all types of learning and development, far beyond its early applications. The Visual-Auditory-Kinesthetic learning style model does not overlay Gardner's multiple intelligences or Kolb's theory; rather the VAK model provides a different perspective for understanding and explaining a person's preferred or dominant thinking and learning style. Teaching and learning styles should be of the greatest interest to educators, particularly the relationship between the two. However, one of the weaknesses of learning style research is the lack of investigation into the matching of teaching and learning styles (Logsdon, 2008; May, 2002).

Although there are many empirical research findings on attention raising mechanisms via input enhancement, the pertinent findings on the target techniques (i.e., TIE and IM) are not only inconclusive but also too sporadic, especially in Iranian EFL setting such that further studies are warranted. Relying on this rationale on one hand and motivated by the claims in favor of the effect of VAK learning style in grammatical development on the other (Izumi, 2002; Oxford, 2001; Reid, 1987; Terrell, 1991), this study was designed to investigate the effect of TIE/IM in order to see whether they are significantly and individually effective in developing target structure knowledge. The other concern of this research was to examine the merging effect of TIE and IM with VAK learning style in learner's gain of causative construction knowledge.

LITERATURE REVIEW

Pedagogic Concerns on Form-focused Instruction

Over the recent decades, the controversy over either direct or indirect instruction of language forms has always been challenged (Ellis, 2006). Due to the inadequacy of the approaches favoring either form or meaning with the exclusion of one or the other, the 1990s witnessed approaches pursuing the combination of the two learning targets of form and meaning, including Long's (1983) interaction hypothesis, Schmidt's (1993, 2001) noticing hypothesis, Sharwood Smith's (1993) input enhancement, and VanPatten's (1996, 2002) processing instruction.

Textual input enhancement is a pedagogic technique with the aim of enhancing input deliberately to draw learners' attention to the formal features of the language to help the development of L2 knowledge (Nassaji & Fotos, 2011; Sharwood Smith, 1993). Typographical or textual enhancement is a type of input enhancement which has received some attention in the past two decades (Gascoigne, 2006; Izumi, 2002; Lee, 2007; Lee & Huang, 2008; Simard, 2009). As Peart (2008) asserts, "an advantage for textual enhancement is that it can be easily integrated into different instructional approaches and course materials regardless of any particular teaching approaches" (p. 86).

Among different techniques in the explicit discussion of target forms is the pivotal role of interaction devised by Long Interaction Hypothesis (1982). Ellis (2001) suggests that "in this way, we promote learner's attention to the target structure and meanwhile engage learners in meaning-focused interaction to mediate environmental contributions to acquisition" (p.32). In addition, Long (1982, 1983) also emphasizes that modifications are likely to occur more in two-way tasks which oblige NSs and NNSs to negotiate for meaning in order to make their speech more comprehensible to their interlocutors. Many researchers (Carroll, 2000; Ellis, 1997; Larsen-Freeman & Long, 1991; Leow, 2001; McDonough & Mackey, 2000) hold a similar view on the significance of input modifications which result from the negotiation process in interaction.

Research in pedagogy has shown that learners' internal mechanisms as their cognition with different perceptual modalities can make some features of the input seem different to them (Oxford, 2001; Reid, 1987). According to Brown (2000), learning style characterizes a profile of the person's approach to learning, a blueprint of the habitual or preferred way the individual perceives, interacts with, and responds to the learning environment. Learning style was defined as the individual preference to manipulate, process, interpret and assimilate knowledge (Cassidy, 2004). VAK learning style as the category of instructional preference which is dealing with the perceptual model has been studied in a number of studies in SLA (Fleming, 2001; Ingram, 2007; Norman, 2009; Sen & Yilmaz, 2012). The theoretical framework of this study lies within the input enhancement and interaction hypothesis. Contrary to the sufficient empirical research findings on various mechanisms of attention raising via different

pedagogical techniques, the pertinent findings on target input types (TIE & IM) are inconclusive. Relying on this rationale on one hand and motivated by debates in the field of cognitive psychology that learning styles should focus more on the sensory input and output rather than a response to the situation thereby improving an individuals' learning process (Fleming, 2001), this study was designed to investigate the role of two different input types on developing grammar ability in order to see whether they are significantly effective. Additionally, it seems that data are thin on the ground as to the merging effect of input types in relation to VAK learning style that no study to date has been devoted to the investigation of such effects as far as the acquisition of the target structure is concerned.

VAK Learning Style

Learning styles are those general characteristics of intellectual functioning and personality type, as well that especially pertain to someone as an individual. Miller (2001) defines learning style as "Learning style is a gestalt combining internal and external operation derived from the individuals' neurobiology, personality, and development, and reflected in learner behavior" (p. 16). One of the most common learning styles taxonomy in practice today, VAK has become commonplace at all levels of education (Bishka, 2010; Fridley & Fridley, 2010; Logsdon, 2009). Some researchers have worked on the effects of learning styles and different instructional techniques on L2 learning (Doughty & Williams, 1998; Felder & Henriques, 1995; Kara, 2009). For example, Alavinia and Farhady (2012) in their study revealed that the performance of learners possessing VAK learning style had a significant effect on grammar tests. Rakap (2010) also pointed out that VAK learning style had a positive effect on adult students' knowledge acquisitions. Some other scholars like Castro and Peck (2005) claim that a student's preferred learning style can help or hinder success in the foreign language classroom. They carried out a study on learning styles and learning difficulties that foreign language students face in L2 grammar learning and found no significant correlation between learning style and grammar tests. Similarly, Tight's (2007) study of English college students learning Spanish showed that students performed equally well on vocabulary tests regardless of perceptual learning style preference. Controversial results of the studies indicated the individual variations shown

by participants as the effect of instruction may have been due to the individual differences, or the mismatches between cognitive and instructional styles.

