Cooperating Triangle? Incidental Learning Gloss Types and Motivation

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Abstract

Lexical competence is one of the core elements of communicative competence (Coady & Huckin, 1997). The present study is an attempt to investigate the role of two types of glosses and their influences on lexical competence, especially their relationships with incidental vocabulary learning. In addition, this study tries to examine the influence of motivation and its effect on/or relationship to incidental vocabulary acquisition. Fifty-eight university students of English as a foreign language took part in this study. A list of twenty L1 and L2 glosses, were administered among the participants and they were required to read the passage by the help of these glosses. After each session of treatment, a version of State Rating Task was used to show the participants' change of cognitive state. After the last session of treatment, participants were required to fill out a motivation questionnaire to find the relationship between incidental vocabulary learning and their motivation. The findings indicate that incidental process of learning vocabulary in the form of glosses have contribution to a change in participants' cognitive state, but regarding the type of glosses, this contribution varies. The analysis of motivation questionnaire showed that learners involved in incidental vocabulary learning were instrumentally motivated.

Keywords: Incidental vocabulary learning, Glosses, Motivation, State rating task

1. Introduction

Research has indicated that the core element of learning a second language is the task of learning its vocabulary (Gass, 1999). In spite of the bulk of research done in this regard, there is still need to have focus on the way second language learners try to acquire l2 vocabularies. Hulstijn (2003) distinguishes between two approaches learners deal with L2 vocabularies; incidental and intentional. There is still research done on these two processes of vocabulary acquisition and it shows that there are concerns to shed more light in this regard. Hulstijn (2003) defines the term incidental as follow:

"The term incidental learning is used, in applied linguistics, to refer to the acquisition of a word or expression without the conscious intention to commit the element to memory, such as "picking up" an unknown word from listening to someone or from reading a text" (p. 350).

On the other side of the continuum there is the concept of intentional learning which again according to Hulstijn (2003) refers to "a deliberate attempt to commit factual information to memory, often including the use of rehearsal techniques, like preparing for a test in school or learning a song by heart (p. 355).

The dilemma in vocabulary acquisition is the advantages of the commonly distinguished incidental and intentional vocabulary acquisition, especially regarding the role played by attention. Gass (1999) brings some counter-evidences about the concept of attention in vocabulary learning. It is said that attention is one of the pivotal elements of second language acquisition and by emphasizing incidental learning, which is actually the absence of attention, one should not expect an ideal learning. She argues that this is not the case by stating that "rather, the ease with which a vocabulary item might be learned will depend on a number of factors". Input must have three characteristics which help learners to acquire it more easily; there are cognates between the two languages, there are lots of exposures of L2 lexical items and finally there are other L2 associations. Fraser (1999) confirms this finding by stating that higher retention rate occurs when noticing words occur in these three ways; the word should have the same origin in L1 and a related association in L2 and finally it should be a frequently-encountered word. According to Gass (1999) these features (+ cognates, + exposure, + known L2 words) are suggested to be associated with incidental vocabulary learning that is the effortless process of vocabulary leaning, as opposed to intentional process which requires more time and energy.

1.1 Purpose of the Study

It is a general agreement among scholars that vocabulary acquisition is at the heart of language acquisition (Coady & Huckin, 1997). Although there is a bulk of research in this regard, in real life situation language learners face difficulty when dealing with L2 vocabulary. The current study is an attempt to broaden our knowledge of vocabulary learning by investigating the effects of two types of glosses and their relationships with incidental vocabulary learning, along with the effects of motivation and its effect on/or relationship to incidental vocabulary acquisition. Accordingly, the purpose of the current study is twofold;

focusing on teaching vocabulary by the help of glosses to examine if they have improved participants success in vocabulary learning and also investigating the types of motivation influencing incidental vocabulary learning.

1.2 Significance of the Study

While there is an extensive amount of research on the use of incidental vocabulary acquisition in educational settings, there has not been found one study that investigates the relationship between incidental vocabulary learning and different types of motivation. The study would be very helpful in explaining whether students are more motivated integratively or instrumentally during incidental vocabulary learning. This research might be helpful to teachers and curriculum designers to make improvements on the current English program implementing in universities, specifically to address concerns why students are not well rounded in the development of their knowledge of vocabulary in L2.

