On the Impact of Two Input-Oriented Techniques and Perceptual Learning Styles on Causative Construction Development: The Case of Iranian Learners of English

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Abstract

This study sought to investigate the effect of the two input types interactionally modified input (IM) and textual input enhancement (TIE), the impact of a commonly used learning styles taxonomy as the Visual, Auditory and Kinesthetic learning styles (VAK) by itself as well as the interactional effect of perceptual learning styles and input types on the causative construction development of EFL learners. To this end, 120 female Iranian EFL learners from three language schools in Tehran participated in this research and were divided into two experimental groups of 60. The study adopted a pretest-posttest design and learner's grammar knowledge was measured before and after providing them with instructional treatment through IM input and TIE techniques. The data were analyzed through a two-way ANOVA. The results of the study indicated that IM input was significantly more effective than TIE in promoting the participants' knowledge of the target structure. The comparison of the posttest means scores also revealed that the VAK style was not an influential factor in second language learners' target form knowledge, while a significant interaction between input type and learning styles turned out to have a beneficial effect if they synchronize in classrooms.

INTRODUCTION

Over the past decades,there has been a shift to meaning-based approaches in which meaning was focused at the expense of form. Implementing a balance between meaning and form-focused instruction enticed the researchers to come up with the focus-on-form approach which facilitates interlanguage restructuring through form-function mapping (Nassaji&Fotos, 2007). Long and Robinson (1998) suggest that focus-on-form "often consists of an occasional shift of attention to linguistic code features, by the teachers and or

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one or more students, triggered by perceived problems with comprehension or production" (p.23). There are different ways to pull focus-on-form instruction. This can range from providing learners with implicit and explicit corrective feedback for their errors during communication (reactive focus on form) to manipulating prese-lected linguistic features in input to make them more salient and noticeable to learners (proactive or preplanned focus on form). Such noticing, Schmidt (2000) argues, helps L2 learning. For these reasons, focus-on-form is seen as potential-ly beneficial for L2 learners. Bialystok (1998), Ellis (2001) and Reber (1993) suggest that some debates in the field of cognitive psychology on whether such learning occurs through conscious manipulation of information through learning styles or primarily through unconscious processes when people are exposed to language input. Ped-agogically among the alternative techniques of focus-on-form instruction are textual input en-hancement and interactionally modified input techniques which may facilitate noticing of target linguistic forms in the input. Ellis, Basturkmen, and Loewen (2002) assert that input enhancement involves "highlighting certain features of input that might go unnoticed under normal circum-stances by typographically manipulating them through boldfacing, italicizing, underlining, or capitalizing" (p. 425). It is claimed that these techniques bring the forms into focal attention. Robinson (2003) suggests that some L2 compo-nents are so subtle and abstract that they cannot be attended to; therefore, one of the important functions of language teaching is to help focus learners' attention on the linguistic aspects. Ina-bility to process the form and meaning simulta-neously, as well as lack of ability to pay global attention to all aspects of the input at once due to memory capacity, are two reasons for the appli-cation of this focus-on-form technique. Over the past decades, various studies have debated the instructional effect of an input-based approach, namely, input enhancement (e.g. Alanen, 1995; Han, Park, & Combs, 2008; Izumi, 2002; Leow, 2001; Liu, 2009; White, 1998; Wong, 2003).

They differ in types of typological cues and the kind of tasks employed as recognition, compre-hension, intake, and production. Results of these studies cast considerable doubt on the efficacy of input enhancement since most of the studies re-ported that input enhancement does not induce desired learning effects as intended by the re-searchers. Consequently, they concluded that providing learners with input enhancement alone is too implicit to both draw their attention to form and affect their learning.

The next linguistic environment chosen as the second potential source of comprehensible input in this study was characterized by opportunities for learner interactions in which Pica, Young and Doughty, (1986) define it as when "both parties modify and restructure the interaction to arrive at mutual understanding" (p. 7). The role of interac-tion in SLA evolved from Hatch's (1983) work, which emphasized the importance of conversa-tion in developing grammar. It was substantiated by the seminal work of Long (1982, 1983), who termed this as an interactional modification, which later became more widely referred to as negotiation. Pica (1994) defines this term as it is used to "characterize the modification and re-structuring of interaction that occurs when learn-ers and their interlocutors anticipate, perceive, or experience difficulties in message comprehensi-bility" (p. 494).Long (1983) proposes that this two-way exchange of information will provide more comprehensible input, and promote acquisi-tion better than one-way information exchange. Many researchers hold a similar view on the sig-nificance of input modifications which result from the negotiation process in interaction (e.g. Fotos, 2002; Mackey & Oliver, 2002; McDonough & Mackey, 2000). Due to the wide array of differences, the studies are not compara-ble and the results cannot be generalized. The majority of the studies report the beneficial ef-fects of interactionally modified input over other input types. However, these results should be interpreted with caution.