Textual Input Enhancement

Input enhancement is grounded on the theories that deliberate attention to target forms is a necessary condition for learning target forms (Lee, 2007; Leow, 1999; Lyddon, 2011; Santis, 2008; Sharwood Smith, 1993; Simard, 2009). For example, Lee (2007) found positive effects of VIE on Korean EFL students' learning of passive form. Likewise, the results of the study conducted by Santis (2008) revealed that VIE facilitated the learners' awareness of the target form in reading. In contrast, other researchers reported no positive effects of VIE (Izumi, 2002; White, 1998). Leow (2001) investigated the effects of textual enhancement on learning Spanish formal imperatives and found no advantage for enhanced text over unenhanced text. Barcroft (2003), by the same token, compared two types of focus on form strategies on the learning of English relativization, finding that the visual enhancement did not result in gains in accuracy using the target form. Thus, the results of the studies on textual enhancement suggest that, while this strategy may promote noticing of grammatical forms, it may not be sufficient for their acquisition.

Interactionally Modified Input

In the interactional approach, input is defined as "the linguistic forms (morphemes, words, utterances), the streams of speech in the air, directed at the non-native speaker" (Long, 1983, p.127). His work (1983) revealed that in NS-NNS interactions, NSs modified their interactions more often and more consistently than they did the input. So far, the empirical studies that deal with grammar acquisition from an interactionist perspective have reported contradictory findings. For instance, Loschky (1994) did not find positive effects of negotiated interaction on vocabulary retention. In the same vein, Ellis (2002) cast doubts on the value of negotiation for the acquisition of target forms. More recently, Smith (2005) explored the relationship between negotiated interaction, learner uptake, and lexical acquisition. Smith's (2005) study indicated that there is no relationship

between a degree of uptake and the acquisition of target lexical items. These authors reported that learners' behavior in interaction varies from actively asking questions to passively attending the negotiations.

Other studies have argued that modification of the conversational structure is more beneficial to learners than simplified input (Gasss, 2003; Morris & Tarone, 2003; Sullivan, 2000). Similarly, Van den Branden (2000) tried to make distinctions between unmodified input condition, interactional input condition and pair negotiation condition. It was found that learners displayed significantly higher scores on comprehension tests with the chance to negotiate the meaning of unknown words and phrases than being merely exposed to either the unmodified texts or the interactional texts. Such results indicate that more professional research should be carried out to examine the effects of interactionally modified input not only in response to different types of grammar features but also in different classroom contexts.

Causative Construction

The L2 acquisition of causative structures has attracted some researches within the framework of generative grammar (Pinker, 1989; White, 1998). This has been not only due to the overall interest related to the ongoing development of grammar theories but also because of the fact that the acquisition of grammatical items is a very complex knowledge contrary to what some structuralist thoughts (Furuta, 2008). Although L2 learners are successful at figuring out the correct lexicosyntactic representation changing the morphology of change-of-state verbs in English, some learners may still accept morphological errors with these verbs that can be traced back to their respective L1s. This difficulty might be due to the fact that the causative structure is different between English and Persian languages. Causative construction is chosen as the target structure in this study based on VanPatten's (1996) "First Noun Principle". According to this principle, the order in which learners encounter sentence elements is a powerful factor in assigning grammatical relations among sentence elements. Thus, English causatives are good examples for investigating this principle, especially in an EFL context.

PURPOSE OF THE STUDY

The review of the current literature on the role of TIE, IM input in respect to VAK learning style in fostering non-native English learners' causative construction knowledge indicated the dearth of empirical research on this area of investigation. To fill this gap, the present study assessed and examined the effectiveness of two input types of the study namely as interactionally modified input (IM) and textual input enhancement (TIE) considering VAK learning style in fostering the noticing and learning gain of English causative constructions by Iranian EFL learners. Thus, this study aimed to address the following research questions:

1. Does textual input enhancement in view of VAK learning style have any significant effect on developing causative constructions in the immediate posttest?
2. Does interactionally modified input in view of VAK learning style have any significant effect on developing causative constructions in the immediate posttest?
3. Is there any significant interaction between VAK learning style and input type on developing causative constructions in the delayed posttest?

METHOD

Participants

This study with a quasi-experimental design included a pretest, posttest and delayed posttest. The independent variables were training EFL learners through two input-based instructional techniques and VAK learning style aimed at learning causative constructions as the dependent variable. In what follows, the details are presented of the selection of participants, instrumentation, the instructional materials used, and data collection procedure in two experimental groups of the study.

A total number of 120 upper-intermediate female students within the age range of 20 to 28 participated in this study. They were taking English language courses in three different language schools in Tehran and they attended the same course with the researcher as the instructor. To this aim, the researcher initially negotiated with the managers of these institutes and

gained their consent to carry out the present study in the respective institutes. The sampling method was non-random convenient sampling due to availability and manageability reasons. The participants shared Persian as their vernacular language whose selection was based on the results of the PBT TOEFL test according to which those who scored the cut-off criterion were considered as the acceptable L2-sample participants for the purpose of the study. PLSPQ questionnaire was given to participants. Then, they were divided into two groups (TIE &IMI) of 60 each. Each group of 60 participants was further divided into three subgroups consisting of thirty learners. Each of these subgroups also had ten participants from each of the Visual, Auditory, and Kinesthetic learning styles.

Instrumentation

PBT TOEFL

Two subsections of paper-based TOEFL taken from Broukal (1997) were used as a means of homogenizing the pool of initial participants. The items were randomly selected from among 150 items provided in this book which are claimed to be similar to real TOEFL in terms of content and difficulty, hence evidence for its construct validity. The test consisted of 90 items and included 30 items of structure and written expressions and 50 items of reading comprehension. Each item had a weight of 1 point and accordingly had a scaling of 0 to 90 for scoring. K-R 21 was utilized to estimate the reliability of the test, which was estimated to be 0.82 in the piloting phase which is a satisfactory level of reliability (Brown, 2000). To ensure the content validity of this test, it was examined by four English teachers holding Ph.D. degrees. The feedback of these teachers was considered to locate any possible instances of ambiguity, ambivalence or infelicity and rewording a few of the items in terms of item characteristics of a test.