1.3 Research Questions and Hypothesis

To probe into the aforementioned gap, the following research questions were addressed in this study:

1. Do L1 and L2 glosses differ in their effectiveness on incidental vocabulary learning?

2. Is there any relationship between the type of motivation (integrative/instrumental) and incidental vocabulary learning?

In order to investigate these research questions, the following research hypotheses were posited:

H01. There is no significant difference between L1 and L2 glosses regarding their effectiveness on incidental vocabulary learning.

H02. There is a positive relationship between the integrative type of motivation and incidental vocabulary learning.

1.4 Review of Related Literature

1.4.1 Vocabulary Learning Strategies

In a comprehensive paper concerning digging out the key concepts of incidental vocabulary learning, Gass (1999) talks about a number of "general strategies" learners resort to when trying to comprehend an L2 text and overcoming vocabulary problems; lexical inferencing from context, using dictionaries ("proficient speakers) and finally "ignoring the unknown words" (p. 328).

Although researchers have not reached a consensus as to the roles played by inferencing vocabularies from context by L2 learners, Fraser (1999) argues that this strategy seems to be preferred by the learners. There are some reasons why learners are interested in using this specific strategy; some researchers (Eliss, 1994) believe that lexical inferencing is a kind of "communicative event in which learners engage in considerable hypothesis formation and testing about word meaning" (Fraser, 1999, p. 266). Therefore this strategy has some

cognitive demands and loads on learners encountering unfamiliar words. Also research shows that this strategy results in higher retention and acquisition of words than other "lexical processing strategies", i.e. ignoring the words and using dictionaries (Fraser, 1999).

1.4.2 Lexical Inferencing and Incidental Vocabulary Learning

Previous research has demonstrated that guessing the meaning of unfamiliar words, i.e. lexical inferencing, is the first and foremost strategy used by learners while reading a text (Paribakht, 2005; Huckin & Coady, 1999; Paribakht & Wesche, 1999).

Carton (1971) defines inferencing as follows:

Inferencing refers to a process of identifying unfamiliar stimuli. In foreign language learning inferencing is concerned with the acquisition of new morphemes and vocables in 'natural contexts' (p. 45).

As the definition proposes, the process of inferencing occurs in a "natural context" and it does not require learners to engage themselves into learning process and commit information in their memories. The same notion can be regarded in the process of incidental vocabulary learning, which is defined as the procedure of picking up and inferring structures and lexicon of a language (Hulstijn, 2003). It has been widely accepted among different researchers that a considerable amount of L2 vocabularies are learnt as a "by product" of reading, i.e. the incidental process of vocabulary learning (Nation & Coady 1988, Nation 2001).

Research on incidental vocabulary learning seems to be just concentrating on specific aspects of this process and ignoring others. A very brief summary of the research done on this subject are presented here. A vast body of research investigates incidental vocabulary learning through reading (e.g. Pulido, 2007; Pellicer-Sánchez & Schmitt, 2010; Webb, 2008; Kim, 2006; Urano, 2000). To the best of the researcher's knowledge, there is only one study examining incidental vocabulary learning through listening comparing to reading (Vidal, 2011). Several studies (e.g. Lomicka, 1998; Hulstjin 1996; Watanabe, 1997; Yoshii, 2006; Lin & Huang, 2008; to name just a few) have also examined the relationships between application of gloss types and incidental vocabulary learning.

One of the aspects of incidental vocabulary learning which was not dealt with thus far is the effects of motivation during this process. Therefore this study is designed to investigate the relationship between incidental vocabulary learning and different types of motivation.