Among many studies conducted to measure the gains in learners' performance dealt with the

extent different input types could trigger the targeted grammatical construction, learning styles are one of the scarce research areas in this regard. Among the various learning style theories available, the delineation put forth by Reid (1987) has been adopted in the current study which characterizes the perceptual learning styles as " a biologically and developmentally imposed set of personal characteristics that make the same teaching and learning methods effective for some and ineffective for others" (p. 41). One of the most common learning styles taxonomy in practice today, precisely visual, auditory and kinesthetic (VAK), has become commonplace at all levels of education. Fleming (2001) defines visual learners prefer maps, charts, graphs, diagrams, highlighters, and different spatial arrangements. Aural learners like to explain new ideas to others, discuss topics with other students and their teachers, attend lectures, and discussion groups. Kinesthetic learners like field trips, trial, and error, doing things to understand them, laboratories, recipes and solutions to problems and samples. Over the past three decades, various studies on learning styles have indicated controversial results (Cano, 1999; Fridley & Fridley, 2010; Lewis, 2008; Oxford, 2001; Wang, 2007). One common discrepancy exists when the preferred input modality of most learners and the preferred presentation mode of most professors are inconsistent (Gappi, 2013). Hall and Moseley (2005) propose that the compatibility of the students' learning styles and teaching techniques such as the provision of a balance of concrete information should be arranged for students who prefer, for example, sensory learning styles. They note that according to the learning styles hypothesis, if the instruction is matched to students' learning preferences, then we should see an increase in learning, yet research does not yet support this claim.

A causative structure is one of the challenging and infrequent English structures for less proficient EFL learners as the target structure of this study. The targeted forms were the English causative verbs have and get to which the participants had not been exposed before in order to see the

effects of two implicit types of focus on form techniques. Hypothetically, this would increase the likelihood of matching the target linguistic form that the teacher (or the researcher) intends to focus on, with the linguistic form that learners are developmentally ready to acquire. The theoretical and pedagogical reasons for choosing the target structure were as follows. A variety of theoretical frameworks as the universal-typological theory proposed by Wierzbicka (2000), cognitive linguistics developed by Hollmann (2006) and construction grammar introduced by Stefanowitsch and Gries (2003) have been put forward to clarify the concept of causative structures. The causative structure was deemed a good target for the first-noun principle of Information Processing (IP) theory among the other frameworks (VanPatten, 2004). It is argued that learners usually tend to use a default processing strategy that assigns the role of a subject to the first noun or phrase they see or hear in the input containing a causative verb, and IP can help learners adjust this false strategy. Moreover, this structure is among the most problematic constructions due to its difference between English and Persian. Persian verbs are usually causativised by affixing the causative infix /än/. The infix changes an intransitive verb to a causative transitive one. For example, Bateni mentioned that the intransitive verb *Khandidan*(to laugh) is simply changed to the transitive verb of *Khandandan*(to make somebody laugh) by inserting the morpheme /än / into the word (as cited in BagherShabani, 2012). This process is completely morphologic which mostly occurs in languages such as Persian which is more inflectional than agglutinative. In contrast, Lotfi (2008) believes that in English this process is lexical and periphrastic. For example, in the sentence 'my teacher had me work hard' the tendency would be to interpret that it was 'teacher', and not 'I' who worked hard, which is a periphrastic use of this structure. Another reason why causative sentences seem demanding for learners is that thefirst meanings of have and get that they usually encounter and learn are to possess and to receive respectively, so many Iranian

learners have a problem with identifying their usages. Finally, producing causative sentences requires learners to be aware of the correct form of the verb following each causative verb too. In light of the above issues, this study was an effort to fill the relevant gap of research in SLA literature on the impacts of two input-oriented techniques and perceptual learning styles on English causative structures.In this research study, the following questions were proposed:

1- Following instructional treatments, is there a significant differential performance between IM group and TIE group toward causative construction development?

2- Do adult Iranian EFL learner's perceptual modality, namely VAK, significantly affect their ability to notice the target forms in subsequent authentic input?

3- Is there any significant interaction between VAK learning style and input type on developing causative constructions?