PLSPQ Questionnaire

Reid's (1984) Perceptual Learning Style Preference Questionnaire (PLSQR) was the second instrument to measure EFL learners' learning style on a five-option Likert point scale. The questionnaire contained 30 items catering for six types of learning styles: Visual, Auditory, Kinesthetic, Tactile, Group

Learning and Individual learning. For the purpose of the present study, categories that were relevant to perceptual modality were needed. Thus the three major perceptual styles of visual, auditory, and kinesthetic (VAK) were used. The overall reliability of the questionnaire proved to be 0.90 in the piloting phase as the acceptable level of reliability. PLSPQ has been the central instrument for many studies in EFL contexts and validated by several researchers (Peacock, 2001; Honey & Mumfords, 2000). For the purpose of content and face validity of the questionnaire, it was looked over by two ELT professionals so as to be valid for the present study purpose.

Causative Structure Test

The last instrument used was a 30-item multiple choice causative structure test in order to assess the participants' knowledge and served as, pretest, posttest and delayed-posttest after one month of finishing the instructions. To examine the overall quality of the test with regard to the appropriateness of the content-level, the clarity of directions, the time limits, and administration procedures the causative structure test was piloted. The test had 30 items with the reliability index of .070 piloting with a group of 30 students and later reviewed both by two language testing researchers judging the workability, appropriacy, and accuracy of the items and also item analysis. The results revealed some instances of misspelling, miss ordering of test-items on print, and ambiguity of directions. So, the modifications were made and the finalized version of the test was used for the purpose of data collection. To analyze the data, each incorrect or blank response received a score of 0 and each item was scored 1 if the response was correct. Therefore, the total score made a sum of 30. The researcher gathered test items from different well-known grammar books (Alexander, 1990; Murphy, 2004; Swan, 2005). In order to check its content validity, the test was examined by the above-cited professors and was confirmed to be valid. Particularly, based on the judgments from these experts, minor modifications were applied and some items were replaced or improved. Particularly, based on item facility and difficulty indices, the items which proved to be invariably easy or very hard were either eliminated or modified.

Treatment for the Target Structure

VanPatten points out that, “the human mind may be predisposed to placing agents and subjects in a first noun position” (2002, p.15). Thus, English causatives are good examples for investigating this principle. In these structures, the first noun is not the real agent of the sentence and this makes their comprehension and production difficult. Causative is one of the English structures that does not frequently appear in instructional materials and these structures might be problematic for EFL learners. Majority of the studies on causative constructions have dealt with the way in which causative constructions are employed by English native speakers. (Altunkol, 2013; Anyanwu, 2012; Hemmings, 2013; Zibin, & Altakhaineh, 2016). Therefore, fewer investigations have focused on the use of these constructions by English non-native speakers which is mainly due to the complexities of causatives both within particular languages and cross-linguistically (Kemmer & Ferhagen, 1994). The targeted forms were the English causative verbs have, get and make to which the participants had not been exposed before, according to the placement test of the institutes which placed them at the same level. All participants in each group took the pretest before the beginning of the instructional phase in order to make sure that they were not familiar with the target structures. Given the important role of input and the fact that causative structures pose challenges for EFL learners, the present study sought to investigate the effect of input type in view of VAK learning style on learning causative structures by Iranian upper-intermediate learners.

Data Collection Procedure

Prior to conducting the study, the participants and the managers of the language schools completed the consent form. Two experimental groups of the study each with 60 learners received (TIE or IMI) as the treatments of the study and they were divided into subgroups according to their VAK learning style. The learners had 8 treatment sessions about 40 minutes in two months. The causative construction test was used as the pretest before the first session, posttest in the fourth session and delayed post-test about one month after the treatments. To do so, initially, the researcher obtained some texts from the student's coursebook named "Interactions access" and

"Active Skills for Reading" consisting of causative structures. Eight of such texts were used for both groups. In TIE group, the causative structures used in the texts were textually enhanced drawing on Sharwood Smith's (1993) guidelines such as underlining, italicization, capitalization, and other strategies to increase the noticing of the target structure. After reading the passage, the TIE group answered a multiple-choice exercise, without looking back the text they just read. In IMI group, a text was read at normal speed by the instructor. While the text was being read, learners took notes. The tasks after reading the passages were some scrambled, transformational or reconstruction exercises to be done with their peers and make the modifications required through interaction.

Data Analysis

Before running any of the needed analyses for each research question, the necessary assumptions were observed by checking the ratios of skewness and kurtosis for normality of distribution of data and graphical representation by Q-Q plots. Then, to investigate the effect of textual input enhancement and interactionally modified input in view of VAK learning style on target structure, two paired-sample t-tests were conducted. A two-way ANOVA was also applied to probe the interaction between VAK learning style and input type on developing causative constructions in the delayed posttest.

RESULTS

Results of the Normality Test

To ensure the homogeneity of the participants, items of structure and reading comprehension of a PBT TOEFL test, the ratios of skewness and kurtosis was checked. Table 1 shows the absolute values of the ratios of skewness and kurtosis over their respective standard errors which are lower than 1.96; hence normality of the present data.