1.4.3 Gloss Types

Kroll & Stewart (1994) develops a model of lexical and semantic representation in bilingual learners mind called Hierarchical Model of Bilingual Memory (Figure 1).
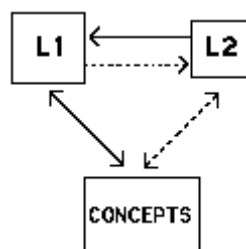
Figure 1. Hierarchical Bilingual Model (from Kroll & Stewart, 1994)

This model helps up to more investigate the relationship between L1 and L2 glosses and their different effects. The model suggests that bilingual memory is perceived as being represented in separate but interconnected lexicons. The links between these two parts differ in strength, i.e. while the link between L2 lexicons to L1 lexicons is strong, L1 lexicon is connected to the L2 lexicon by weak links. The model predicts the way in which the L2 is learnt by a bilingual learner. Therefore, trying to learn the second language, L2 learners usually make a link between the new words to their L1 lexicon store. The model claims that because there no conceptual link mediating between L1 to L2, second language learners rarely translate from L1 to L2. This is shown in the figure 1 by a weak link between L1 and L2. The model proposes that L2 translation is subordinated to the L1 translation.

1.4.4 Motivation

The process of learning a second language calls for different aspects of human beings. Cast on what Gray (1999) states, human beings are not only information-processor devices, but also they have their own contributions, e. g. motives and emotions, and they are deliberately involved in social and cultural activities (Laufer & Hulstijn, 2001). Suffice it to say that motivation is considered as the causes of success and failure in language learning by teachers and students (Guilloteaux and Dornyei, 2008).

Before delving into the different understanding of the term, it is important to have a general definition of the term motivation. Literature contains a plethora of definitions of motivation. Different scholars went through the term and have defined it in different ways. Here the definition of Dornyei would be presented:

The motivated individual expends effort, is persistent and attentive to the task at hand, has goals, desires and aspirations, enjoys the activity, experiences reinforcement from success and disappointment from failure, makes attributions concerning success and or failure, is aroused, and makes use of strategies to aid in achieving goals (2003, p. 173).

The first, and most influential, model of motivation was introduced by Gardner and Lambert (1959, 1972). They suggested that motivation is a "combination of effort plus desire to achieve the goal of learning the language plus favorable *attitudes* towards learning the language" (Gardner, 1985, p. 10). This model presents us two types of motivations; integrative, which at the very least refers to have communication and at the very most means to integrate with the target language community, and instrumental which is the desire to learn a language for functional purposes such as getting job, to have better salary, etc.

New insights into the concept of motivation were brought about by different cognitive approaches such as Self-determination theory (Deci, Ryan; 1985), Attribution theory (Weiner, 1986) and Self-efficacy theory (Bandura, 1997). Self-determination theory associates the concept of motivation with the concept of *autonomy* and states that "to be self-determining means to experience a sense of choice in initiating and regulating one's own actions"(Deci, Connell, & Ryan, 1989, p. 580). The theory categorizes motivation as, intrinsic and extrinsic. The first refers to one's motivation to perform the task just because of some internal rewards, such as joy, pleasure, etc. In the second type individuals do the task of learning because they are expecting to get extrinsic rewards such as grades, praise from others, etc.

According to Attribution theory (Weiner, 1986), one's failure or success in learning a language is attributable to some internal reasons, such as learners' own knowledge and efforts, or external factors, such as luck, fate and other environmental factors. And finally, Bandura (1997) in the Self-efficacy theory states that "If people believe they have no power to produce results, they will not attempt to make things happen'' (p. 3).

This study used the integrative/instrumental types of motivation proposegd by Socio-educational model to investigate the relationships between the types of motivation and incidental vocabulary learning. In other words, this study had an attempt to examine whether those who are involving in incidental process of learning vocabulary are integratively motivated or instrumentally.

2. Research Method

2.1 Participants

The participants in the study were fifty-nine freshmen whose majors were English in the English Department of an Iranian university. They were both male and female and between the ages of 18 and 25 years old. At the time of data collection, most of these learners had been learning English as a foreign language in Iranian schools for at least seven years, at elementary and middle school. None of them had ever been to an English-speaking country and they had had no chance to use English for communicative purposes outside the classroom. To decide if the participants formed a homogeneous sample, Nation's Level test vocabulary knowledge at 3000, 5000, 10000 was administered to them before conducting the main study. The results showed that there was no significant difference among the obtained scores of the students. The students were totally unaware of the process of data collection for the study and they were told that the tests and tasks they would complete were classroom activities. They were assured that the information collected from these tests and tasks would not be used towards their course grades. The students were randomly divided into two groups, with 29 and 30 in G1 (L1 glosses) and G2 (L2 glosses) groups respectively.