METHODS

Participants

The final number of participants was 120 out of 300 female students of the upper-intermediate level, aged between 20 and 28, learning English in three language schools in Tehran. The sampling method was non-random convenient sampling due to availability and manageability reasons. The participants were selected based on the results of the paper-based TOEFL who shared Persian as their vernacular language. Based on the mean of 55 plus and minus one standard deviation of 11.42, the cases were selected to participate in the main study. Reid's PLSPQ questionnaire (1984) was given to participants. Then, they were divided into two groups (TIE and IM) of 60 each. Each group of 60 participants was further divided into three subgroups consisting of 20 learners from each of the Visual, Auditory, and Kinesthetic learning styles.

Instruments

The instruments implemented in the study were as follows:

1) A sample of paper-based TOEFL administered to ensure the homogeneity of the participants. TOEFL is an international examination developed by Educational Testing Service which sanctions lower intermediate mastery of the English language. It should be mentioned that the listening and writing sections of the test were not administered.

2) To identify the perceptual modalities of the participants, an adapted version of the Reid's (1984) Perceptual Learning Style Preference Questionnaire (PLSPQ) was used.The VAK learning styles self-assessment questionnaire measures 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 as visual, auditory, and kinesthetic were needed. Thus three other categories were excluded from the test. For the thirty items, the learning style most often selected determines the learning style label assigned to that individual. It is possible for a respondent to mark responses tied to two or three learning styles with equal frequency and, hence not be considered to have a single learning style.

3) In order to measure how much learning had taken place in both experimental groups, a test of the causative structure was devised by the researcher as the pretest and posttest. The purpose of pretest consisting of 30 items was to exclude the participants who were familiar with the target structure. Both tests were devised on comprehension and structure-based questions. The formats of the tests were multiple-choice followed those of the TIE and IM input activities they were practicing in the class. The re-

searcher gathered test items from different well-known grammar books (Murphy, 2004; Swan, 2005).

Instructional Materials

Based on focus on form instruction guidelines (as suggested in Sharwood Smith, 1993) along with Long Interaction hypothesis (1982) and their emphasis on unobtrusive and implicit means of input-based treatments, the instructional materials of this study were developed. TIE was aimed at directing the learner's attention to the target structure in a text by highlighting, underlining or coloring when they interpret the sentences containing the key form. After reading the passage or a story, the learners answered some exercises like reading-based comprehension task or noticing questions without looking back at the text they just read.

Objective of IM input technique was to help the learners produce output by providing interactional modifications in order to help them notice a mismatch between their interlanguage and target language form. Planned (proactive) focus-on-form task was utilized through IM input type of the present study. Tasks were designed to elicit the use of target structure in a meaning-based context. In short, the learners were invited to negotiate over the task with the teacher through comprehension checks, clarification requests and expansions to make the modifications required.

Procedure

To address the research questions the following steps were taken in the current study. For the purpose of homogenizing the participants, a sample of paper-based TOEFL was used. First, it was administered to 300 Iranian EFL learners. The time allocated for the test was 90 minutes. The correct answer to each item received one point while there was no penalty for false responses. The mean (M= 55.00) and standard deviation (SD= 11.42) of the TOEFL were used as the criteria for choosing the participants. This test was piloted with 30 non-

participants having the same characteristics to the main participantsto calculate the reliability index. The KR-21 reliability index was 0.82. The PLSPQ questionnairewas administered to one-hundred twenty participants to determine whether they were mostly visual, audio or kinesthetic style. The overall reliability of the questionnaire proved to be 0.90 in the piloting phase with 30 non- participants having the same characteristics to the main participants. The causative structure test as the pretest and posttest of this study was piloted according to the appropriateness of the content level, the clarity of directions, the time limits, and administration procedures. After piloting the test with a group of 30 non-participants, the non-fit items were removed.The final version consisted of 30 test items with the reliability index of .070.For the purpose of validating the content of the above-mentioned tests, two expert ELT professionals who had been teaching grammar for years, examined the items so as to be valid for the present study purpose.

This research study employed a quasi-experimental, pretest, posttest design. The selected participants were distributed in two groups, TIE group, and IM input group; each consists of 60 learners. The major goal of the study was to investigate how subjects with different learning styles of VAK would process input, so each experimental group received each type of input techniques. The treatment and administration of the required assessment measures lasted eight sessions. During the first session, the learners in both groups took part in the pretest to examine the participant's knowledge of causative structure before the treatment commencement. Both pretest and posttest included 30 multiple choice questions about causative structure in the present and past tenses. The posttest was the same as that of the pretest with the same content but shuffled items, gathered from different well-known grammar books (Murphy, 2004; Swan, 2005). In this study, the acquisition was evaluated in terms of the correct production of the target form.