Table 1: Testing normality of data

Treatment	Style		N	Skewness			Kurtosis		
			Statistic	Statistic	Std. Error	Ratio	Statistic	Std. Error	Ratio
Input Enhancement	Auditory	TOEFL	30	.025	.427	0.06	-1.066	.833	-1.28
		Pretest	30	-.381	.427	-0.89	-.258	.833	-0.31
		Posttest	30	-.386	.427	-0.90	-.740	.833	-0.89
		Delayed	30	-.363	.427	-0.85	-1.005	.833	-1.21
	Visual	TOEFL	30	.058	.427	0.14	-.816	.833	-0.98
		Pretest	30	.327	.427	0.77	-.539	.833	-0.65
		Posttest	30	.286	.427	0.67	-.324	.833	-0.39
		Delayed	30	.189	.427	0.44	-.396	.833	-0.48
	Kinesthetic	TOEFL	30	-.111	.427	-0.26	-1.025	.833	-1.23
		Pretest	30	.085	.427	0.20	-.557	.833	-0.67
		Posttest	30	.059	.427	0.14	-.688	.833	-0.83
		Delayed	30	.055	.427	0.13	-.887	.833	-1.06
Interactionally Modified	Auditory	TOEFL	30	.274	.427	0.64	-.937	.833	-1.12
		Pretest	30	.032	.427	0.07	-.773	.833	-0.93
		Posttest	30	-.430	.427	-1.01	-.353	.833	-0.42
		Delayed	30	.205	.427	0.48	-.927	.833	-1.11
	Visual	TOEFL	30	.215	.427	0.50	-.901	.833	-1.08
		Pretest	30	-.308	.427	-0.72	-.395	.833	-0.47
		Posttest	30	-.542	.427	-1.27	-.322	.833	-0.39
		Delayed	30	-.289	.427	-0.68	-1.131	.833	-1.36
	Kinesthetic	TOEFL	30	.216	.427	0.51	-.505	.833	-0.61
		Pretest	30	.259	.427	0.61	.280	.833	0.34
		Posttest	30	-.611	.427	-1.43	-.825	.833	-0.99
		Delayed	30	-.248	.427	-0.58	-.524	.833	-0.63

As it can be seen in the table above, the absolute values of the ratios of skewness and kurtosis over their respective standard errors were lower than 1.96; hence normality of the present data. The Q-Q plots indicate the quantiles of the data under consideration against the quantiles of the normal distribution. Figures bellows display the normal Q-Q plots of the TOEFL test and the pretest respectively.

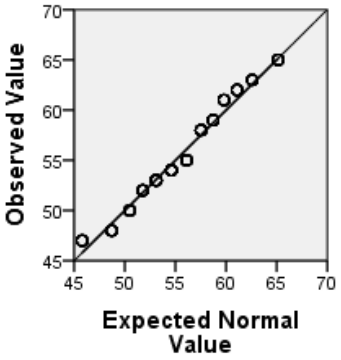

Figure1. The normal Q-Q plot of the TOEFL test

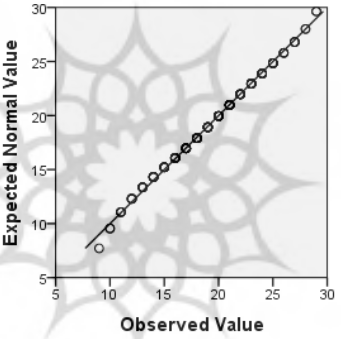

Figure 2. The normal Q-Q plot of the pretest

According to the figures above, although very few points have departed from the reference line, the degree of their departure is not great. Therefore, their distribution was normal.

First Research Question

The first research question sought to investigate the efficiency of textual input enhancement in view of VAK learning style on the target structure. Table 2 indicates the non-significant result ($p>0.05$) of normality which means that participants were homogeneous.

Table 2: Descriptive statistics of TIE group's pretest and posttest of causative structure

						Kolmogorov-Smirnov		
		Mean	N	Std. Deviation	Std. Error Mean	Statistic	df	Sig.
Pair 1	Pretest Textual Enhancement Auditory	18.5333	30	4.40793	.80478	.097	30	.200*
	Posttest Textual Enhancement Auditory	19.4333	30	3.09263	.56463	.142	30	.125
Pair 2	Pretest Textual Enhancement Visual	19.6333	30	4.10621	.74969	.112	30	.200*
	Posttest Textual Enhancement Visual	20.9667	30	3.11264	.56829	.171	30	.085
Pair 3	Pretest Textual Enhancement Kinesthetic	18.7000	30	4.26817	.77926	.080	30	.200*
	Posttest Textual Enhancement Kinesthetic	21.3000	30	3.65919	.66807	.144	30	.114

As Table 2 shows there was a statistically significant increase in TIE mean scores from pretest to posttest. In the auditory group it was found that their pre-test scores (*M*=18.53, *SD*=4.40) were significantly higher than their post-test (*M*=19.43, *SD*=3.092). A significant difference was found between the pretest scores of visual (*M*=19.63, *SD*=4.10) and kinesthetic groups (*M*=18.70, *SD*=4.26) and the posttest scores of visual (*M*=20.96, *SD*=3.11) and kinesthetic groups (*M*=21.30, *SD*=3.65). Table 3 provides the paired samples t-test statistics conducted to answer the first research question.

Table 3: Paired-samples t-test pretest and posttest of causative structure in TIE group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Posttest Textual Enhancement Visual - Pretest Textual Enhancement Visual	1.33333	1.47001	.26839	.78442	1.88224	-4.968	29	.000
Pair 2	Posttest Textual Enhancement Auditory - Pretest Textual Enhancement Auditory	.90000	1.62629	.29692	.29273	1.50727	-3.031	29	.005
Pair 3	Pretest Textual Enhancement Kinesthetic - Posttest Textual Enhancement Kinesthetic	-2.60000	1.13259	.20678	-3.02292	-2.17708	-12.574	29	.000

The t-observed values are represented in Table 3 as they are in the case of learners with visual style (t =-4.96, $p<0.05$), with auditory style (t =-3.031, $p<0.05$) and learners with kinesthetic style (t=-12.57, $p<0.05$). Statistically speaking, the first null hypothesis was rejected; indicating that TIE instruction had a significant effect on noticing causative constructions in view of VAK learning style.

Second Research Question

In order to answer the second research question addressing the efficiency of interactionally modified input in view of VAK learning style on noticing causative constructions, another paired-sample t-test was run. Table 4 shows

the respective descriptive statistics.