2.2 Materials

2.1.1 Tests and Tasks

The homogeneity test used in this study was Nation' Level test of vocabulary knowledge, the purpose of which was to examine the receptive and productive knowledge of participants. In

addition to this test, a version of State Rating Task (Waring, 2000) was given to the participants which was once used for the purposes of pretest administered two weeks before first session of the treatment and as the posttest administered immediately after each session of the treatment. Unlike traditional methods of testing vocabulary knowledge, whose main concerns were reporting how vocabulary grows, this multi-state model of vocabulary testing were used which are concerned with how lexicons change through different cognitive states.

Waring (2000) believes that State Rating Tasks (SRT)

attempts to resolve the issue of rating words in relation to other ratings by presenting the rubric in such a way that subject should make independent judgments of her Understanding and Use vocabulary(p. 4).

Participants were presented with a list of words and 5 rubrics, A, B, C, D and E, indicating different states of vocabulary change. Participants first had to decide whether they knew the word or not, rubric E. If they thought they knew the word but did not know how to use it and if they thought they knew the word and knew how to use it they must select rubrics D and C respectively. If participants were sure they understood the word but they did not know how to use it the rubric B should be used and finally if they had complete knowledge of vocabulary and its usage they must select rubric A. The rationale for selecting this model was two-folded; as it was stated by Waring (2000), this model helped participants to have an independent judgment of their understanding and use vocabulary. Secondly, it provided a perception of participants own knowledge of words by simply showing a distinction between different states of knowing and not knowing.

2.1.2 Text Selection

A passage from the course book, *Twenty Thousands Leagues under the Sea,* written by *Jules Verne* was initially selected as the baseline text. A widespread problem in university context in Iran is the habit of using a guidance book, even among students majoring English. This guidance book contains all the passages' translation and keys to exercises. The passage selected for the present study was from the Extensive Reading part of the book which, fortunately, was not dandled in the guidance book. This confirms that the participants had no access to its translation and definitions of new words.

2.1.3 Target Word (TW) Selection and Preparation

The target words of this study include twenty English words that were presented to the participants during two sessions of treatment. These TW were in the form of two types of glosses, i.e. L1 and L2. For the selection of the words, the following characteristics were considered:

1.   The level of frequency: the TWs were selected from the academic-list vocabularies using Nation's Vocabulary Profile.

2.   Visual similarity: the TWs were examined to have 4 to 10 letters. They were words from three word classes (11 nouns, 7 verbs, 2 adjectives).

In addition to the TWs, the number of thirteen words was added to the list as the control words. They were of the same frequency and the same grammatical categories as the TWs. The control words were acting as the distracters to TWs, therefore participants would answer the tasks according to their true knowledge.

2.1.4 Motivation Questionnaire

This study tried to investigate whether learners who were involved in incidental process of vocabulary learning while reading the L2 texts were integratively motivated or instrumentally. Put it in other words, the study attempts to find the relationship between the types of motivation (integrative vs. instrumental) and incidental vocabulary learning. Therefore at the final stage of study, a motivation questionnaire was administered to the participants. The original 7-point Likert Scale format of Gardner's (1985) Attitude/Motivation Test Battery (AMTB) and also Clement et al. (1994) scale were modified to a 5-point scale, rating from "Strongly Disagree" to "Strongly Agree". The reliability and validity of the questionnaire was reported by Gardner (2003). The questionnaire was translated in participants' L1, i.e. Persian. Participants were confirmed they could ask any question regarding the items in the questionnaire. Also they were informed their answers to the questionnaire would be kept confidential.

Integrativeness: the first-twelve items in the questionnaire show the participants integrativeness towards the target language.

Instrumentality: the scale contains thirteen items regarding the functional purposes participants were engaged in during the learning of language.