To minimize the probable "Hawthorne" effect, the same teacher instructed the two groups. Due to the nature of the treatments in this study, each week the instructional treatment session took 20 minutes for TIE group and about 25 minutes for IM group. To do so, initially, the researcher obtained some texts from the student's course book named "Interactions access" and "Active Skills for Reading" consisting of causative structures or any other sources like English magazines and newspapers. The target structures in TIE group were typographically enhanced in these texts utilizing various enhancement techniques (bolding, italicizing, and underlining). In each instructional session, learners individually read a passage within an optimal pace assigned by their teacher. After reading the passage or a story, the TIE group answered some exercises like reading-based comprehension task or noticing questions without looking back at the text they just read. Due to the individual differences, the teacher ensured that vocabulary was not an issue. She then explained problematic vocabulary to help them get the meaning conveyed by the passages.

In IM group, the learners were divided into groups working on a passage. The researcher read out each sentence allowing a short pause to attract the learner's attention to the structure of the context. During the pause, the students negotiated in order to find out the mistakes and correct them. After that, the teacher tried to help them to edit the text. As for the feedback, the teacher sought answers from the students. When the process was done for the whole passage, the researcher read the corrected form of the passage again. Once the instructional sessions were held, the learners sat for the posttest in order to investigate the effect of the treatments on the eighth session.

DATA ANALYSIS AND RESULTS

In order to answer the research questions, the quality of the numerical data was analyzed with the absolute values of the ratios of skewness and kurtosis over their respective standard errors. They were lower than 1.96; hence normality of the present data. In order to probe the construct validity for the tests administered in this study, Kaiser-Meyer-Olkin (KMO) measure of sample adequacy was run. As shown in Table 1, KMO statistic is .576 and Bartlett's test is significant (p=0.000).

Table 1.
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.576
	Approx. Chi-Square	222.990
Bartlett's Test of Sphericity	Df	6
	Sig.	.000

Table 2 shows the total variance explained by two factors. This two-factor model accounted for 76.83 percent of the variance. That is to say; the three tests measured their underlying constructs with an accuracy of 76.83 percent.

Table 2
Total Variance Explained

Com-ponent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.055	51.369	51.369	2.055	51.369	51.369	2.050	51.259	51.259
2	1.018	25.458	76.827	1.018	25.458	76.827	1.023	25.568	76.827
3	.745	18.630	95.457						
4	.182	4.543	100.000						

Testing Varimax rotation on the data indicated the factor loadings of the four tests under the two extracted factors which can be labeled as "causative construction" and "general language proficiency" factor (TOEFL). All factor loadings enjoyed large effect size (=> .50). After normality and reliability of the data were examined, the homogeneity of the samples was also investigated.

Two-way ANOVA was run to compare the mean scores of the two groups on the TOEFL test. The data analysis (p = .111) in Table 3 represent that there was not any significant difference between the TIE and IM groups' means on the TOEFL test and the two groups enjoyed the same level of general language proficiency prior to the administration of the treatment.

Table 3.

Tests of Between-Subjects Effects; TOEFL Test by Groups by Learning Styles

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Group	2.939	1	2.939	.111	.740	.001
Learning styles	59.233	2	29.617	1.114	.331	.013
Group * Learning styles	17.144	2	8.572	.322	.725	.004
Error	4625.233	174	26.582			
Total	564825.000	180				

A two-way ANOVA was also run to probe any difference between the TIE and IM groups' mean scores on the pretest of the target structure. The results of the Levene's test (p > .05) indicated that there were not any significant differences between the groups' variances on the pretest. As Table 4 displays, the results of two-way ANOVA (p = .207) also indicated that there was not any significant difference between the means of the two groups of the study on the pretest and the two groups were at the same level of English structure knowledge prior to the administration of the treatment. The results displayed in Table below also represents that there were not any significant interaction between types of treatments and learning styles (p = .546) before the treatment administration.

Table 4.

Tests of Between-Subjects Effects; Pretest by Groups by Learning Styles

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Group	3.756	1	3.756	.207	.650	.001
Learning styles	4.033	2	2.017	.111	.895	.001
Group * Learning styles	22.011	2	11.006	.607	.546	.007
Error	3154.400	174	18.129			
Total	68850.000	180				

Table 5 below shows the descriptive statistics of the groups' pretest according to their VAK learning style. As shown, there was not any significant difference between the auditory (M = 18.91, SE = .55) visual (M = 19.28, SE = .55) and kinesthetic (M = 19.10, SE = .55) groups' means on the pretest. Thus it can be concluded that they were at the same level of their knowledge on causative construction prior to the administration of the treatment.

Table 5.