Table 4: Descriptive statistics of IM group's pretest and posttest of causative structure

		Mean	N	Std. Deviation	Std. Error Mean	Kolmogorov-Smirnov Statistic	df	Sig.
Pair 1	Pretest Interactionally Modified Auditory	19.3000	30	4.21941	.77036	.074	30	.200*
	Posttest Interactionally Modified Auditory	21.9667	30	3.54754	.64769	.144	30	.116
Pair 2	Pretest Interactionally Modified Visual	18.9333	30	4.19304	.76554	.089	30	.200*
	Posttest Interactionally Modified Visual	21.1667	30	3.75163	.68495	.175	30	.120
Pair 3	Pretest Interactionally Modified Kinesthetic	19.5000	30	4.34503	.79329	.083	30	.200*
	Posttest Interactionally Modified Kinesthetic	21.1667	30	3.39455	.61976	.130	30	.200*

As Table 4 shows there was a statistically significant increase in IM mean scores from pretest to posttest. In an auditory group, it was found that their pre-test scores (*M*=19.30, *SD*=4.21) were significantly higher than their

post-test (*M*=21.96, *SD*=3.54). A significant difference was found between the pretest scores of both visual (*M*=18.93, *SD*=4.19) and kinesthetic groups (*M*=19.50, *SD*=4.34) and the posttest scores of visual (*M*=21.16, *SD*=3.75) and kinesthetic groups (*M*=21.16, *SD*=3.39). Table 5 provides the paired samples t-test statistics conducted to answer the second research question.

Table 5: Paired-samples t-test pretest and posttest in IM group

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest Interactionally Modified Auditory - Posttest Interactionally Modified Auditory	-2.66667	1.12444	.20529	-3.08654	-2.24679	-12.990	29	.000
Pair 2	Pretest Interactionally Modified Visual - Posttest Interactionally Modified Visual	-2.23333	.93526	.17075	-2.58257	-1.88410	-13.079	29	.000
Pair 3	Pretest Interactionally Modified Kinesthetic - Posttest Interactionally Modified Kinesthetic	-1.66667	1.18419	.21620	-2.10885	-1.22448	-7.709	29	.000

The t-observed values are represented in Table 5 as they are in the case of learners with visual style (t =-13.07, p<0.05), with auditory style (t =-12.99, p<0.05) and learners with kinesthetic style (t=-7.70, p<0.05). Thus,

interactionally modified input had a significant effect on noticing causative constructions in view of VAK learning style.

Third Research Question

A two-way analysis of variances (two-way ANOVA) was run on the delayed posttest scores of causative construction in order to probe the last three research questions. Before discussing the results, it should be noted that the assumption of homogeneity of variances was met. The results of the Levene's test ($p > .05$) indicated that there were not any significant differences between the groups' variances on delayed posttest; hence homogeneity of their variances.

Table 6: Tests of between-subjects effects: Delayed posttest by groups by learning styles

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Group	93.889	1	93.889	5.636	.019	.031
Learning styles	6.933	2	3.467	.208	.812	.002
Group * Learning styles	107.378	2	53.689	3.223	.042	.036
Error	2898.800	174	16.660			
Total	81232.000	180				

As displayed in Table 6, there was a marginally significant interaction between types of treatments and learning styles in the delayed post-test ($F(1, 174) = 3.22$, $p = .042$, partial $\eta^2 = .036$). Based on these results it can be concluded that the third null-hypothesis as no significant interaction between types of treatments and learning styles was rejected, although the results should be interpreted cautiously due to the weak effect size value of .042. Furthermore, the researcher decided to use pair-wise comparisons to determine which group differences were statistically significant. The results are indicated in Table 7.

Table 7: Pair-wise comparisons: Delayed posttest scores of causative construction by treatment by learning style

Style	(I) Treatment	(J) Treatment	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
						Lower Bound	Upper Bound
Auditory	Input Enhancement	Interactionally Modified	.600	1.054	.570	-1.480	2.680
Visual	Input Enhancement	Input Enhancement	1.800	1.054	.089	-.280	3.880
Kinesthetic	Interactionally Modified	Interactionally Modified	3.133*	1.054	.003	1.053	5.213

In Table 7, the auditory group means (Mean Difference = .600, p = .570) and the visual group means (Mean Difference = 1.80, p = .089) indicated that the types of treatments did not have any significant effect on the auditory group's performance on the delayed posttest. However, the kinesthetic group means (Mean Difference = 3.13, p = .003) represented that the types of treatments had a significant effect on the kinesthetic group's performance on the delayed posttest.

DISCUSSION

The results obtained from the first research question highlighted that noticing causative constructions was achieved due to the significant effect of TIE instruction in view of VAK learning style of the learners, thus it was in line with Sharwood Smith's (1981) Input Enhancement Hypothesis and Schmidt's (1990, 1993, 1995) Noticing Hypothesis that input salience can be created by an outsider like a teacher or by an insider like the learners themselves through their cognitive processes. The significant effect of textual enhancement is in line with some previous research trends (Berent & Kelly, 2008; Combs, 2008; Lee, 2007; Simard, 2009; Song, 2007). For example, Cho (2010) investigated the effects of textual enhancement on the acquisition of the English present perfect tense. The results indicated that textual enhancement positively influenced the learners' noticing and acquisition of the target forms. Given the results achieved, the findings of this study are in contrast with those of the previous studies (Ahmad, 2011;

Izumi, 2002; Park, 2004). Areas of mismatch among the findings of the effectiveness of TIE in this study and those of the previous researches might be attributed to methodological issues. For example, Kim (2006) reported negative effects since he incorporated lexical elaboration into textual enhancement in the acquisition of form. The researcher considered VAK learning style of the learners in addition to input enhancement, so it is safe to ascertain the positive effects of both on target structure. Consequently, when exposed to externally enhanced input, learners may or may not notice it, or may notice it partially. This justification can be supported by the claim by Sharwood Smith (1991) that a mismatch may arise between the intentions lying behind teacher or textbook generated enhancement of the input and the actual effect it comes to have on the learner cognitive system.