3. Procedure

The experiment was conducted in two separate sessions of treatment. Before the main study began, participants in two experimental groups were required to fill out a bio-data questionnaire, to obtain some information regarding their background knowledge of English, their age, gender, the time they involved in learning English and a question regarding whether they have read the story, *Twenty Leagues under the Sea*. Only one individual has read the passage before, who was removed from the analysis part. Before the time of data collection, participants were asked to take a Nation's level test to homogenize them in terms of their vocabulary knowledge. Two weeks before the main study, a version of State Rating Task (Waring 2000) was administered among participants as the pretest, to measure their previous knowledge of the target and control words. During data-collection sessions of the first group, participants in the first group were given a passage with a list of twenty L1 glosses, i.e. translation of the difficult terms in to Persian, at its margin and they were required to read the passage in twenty minutes. They could have a look at the list of glosses while reading. The same process was applied to the second group by this difference that they have been received a passage with a list of twenty L2 glosses, i.e. the definition of the difficult terms in to English at the margin and they were told they could use these definitions during their reading. The words in the two lists of glosses were the same. There was no interaction between researcher (teacher) and participants. Immediately after the session of treatment, one State

Rating Task was administered to participants. To guarantee the establishment of the experimental condition of incidental vocabulary learning from reading, the vocabulary posttests were not pointed out to the participants (Kim, 2006). At the final stage of the study, a motivation questionnaire, developed by Gardner's (1985) Attitude/Motivation Test Battery (AMTB) and also Clement et al. (1994) scale was given to participants to find the relationship between incidental vocabulary learning and the types of motivation.

4. Results and discussion

4.1 SRT Data Analysis

In his item analysis of SRT, Waring (2000) suggests several approaches. One approach is to calculate the number of items in each state by data time. The other one is to calculate the transitional matrices (Waring, 2000). Finally, the patters of responses of each item can be identified. What is of concern in this study is to identify the pattern of changes of items over the two data times. For this purpose, the movement between states was calculated.

The presumption here is that there is a change of state from lower knowledge states to higher knowledge states in both L1 and L2 gloss types. In this study, a list of twenty glosses was administered among the participants in the two groups of L1 (G1) and L2 (G2) glosses in two administration times; time 1, two weeks before the main study, and time 2, after the treatment session. The following table shows the patterns of changes in percentage of the participants' rating of their vocabulary knowledge states regarding different rubrics for G1 in two data times:

Table 1. patterns of changes in percentage of the participants' rating of their vocabulary knowledge states in G1 in both data times

States	E	D	C	B	A
Time 1	%38.25	% 7.75	%3.00	%4.75	%10.75
Time 2	%18.5	%5.75	%5.00	%1.75	%31.00

Waring (2000) believes that there are three kinds of change of movement from data time to data time including "Same States, Near State changes and Dramatic movement changes". With regard to the above table, the change of movements for states E and A was dramatic and for other states it was near state changes. The following table shows the patterns of changes in percentage of the participants' rating of their vocabulary knowledge in G2 in both data times:

Table 2. patterns of changes in percentage of the participants' rating of their vocabulary knowledge states in G2 in both data times

States	E	D	C	B	A
Time 1	%48.00	%17.75	%8.75	%7.5	%18.25
Time 2	%26.75	%19.75	%7.75	%10.25	%36.00

As the table shows, there is a dramatic movement changes in both E and A states, while the other states had near state changes.

These two tables indicate that there was an overall increase of participants' vocabulary knowledge from lower states to higher states in both groups after receiving the two types of glosses. But the focus of this study is to more clarify whether L1 and L2 glosses differ in their effectiveness during the process of incidental vocabulary learning. For this purpose, the fluctuation in movements of the two states from E (not knowing the word) to A (fully understand the word) would be analyzed, because the other states had near change movement, therefore they cannot indicate any specific change of vocabulary knowledge in participants.

The data in the two tables show that there was a similar amount of decrease in state E from the first data time to the second one in both G1 and G2. The percentage of participants' rating dropped approximately two times from time 1 to time 2, showing that there was no significant difference between participants' knowledge before receiving the treatment. Accordingly, there is a corresponding increase in state A in both groups. The amount of increase is two times more in G2, who received L2 gloss type, while it is almost tripled in participants' knowledge of G1 who received L1 gloss type. In comparing the two groups it became clear that L1 gloss type was more influential on increasing states knowledge in participants and consequently it helps vocabulary learning during incidental instruction process.