Descriptive Statistics; Pretest by Learning Styles

Style	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Auditory	18.917	.550	17.832	20.002
Visual	19.283	.550	18.198	20.368
Kinesthetic	19.100	.550	18.015	20.185

In a bid to answer the research questions, both descriptive and inferential statistics were used to give a clear picture of the data and to answer the three research questions. A two-way analysis of variances (two-way ANOVA) was run to determine the effectiveness of input types and learning style on the learner's causative construction development. The independent variables were the input type (TIE and IM) and learning style (VAK) and the dependent variable was causative construction development.

A two-way analysis of variances (two-way ANOVA) was run in order to probe the three research questions. The results of Levene's test (p > .05) indicated that there were not any significant differences between the groups' means on the posttest. As displayed in Table 6, the interactionally modified group (M = 24.90, SE = .35) had a higher mean than the input enhancement group (M = 22.68, SE = .35) on the posttest.

Table 6.

Descriptive Statistics; Posttest by Groups

Group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Input Enhancement	22.689	.358	21.982	23.395
Interactionally Modified	24.900	.358	24.193	25.607

The results of the two-way ANOVA in Table 7 (p = .000) indicated that the interactionally modified group significantly outperformed the input enhancement group on the posttest of causative construction. Thus the first null hypothesis was rejected.

Table 7.

Tests of Between-Subjects Effects; Posttest by Groups by Learning Styles

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Group	220.006	1	220.006	19.07	.000	.099
Learning styles	6.711	2	3.356	.291	.748	.003
Group * Learning styles	563.511	2	281.756	24.425	.000	.219
Error	2007.167	174	11.535			
Total	104709.000	180				

The results displayed in Table 7 (p = .748) and also the results in Table 8 indicated that there were not any significant differences between the auditory (M = 23.75, SE = .43) visual (M = 23.58, SE = .43) and kinesthetic (M = 24.05, SE = .43) groups' means on the posttest of causative construction. Thus it can be concluded that the second null-hypothesis was supported.

Table 8.
Descriptive Statistics; Posttest by Learning Styles

Style	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Auditory	23.750	.438	22.885	24.615
Visual	23.583	.438	22.718	24.449
Kinesthetic	24.050	.438	23.185	24.915

And finally, as displayed in Table 7 above, there was a significant interaction between types of treatments and learning styles (p = .000). As it is indicated in the following graph, it can be concluded that the third null-hypothesis as no significant interaction between types of treatments and learning styles was rejected.

	Auditory	Visual	Kinesthetic
Input Enhancement	25.10	21.67	21.30
Interactionally Modified	22.40	25.50	26.80
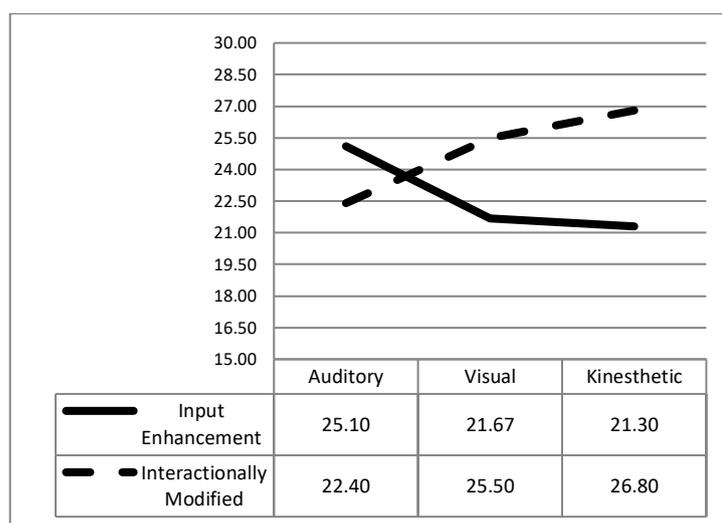
Line Graph 1The Interactional effect between groups and learning styles on the posttest

DISCUSSION AND CONCLUSIONS

The present research was an attempt to investigate the effect of two input-oriented techniques and VAK learning style on learner's causative construction development. According to the results of this study, three major findings are evident. First of all, supporting Long's InteractionHypothesis, the subjects engaged in interactionally modified input (IM) treatment outperformed those exposed to textual input enhancement in learning English causative construction. Carefully planned activities for noticing input involving negotiated interaction might contribute to the outperformance of IM group to gain a better knowledge of causative forms. This finding of the present study is consistent with the results of some previous studies (Liu, 2009; Loscky, 1994; Macky, 1999; Pica et al., 1986), which proposed