The results of the second research question indicated statistically significant effects of IM technique in view of VAK learning styles. This goes in line with Long's (1983) premise about interactional modification and Reid's (1987) proxy of perceptual styles known as VAK. As Long (1996) has pointed out, the role of interaction is claimed only to be facilitative stemming from learner-internal factors. This finding was also in accordance with the studies on the positive link between instructional techniques and the perceptual profile of the learners (Ford & Chen, 2001; Grasha, 1996; Lighbown & Spada, 2006; Logsdon, 2009). Felder and Henriques (1995) suggest the need for balancing concrete information as sensing and conceptual information as intuition. The balance does not have to be equal and in some courses, it may be shifted heavily toward the sensing side, but there should periodically be something to capture the intuition's interest.

Finally, the interactional effect of VAK learning style and input types proved to be marginally significant in delayed post-test, which suggests that the positive effects for instruction on target structure were not retained equally well over the time interval. A possible reason might be related to differences in cognitive development in which learning goes through a number of processes, from processing information to short-term memory before transforming the encoded information to long-term memory. In other words, there is no relationship between learning style classifications and their memory performance as the case in the present study. Reviewing the related literature indicates while there is some evidence supporting the

learning styles theory (Fleming, 2001; Hyland, 1993; Strati, 2007) and there are notions against the theory (Cohen, 2003; Keri, 2002). This initiates the call for responsiveness and adaptability in instruction to address learner diversity. Similar to our research, the study conducted by Keri (2002) also indicated that kinesthetic learning was the major learning style among the learners and auditory learning was the least preferred learning style. On the other hand, none of the subjects were visual learners. In addition, Massa and Mayer (2006) found no support for any kind of interactions despite the exhaustive analysis of nearly 200 individual-difference measures that spanned their proposed facets of verbalizer, visualize and verbalizer-visualize learning styles. To provide a justification to such observations, May (2002) argues that learning categories are not definitive and it does not mean that an individual cannot learn through a different means if they are placed into one learning style, it simply means that through careful investigation, this is their learning preference. Going beyond instructional interventions, Bishka (2010) makes the case that neuroimaging shows that the various sensing modalities (visual/auditory/kinesthetic) are actually interlinked in the brain so that they are triggered in unison, suggesting no single mode can operate in isolation.

CONCLUSION AND IMPLICATIONS

The results of the present study indicate that TIE and IM input in view of VAK learning styles positively facilitate the development of causative structures, both immediately after the instructional intervention, and marginally decreasing over time. The main theoretical implication that may be drawn from this study is that although input, whether textually enhanced or interactionally modified may provide a positive effect that allows it to become salient and hence noticed, it should not be seen as a cause of acquisition; it can only set the scene for potential learning. Learners' cognitive process in language learning is more complex and may affect their learning outcomes, therefore, it should be taken into consideration when they are involved in different situations of instruction. The results of the current research provided evidence that TIE and IM techniques had positive effects on the target structure as far as the VAK style of the learners was concerned. However, the interactional effects of the input types and VAK style were not significant. These findings may suggest that TIE and IM

techniques in view of perceptual learning styles are either helpful or unhelpful. Future research should seek to test the robustness of these insights. This effort will lead researchers into ascertaining psycholinguistic contingencies under which input type is able to trigger a chain of cognitive processes that result ultimately in acquisition.

There are, however, a number of limitations to this study. One of the limitations is related to the target forms which represent only a small part of the overall range of the causative structures. Furthermore, factors such as gender, the number of participants, their level of proficiency, and the time of the tests' administration must be taken into account. The use of similar pretest and posttests could have had an effect on the participants' memory. Future research should involve manipulation of test items to discourage the influence of item familiarity which could have affected students' performance. Therefore, future studies could address all these limitations via a wider span, and choose new forms to gain more insights in different EFL contexts.

References

Ahmad, A. (2011). Language learning style preferences of Low English proficiency (LEP) students in a tertiary institution. *Malaysian Journal of ELT Research, 7*(2), 33-62.

Alavinia, P., & Farhadi, S. (2012). On the would-be bonds between emotional intelligence and learning style. *Theory and Practice in Language Studies, 2*(5), 956-964.

Alexander, L. G. (1990). *Longman English Grammar Practice*. UK: Pearson Education Limited. Altunkol, E. (2013). The role of explicit instruction in the acquisition of causative/inchoative transitivity. *JSMAL, 3*(1), 1-13.

Anyanwu, O. (2012). Causative and anti-causative verb alternations. *English Linguistics Research, 1*(2), 25-34.

Barcroft, J. (2003). Distinctiveness and bidirectional effects in input enhancement for vocabulary learning. *Applied Language Learning, 13*, 133-159.

Berent, G. P., & Kelly, R. R. (2008). The efficiency of visual input enhancement in teaching learners of L2 English. In Z.H. Han (Ed.), *Understanding second language process (*pp. 80-105). Clevedon: Multilingual Matters.

Bishka, A. (2010). Learning styles fray: Brilliant or batty? *Performance Improvement, 49*, 9-13.

Broukal, M. (1997). *TOEFL grammar flash*. New Jersey: Peterson's Princeton.

Brown, H. D. (2000). *Principles of language learning and teaching*. New York: Longman.

Carroll, S. (2000). *Input and evidence: The raw material of second language acquisition.* Philadelphia: John Benjamins.

Cassidy, S. (2004). Learning styles: An overview of the theories, models and measures. *Educational Psychology, 24*, 419-444.

Castro, O., & Peck, V. (2005). Learning styles and foreign language learning difficulties. *Foreign Language Annals, 38,* 401-409.

Chaudron, C. (1988). *Second language classrooms research on teaching and learning.* Cambridge: Cambridge University Press.

Cho, M. Y. (2010). The effects of input enhancement and written recall on noticing and acquisition. *Innovation in Language Learning and Teaching, 4*(1), 71-87.