5.1 Motivation Questionnaire Analysis

The quantitative approach was applied to answer the second research question "Is there any relationship between the type of motivation (integrative/instrumental) and incidental vocabulary learning? The raw data obtained from the motivation questionnaire was submitted to the SPSS program. Along with the computing descriptive statistics, a paired-samples t-test was run to determine the differences between the two groups of integrative and instrumental motivation. The descriptive analysis (Table 3) shows the mean scores of learners' motivation in instrumental group are higher than integrative one.

Table 3. Descriptive statistics of instrumental and integrative motivation

Descriptive Statistics

	N	Mean	Std. Deviation
instrumental	59	676.0508	101.91315
integrative	59	529.8136	73.59242
Valid N (listwise)	59		

To closely examine the differences between groups, a paired-samples t-test was run to compare the total scores of instrumental and integrative items.

Table 4. Paired-samples t-test for instrumental and integrative motivation

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	integrative - instrumental	-146.2373	95.80464	12.47270	-171.2041	-121.2705	-11.725	58	.000

In the paired-samples t-test output box, the last column labeled Sig. (2-tailed), the probability value is .000. It can be concluded that there a significant difference between the scores of the two groups of motivation. (p> .000).
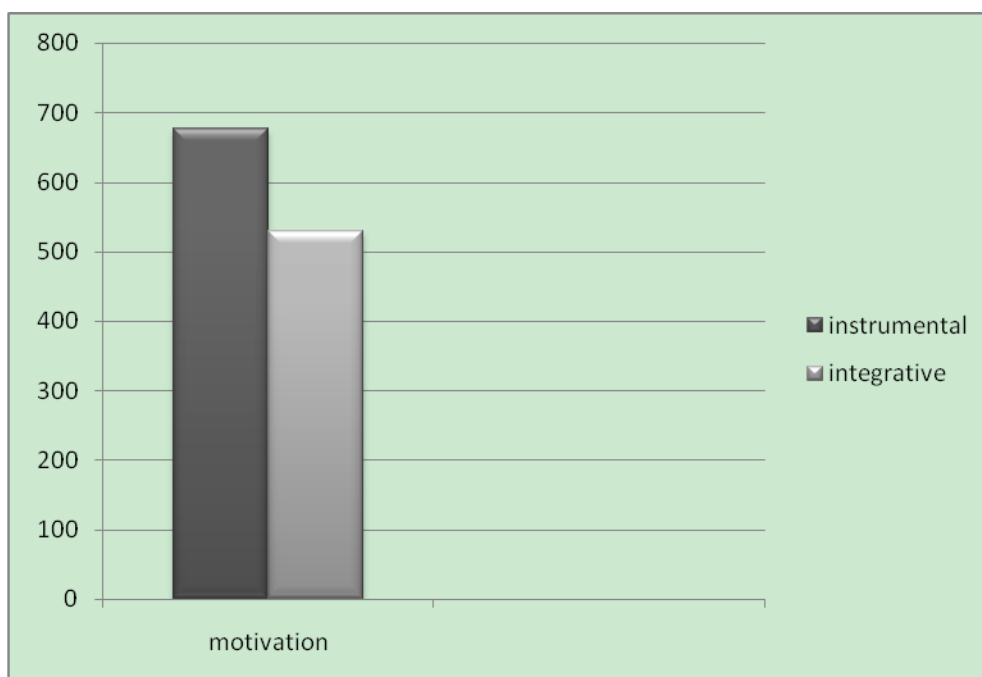
The following figure clearly displays the results:

Figure 1. The difference between integrative and instrumental motivation

The questionnaire consists of one perceived English proficiency question. This item asked participants to rate their English proficiency level on a scale from very bad to very good. The following table reports the results:

Table 5. Participants' perceived levels of English proficiency (n=59)

Rating	Frequency	Percent
Very bad	1	1.6
Bad	6	10.16
Average	38	64.40
Good	14	23.72
Very good	0	0
Total	59	

As the result of table 5 shows, the majority of participants rated their English proficiency level as average (%64.40). Participants' high level of motivation might be contributed to their perceived level of English proficiency. The more they felt hesitant about their ability of English, the more they were motivated to learn it.