that sufficient cognitive resources have been deployed to process the word through interaction. Fotos (2002) postulates that in learner-learner interactions, there is more questioning which enables learners to initiate opportunities for accessing target language data for the immediate resolution of language difficulties. Lack of salience may have been a problem with the nonsignificant effect of TIE. Sachs and Suh (2007) suggest that the non-effects of textual input enhancement may be due to its static nature, its insensitivity to learners' abilities, or its irrelevance to learners' communicative needs. Sharwood Smith (1991) proposes that salience might be a perceptual feature. In other words, even the most deliberate attempts to modify a stimulus are no guarantee of its perception, and the participants in the current study were not asked if they indeed perceived the

enhancements. Consequently, even when a large amount of input is available in their learning environment, they may not benefit much from it. Izumi (2002) contends that learners' first language (L1) as a hindrance to the learners' ability to notice certain linguistic features in the input, should not be ignored. In the same vein, Schmitt (2000) states that failure to benefit from input may arise from a combination of lack of noticing ability on the learner's part and poor input characteristics such as lack of perceptual salience or noticeability. Furthermore, less efficiency in TIE group might be related to the fact that the success of TIE depends on a better understanding of the key modulating variables such as learners' prior knowledge, the nature of the target form, learner processing capacity, and frequency of the enhanced element (Alanen, 1995).

Secondly, disregarding the input type, different VAK learning style failed to show any measurable effect on the noticing of the target structure in the present study. The researcher believed that learning style, as an influential factor, might not have affected the way the attentional resources were taken into account. This is in line with previous studies on related areas (Abdollahi&Tahriri, 2012; Bishka, 2010; Kassaian, 2007). For example, the research finding byOfla and Turunc (2012) demonstrated that second language learning and learning style are weakly related to each other. The non-significant effect of learning style might be related to the differences in cognitive development. Knowing one's learning style can be beneficial if learners take the next step and consider how and when they learn as part of a reflective-metacognitive process with action to follow. Furthermore, there is not a clear concept of learning styles. It seems that they are lauded and then attacked on an almost cyclical basis. As Reid (1995) suggests, "very different aspects of learning styles are contrasted. Consequently, the instruments chosen to measure a learning style vary from one researcher to another and are not without controversy since their statistical reliability and validity have at times, been questioned" (p. 67). The ambiguity in different

study results is that a number of researchers have attempted to present an account of the central themes of the learning-style models, frameworks or typologies (Cassidy, 2004; Nilson, 2016; Reid, 1995).It is worth mentioning in the present research, the learning styles were identified through the questionnaire. Questionnaires, although are commonly used instruments in data collection for such cognitive facets of mind, are not exact. We may conclude that VAK learning style requires more enrichment programs to change. Other possible reasons might be related to the low proficiency of the subjects or even to the novelty of learning style approach to the subjects who also confuse preferences with ability or strengths. They can like something, but be good at it or not good at it or any point between (Pashler, McDaniel & Rohrer, 2009).

Finally, the interactional effect of VAK learning style and input type was proved to be significant in posttest which could be considered as one of the contributions of the present study on their merging effect. This implication is partially supported by the literature indicating that learners cannot be dichotomously separated. This results in an individual being seen as a certain type of learner by nature to match the instruction with. This finding is consistent with previous studies conducted on related areas (Peacock, 2001; Peterson, Rayner& Armstrong, 2009). For example in Aqel and Mahmoud (2006) study, a significant interaction effect did emerge, with reflective learners' gains being higher when they were taught via reflective means, such as instruction and recall. The researchers concluded that teachers should take learning style into account and match instruction accordingly. Based on the gained upshots, L2 teachers can employ input-based instructional techniques in conjunction with informed-decisions about the learner's learning style, as they help L2 learners to make form-meaning connections for grammar learning and make the input more salient to promote L2 learner's noticing. In the present study, the researcher tried to avoid specific styles or style-like consistency but pursued a versatile or synthetic

style, which means to make flexible use of different learning styles in accordance with the teaching techniques. The fact that most instructional treatments, despite their varying foci, touch on learning styles suggests that these categories are ultimately inseparable. However, a number of other scholars have noted the seemingly incongruous dynamic of learning styles on one hand and a lack of empirical support for the teaching method on the other (e.g. Fridley & Fridley, 2010; Pashler et.al., 2009; Riener& Willingham, 2010; Scott, 2010). As partially supported by the literature, this implication should be taken cautiously.

This study was affected by some limitationswhich should be taken into consideration while appraising the results. The first limitation referred to the gender of the participants who were restricted to female learners. Another limitation was in relation to the possible impact of other types of individual differences, such as language aptitude, motivation, etc. Also, due to the short-period process of the instructional treatment, the results obtained is vulnerable to error. The present study involved learners who belonged to almost the same level of proficiency and this might have affected the results. It is worth mentioning that linking instructional treatments and learning styles together depends upon several factors. These factors are background knowledge, interest level, physical state, and emotional state. It is important to know where the learner in regards to these factors to achieve the ultimate learning experience.