Cohen, A. D. (2003). The learner's side of foreign language learning: Where do styles, strategies, and tasks meet? *IRAL, 4*(4), *279-292.*

Combs, Ch. (2008). Topic familiarity and input enhancement: An empirical investigation. *Applied Linguistics, 8*(2), 1-51.

Doughty, C., & Williams, J. (1998). Pedagogical choices in focus on form. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp.197-261). Cambridge: Cambridge University Press.

Doughty, C. (2000). Negotiating the L2 linguistic environment. *University of Hawaii Working Papers in ESL, 18,* 47-83.

Ellis, R. (1997). *SLA research and language teaching*. Oxford: Oxford University Press.

Ellis, R. & Heimbach, R. (1997). Bugs and birds: Children's acquisition of second language vocabulary through interaction. *System, 25*, 247-259.

Ellis, R. (2001). Investigating form-focused instruction. *Language Learning, 51*, 1-46.

Ellis, N. (2002). Frequency effects in language processing. *Studies in Second Language Acquisition, 24,* 143-188.

Ellis, R. (2006). Controversies in grammar teaching. *TESOL Quarterly, 54*, 109-223.

Felder, R. M., & Henriques, E. R. (1995). Learning and teaching styles in foreign and second language education. *Foreign Language Annals, 32,* 43-54.

Fleming, N. D. (2001).Teaching and learning styles: VAK strategies. *Studies in Second Language Acquisition, 21*, 285-301.

Ford, N., & Chen, S.Y. (2001). Matching/mismatching revised: An empirical study of learning and teaching styles. *British Journal of Educational Technology, 32*, 5-22.

Fridley, W. L., & Fridley, C.A. (2010). Some problems and peculiarities with the

learning styles rhetoric and practice. *Journal of Philosophy of Education, 32,* 21-27.

Furuta, Y. (2008). Differences between the causatives Make and Get. *Language Education and Technology, 45,* 95-112.

Gascoigne, C. (2006). Explicit input enhancement: Effects on target and non target aspects of second language acquisition. *Foreign Language Annals, 39*(4), 551-564.

Gass, S. (1997). *Input, interaction, and the second language learner.* Mahwah, NJ: Lawrence Erlbaum Associates.

Gass, S. (2003). Input and interaction. In C. Doughty & M. Long (Eds.), *The handbook of second language acquisition* (pp.224-255). Massachusetts: Blackwell Publishing.

Grasha, A.F. (1996). *Teaching with style.* Pittsburgh, PA: Alliance Publishers.

Harris, Z.S. (1976). A theory of language structure. *American Philosophical Quarterly, 13,* 237-255.

Hemmings, C. (2013). Causatives and applicatives: The case for polysemy in Javanese. *SOAS Working Papers in Linguistics, 6*(2), 167-196.

Honey, P., & Mumfords, A. (2000). *The learning styles helper's guide.* Maidenhead: Peter Honey Publications.

Hyland, K. (1993). Culture and learning: A study of the learning style preferences of Japanese students. *RELC Journal, 24*(2), 69-91.

Ingram, J.C.L. (2007). *Neurolinguistics: An introduction to spoken language processing and its disorders*. Cambridge: Cambridge University Press.

Izumi, S. (2002). Output, input enhancement, and the noticing hypothesis: An experimental study on ESL relativization. *Studies in Second Language Acquisition, 24,* 541–577.

Juffs, A. (1996). *Learnability and the lexicon: Theories and second language acquisition research.* Philadelphia, PA: John Benjamins.

Kara, S. (2009). Learning style and teaching styles: A case study in foreign language classroom. *Applied Linguistics, 34,* 77-82.

Kemmer, S., & Verhagen, A. (1994). The grammar of causatives and conceptual structure of events. *Cognitive Linguistics, 5*(2), 115-156.

Keri, G. (2002). Male and female college students' learning styles differ: An opportunity for instructional diversification. *College Student Journal, 36*(3), 433-441.

Kim, Y. (2006). Effects of input elaboration on vocabulary acquisition through reading by Korean learners of English as a foreign language. *TESOL Quarterly, 40,* 341-373.

Lantolf, J. (2000). Second language learning as a mediated process. *Language Teaching, 33,* 79-96.

Larsen-Freeman, D., & Long, M. (1991). *An introduction to the second language acquisition research*. New York: Longman.

Lee, S. K. (2007). Effects of textual enhancement and topic familiarity on Korean EFL students' reading comprehension and learning of passive voice. *Language Learning, 57*, 87-118.

Lee, S., & Huang, H. (2008). Visual input enhancement and grammar learning: A metaanalytic review. *Studies in Second Language Acquisition, 30*(3), 307-331.

Leow, R. P. (1999). The effects of input enhancement and text length on adult L2 readers'comprehension and intake in second language acquisition. *Applied Language Learning, 8*, 151-182.

Leow, R. (2001). Do learners notice enhanced forms while interacting with the L2? An on-line and off-line study of the role of written input enhancement in L2 reading. *Hispania, 84*, 496-509.

Lightbown, S., & Spada, M. (2006). *How languages are learned.* Oxford: Oxford University Press.

Logsdon, A. (2009). Multisensory technique make multisensory teaching materials. *Second Language Research, 12*, 135-142.

Long, M. (1982). Native speaker/non-native speaker conversation in the second language classroom. In M. Long & C. Richards (Eds.), *Methodology in TESOL: A book of readings* (pp. 339-354). New York: Newbury House.

Long, M. (1983). Native speaker/non-native speaker conversation and the negotiation of comprehensible input. *Applied Linguistics, 4*, 126-141.

Long, M., & Robinson, P. (1998). Focus on form: Theory, research, and practice. In C. Doughty, & L. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 15-41). Cambridge: Cambridge University Press.

Loschky, L. C. (1994). Comprehensible input and second language acquisition: What is the relationship? *Studies in Second Language Acquisition, 16*, 303-325.