References

Abdollahi, S. H., &Tahriri, A. (2012). The relationship between learning styles and vocabulary recall of learners. *Iranian EFL Journal, 8*(6), 11-27**.**

Alanen, R. (1995). Input enhancement and rule presentation in second language acquisition. In R. Schmidt, (Ed.), *Attention and awareness in second language acquisition* (pp. 259-99). Honolulu: University of Hawaii Press.

Aqel, F., & Mahmoud, S. (2006). Learning styles of An-Najah National University students in learning English as a foreign language. *Humanities, 20*(2), 597-624.

BagherShabani, M. (2012). Different learning style preferences of male and female Iranian non-academic EFL learners. *ELT, 5*(9), 65-87.

Bialystock, E. (1998). The competence of processing: Classifying theories of second language acquisition. *TESOL Quarterly, 24*, 635-648.

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

Cano, J. (1999). The relationship between learning style, academic major, and academic performance of college students.*Journal of Education, 40*, 87-99.

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

Doughty, C., & Varela, E.(1998).Communicative focus on form. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 114-138). New York: Cambridge University Press.

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

Ellis, R., Basturkmen, H., &Loewen, S. (2002). Doing focus-on-form.*System, 30*, 419-432.

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

Fotos, S. (2002). Structure-based interactive tasks for the EFL grammar learner. In E. Hinkel& S. Fotos (Eds.), *New perspectives on grammar teaching in secondlanguage classrooms* (pp. 135-155). Mahwah, NJ: Erlbaum.

Fridley, W. L., & Fridley, C.A. (2010).Some problems and peculiarities with the learning styles rhetoric and practice.*Journal of Philosophy and History of Education, 32,* 21-27.

Gappi, L. L. (2013). Relationships between learning style preference and academic performance of students. *InternationalJournal of Educational Research and Technology, 4*(2), 70-76.

García Mayo, M.P. (2002). Interaction in advanced EFL pedagogy: A comparison of form-focusedactivities. *International Journal of Educational Research*, *37*, 323-341.

Hall, E., & Moseley, D. (2005). Is there a role for learning styles in personalized education and training?*International Journal of Lifelong Education, 24,* 243-255.

Han, Z., Park, E., & Combs, C. (2008). Textual enhancement of input: Issues and possibilities. *AppliedLinguistics, 29*(4), 597-618.

Hatch, E. (1983).Simplification and second language acquisition. In R. W. Andersen (Ed.),*Pidginizationand creolization as language acquisition* (pp. 59-86). Rowley, MA: Newbury House.

Hollmann, W. (2006).Passive ability of English periphrastic causatives. In S. Th. Gries& A.Stefanowitsch (Eds.), *Corpora in cognitive linguistics: Corpus-based approaches tosyntax and lexis* (pp. 193-223). Berlin: Mouton de Gruyter.

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

Kassaian, Z. (2007). Learning styles and lexical presentation modes.*ELIA, 7, 53-78.*

Kuiken, F. &Vedder, I. (2002).The effect of interaction in acquiring the grammar of a second language.*International Journal of Educational Research*, *37*, 343-358.

Leow, R. (1997). The effects of input enhancement and text length on adult L2 readers' comprehensionand intake in second language acquisition.*Applied Language Learning, 8*, 151-182.

Leow, R. P. (2001). Do learners notice enhanced forms while interacting with the L2? An online andoffline study of the role of writ-

ten input enhancement in L2 reading.*Hispania, 3*(84), 496-509.

Lewis, N. (2008). *The relationship between learning style and student success in a distance education Program.* (Unpublished master's thesis). University of Athabasca, Canada.

Lipca, L. (1982). Causatives and inchoatives in English and their treatment in recent lexicographicpractice.*An international review of English Studies, 14,* 1-15.

Liu, Z. (2009). On the influential factors for L2 learners' oral language production. *Foreign Languagesand Teaching, 7,* 26-28.

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

Long, M. (1983). Native speaker/non-native speaker conversation and the negotiation of comprehensibleinput.*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.

Lotfi, A. R. (2008).Causative constructions in modern Persian, *California Linguistic Notes,* XXXIII(2),1-31.

Mackey, A. (1999). Input, interaction, and second language development: An empirical study of questionformation. *Studies in Second Language Acquisition, 21,* 557-587.

Mackey, A., & Oliver, R. (2002).Interactional feedback and children's L2 development.*System, 30*(4),459-477.

Mackey, A., &Philp, J. (1998). Conversational

interaction and second language development: Recasts,responses, and red herrings? *The Modern Language Journal, 82*(3), 338-356.

McDonough, K., & Mackey, A. (2000). Communicative tasks, conversational interaction and linguisticform: An empirical study of Thai. *ForeignLanguageAnnals, 33*(1), 82-92.

Murphy, R. (2004). *Grammar in use.*Cambridge: Cambridge University Press.

Nassaji, H. &Fotos, S. (2007). Current issues in form-focused instruction.In S. Fotos& H. Nassaji (Eds.), *Form-focused instruction and teacher education: Studies in honor of Rod Ellis* (pp. 7-15).Oxford: Oxford University Press.

Nilson, L. B. (2016). *Teaching at its best: A research-based resource for college instructors.* Bolton:Heinle&Heinle.

Norris, J., & Ortega, L. (2000). Effectiveness of L2 instruction: A research synthesis and quantitativemeta-analysis. *Language Learning*, *50*, 417-428.

Oflaz, M., &Turunc, T. (2012). The effect of learning styles on group work activities. *Social andBehavior Sciences*, *8*, 306-314.

Overstreet, M. (1998). Text enhancement and content familiarity: The focus of learner attention. *SpanishApplied Linguistics, 2,* 229-258.

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

Pashler, H., McDaniel., M., & Rohrer, D. (2009). Learning styles: Concepts and evidence. *PsychologicalScience in the Public Interest, 9,* 105-119.

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

Peterson, E, R., Rayner, S. G., & Armstrong, S. J. (2009).In search of definitions of cognitive styles andlearning styles.*Learning and Individual differences, 19*, 518-523.

Pica, T., Young, R., & Doughty, C. (1986). Making input comprehensible: Do interactional modificationshelp? *International Review of Applied Linguistics, 72*, 1-25.

Pica, T. (1994). Research on negotiation: What does it reveal about second language learning conditions,processes, and outcomes? *Language Learning, 44*(3), 493-527.

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

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.

Reid, J.M. (1995). *Learning styles in the ESL/EFL classroom.* Bostom: Heinle&Heinle.

Riener, C., & Willingham, D. (2010).The myth of learning styles.*Change, 42*, 32-35.

Robinson, P. (2003). Attention and memory during SLA. In C. Doughty & M. Long (Eds.), *Handbook ofsecond language acquisition* (pp. 631-677). Oxford: Blackwell.

Sachs, R., &Suh, B. R. (2007).Textually enhanced recasts, learner awareness, and L2 outcomes insynchronous computer-mediated interaction. In A. Mackey (Ed.), *Conversational interaction insecondlanguage acquisition: A collection of empirical studies* (pp. 197-227). New York: OxfordUniversity Press.

Schmidt, N. (2000). *Vocabulary in language teaching*. Cambridge: Cambridge University Press.

Scott, C. (2010). The enduring appeal of learning styles.*Australian Journal of Education, 54*(10), 5-17.

Sharwood Smith, M. (1991). Speaking to many minds: On the relevance of different types of languageinformation for the L2 learner. *Interlanguage Studies Bulletin, 17,* 118-32.

Sharwood Smith, M. (1993). Input enhancement in instructed SLA: Theoretical bases. *Studies in SecondLanguage Acquisition*, *15*, 165-179.

Shook, D. (1994).FL/L2 reading, grammatical information, and the input-to-intake phenomenon.*AppliedLanguage Learning, 5*, 57-93.

Stefanowitsch, A., &Gries, S. Th. (2003).Collostructions: Investigating the interaction between wordsand constructions. *International Journal of Corpus Linguistics, 8*(2), 209-243.

Swan, M. (2005). *Practical English usage* (3rd ed.). New York: Oxford University Press.

Van den Branden, K. (2006). *Task-based language education: From theory to practice*. Cambridge:Cambridge University Press.

VanPatten, B. (2004). *Processing instruction*. Mahwah, NJ: Lawrence Erlbaum.

Wang, L. (2007). Variation in learning styles in a group of Chinese English as a foreign languagelearners. *MLJ, 65,* 43-65.

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.

Wierzbicka, A. (2000). The semantics of English causative constructions in a universal typological

perspective. In M. Tomasello (Ed.).*The new psychology of language: Cognitive and functionaapproaches to language structure* (pp. 113-153). Mahwah, NJ: Lawrence Erlbaum Associates.

Wong, W. (2003).Textual enhancement and simplified input: Effects on L2 comprehension and acquisition of non-meaningful grammatical form. *Applied Language Learning, 13,* 17-45.

Zarei, G.R., &Khazaie, S. (2011). L2 vocabulary learning through multimodal representations.*Social and Behavioral Sciences*, *15*, 369-375.

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