Lyddon, P. (2011). The efficacy of corrective feedback and textual enhancement in promoting the acquisition of grammatical redundancies. *The Modern Language Journal, 95*, 104-129.

Massa, L.J., & Mayer, E. (2006).Testing the ATI hypothesis: Should multimedia instruction accommodate verbalizer-visualizer cognitive style? *Learning and Individual Differences, 16*, 321-336.

May, S. (2002). Learning styles and writing in modern foreign languages. *International Journal of Applied Linguistics, 11*(1), 3-14.

McDonough, K., & Mackey, A. (2000). Communicative tasks, conversational interaction and Linguistic form: An empirical study of Thai. *Foreign Language Annals, 33*(1), 82-92.

Miller, P. (2001). *Learning styles: The multimedia of the mind.* Oxford: Oxford University Press.

Morris, F. A. & Tarone, E. E. (2003). Impact of classroom dynamics on the effectiveness of recasts in second language acquisition. *Language Learning, 53(2),* 325-368.

Murphy, R. (2004). *Grammar in Use Intermediate.* UK: Cambridge University Press.

Nassaji, H., & Fotos, S. (2011). *Teaching grammar in second language classrooms: Integrating form-focused instruction in a communicative context*. London: Routledge.

Norman, G. (2009).When will learning style go out of style? *Advances in Education, 14*(1), 1-4.

Oxford, R. L. (2001). Language learning styles and strategies. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (pp. 350-367). Boston: Heinle & Heinle.

Park, E. S. (2004). Constraints of implicit focus on form: Insights from a study of input enhancement. *Applied Linguistics, 42,* 87-95.

Peacock, M. (2001). Match or mismatch? Learning style and teaching style in EFL. *International Journal of Applied Linguistics, 11*(1), 1-20.

Peart, S. M. (2008). The relative effects of enhanced and non-enhanced structured input on L2 Acquisition of Spanish past tense. *Modern Language Journal, 43,* 102-221.

Pinker, S. (1989). *Learnability and cognition: The acquisition of argument structure.* Cambridge, MA: MIT Press.

Radwan, A. A. (2005). The effectiveness of explicit attention to form in language learning. *System, 33,* 69-87.

Rakap, S. (2010). Impacts of learning style and computer skill on adult students' learning online. *The Turkish Online Journal of Educational Technology, 9,* 108-115.

Rao, Z. (2002). Bridging the gap between teaching and learning styles in East Asian contexts. *TESOL Journal, 11*(2), 5-1.

Reber, A. (1993). *Implicit learning and tacit knowledge: An essay on the cognitive unconscious.* Oxford: Clarendon Press.

Reid, J. M. (1987). The learning style preferences of EFL students. *TESOL Quarterly, 21*(1), 87-111.

Santis, P. D. (2008). Text enhancement and the acquisition of English verbal inflection by L1 Haitian creole speakers. *Applied Language Learning, 18*(1), 27-49.

Sarasin, L. C. (1998). *Learning style perspectives. Impact in the classroom*. Madison: Atwood Publishing.

Schmidt, R. (1995). The role of consciousness in second language learning. *Applied Linguistics, 11,* 17–45.

Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics, 11*(2), 17-46.
Schmidt, R. (1993). Consciousness, learning and interlanguage pragmatics. *Interlanguage pragmatics, 21*, 42.
Schmidt, R. (1995). The role of consciousness in second language learning. *Applied Linguistics, 11*, 17–45.
Schmidt, R. (2001). Attention. In Robinson, P. (Ed.), *Cognition and second language instruction* (pp. 3-32), Cambridge: Cambridge University Press.
Sen, S., & Yilmaz, A. (2012). The effect of learning styles on students' misconceptions and self-efficacy for learning and performance. *Social and Behavioral Sciences, 46*, 1482-1486.
Sharwood Smith, M. (1981). Consciousness raising and second language acquisition theory. *Applied Linguistics, 7*, 239-256.
Sharwood Smith, M. (1991). Speaking to many minds: On the relevance of different types of language information for the L2 learner. *Second Language Research, 72*, 118-132.
Sharwood Smith, M. (1993). Input enhancement in instructed SLA: Theoretical bases. *Studies in Second Language Acquisition, 15*, 165-179.
Shintani, N. (2015). The effectiveness of processing instruction and production based instruction on L2 grammar acquisition. *Applied Linguistics, 36*(3), 306-325.
Simard, D. (2009). Differential effects of textual enhancement formats on intake. *System, 37*, 124-135.
Song, M. (2007). Getting learners' attention: Typographical input enhancement, output, and their combined effects. *English Teaching, 62*, 193-215.
Strati, A. (2007). Sensible knowledge and practice-based learning. *Management Learning, 38*(1), 61-77.
Sullivan, P. (2000). Playfulness as mediation communicative language teaching in classroom. *Second Language Learning, 10*, 35-76.
Swan, M. (2005). *Practical English usage* (3rd ed). New York: Oxford University Press.
Terrell, T. D. (1991). The role of grammar instruction in a communicative approach. *The Modern Language Journal, 75*, 52-63.
Tight, D.G. (2007). The role of perceptual learning style preferences and instructional method in the acquisition of L2 Spanish vocabulary. *Modern Language Journal, 67*, 98-112.
Van den Branden, K. (2000). Does negotiation of meaning promote reading comprehension? A Study of multilingual primary school classes. *Reading Research Quarterly, 35*, 426-443.
VanPatten, B. (1996). *Input processing and grammar instruction: Theory and*

research. Norwood, NJ: Ablex.
VanPatten, B. (2002). Processing instruction: An update. *Language Learning, 52,* 755-803.
White, J. (1998). Getting the learners' attention: A typographical input enhancement study. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 85-113). Cambridge: Cambridge University Press.
Zibin, A., & Altakhaineh, A. R. (2016). Acquiring the English causative alternation: Evidence from the University of Jordan. *International Journal of Applied Linguistics and English Literature, 5*(3), 7-15.