The findings of the open-ended question (Q 27) suggest that participants have been more motivated to learn English when entering in university than when they were a secondary school student. In table 6, the frequency and percentage of participants' response are reported:

Table 6. Frequency distribution of (Q 27)

Rating	Frequency	Percent
More	36	61.01
Less	8	13.55
The same	15	25.42
Total	59	

To make it clear why participants were more motivated comparing to their secondary school education, their responses were classified according to the reason for this increase. Table 7 summarizes the reasons for improvement of participants' motivation:

Table 7. participants' reasons to the open-ended question (Q 27)

My motivation to English learning has been improved after entering university because,
1. I understand that learning English is necessary.
2. English helps me to graduate with good marks.
3. Learning English in university classrooms engage me in group activities.
4. My major in university is English.
5. University helps me to learn English more.
6. These days English is very useful in our context.
7. English learning in university makes me happy.
8. English learning in university helps me to acquire more skills.
9. Studying English is very important in my future life.
10. It helps me to feel decided.

As it was mentioned before, participants who was engaged in incidental vocabulary learning were more instrumentally motivated. The results of the open-ended question confirm the previous findings and also it rejects the second hypothesis which states that there is a positive relationship between the integrative motivation and incidental vocabulary learning.

6. Conclusion

The aims of the present study was to examine the different effects of L1 and L2 gloss types on incidental vocabulary learning, on the one hand, and the relationship between the incidental vocabulary learning and different types of motivation, on the other hand. The results reported above is in line with Waring (2000) who investigates the longitudinal development of understanding and use vocabulary over time. One of the main differences between this study and Waring's study lies on the developmental procedure of presenting target words to the participants. While Waring administered SRT over 6 data times, in the present study, the number of SRT administration reduced to 2 data times. The other difference of this study and Waring' is the lack f any treatment in Waring study as opposed to the incidental instruction of vocabulary in the present study. This study tries to investigate the effects of incidental vocabulary learning via gloss types with particular focus on comparison of L1 and L2 gloss types. In conclusion, the findings illustrate and reflect a similar development of vocabulary knowledge and use among participants as Waring study.

With regard to the different effects of gloss types and incidental vocabulary learning, the results suggest that the type of gloss, L1 or L2 glosses, had little effects on the incidental learning of vocabulary. The present study supports the claim proposed by Hierarchical Bilingual Model (Kroll & Stewart, 1994). As it was mentioned before, the model predicts that

L2 translation is subordinated to the L1 translation. Participants in the first group, who received L1 gloss type, outperformed those in the second group, with L2 gloss type, although this difference is no significant.

The more challenging result is related to the relationship between the type of motivation and incidental vocabulary learning. Based on the hypothesis formed, it was supposed that there is a positive relationship between integrative motivation and incidental vocabulary learning. Quite contrary, the results show that participants involving in the process of incidental learning of vocabulary are instrumentally motivated than being motivated by integrative type. Almost all of the definitions suggested for incidental language learning refer to the process as being the "by-product" of other activities in language learning (Nation & Coady 1988, Nation 2001). Also one of the pre-requisites of incidental language learning design is that learners are not informed in advance that there would be a test after the instruction. It means their desire to learn a language is not for functional purposes such as passing the exam, getting a job, to have better salary, etc. (Gardner, 1985). The results should be treated with caution, however. Although integrative and instrumental motivations have contribution in language learning motivation research, some scholars believe that the concepts of integrative and instrumental motivation have been defined in various ways and their differences are not clear-cut. In sum, the results of this study could influence the process of incidental vocabulary learning in EFL contexts by considering the effects of different types of motivation applied by teachers in classrooms.

Certain limitations were imposed in this study including the limited number of data times. This study should be replicated with a developmental research paradigm, considering the change of state of vocabulary knowledge in learners. Future research in dealing with State Rating Tasks and incidental vocabulary learning would ideally incorporate the qualitative research approaches (e.g. think-aloud and interview protocols) to investigate the cognitive process underlying learners' minds.

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References

Carton, A. (1971). Inferencing: a Process in Using and Learning Language. In P. &. Pimsleur, *The Psychology of Second Language Learning* (eds ed., pp. 45-58). Cambridge: C.U.P.

Clement, R., Dornyei, Z., & Noels, K. (1994). Motivation, self-confidence and group cohesion in the foreign language. *Language Learning, 3*, 417-448. http://dx.doi.org/10.1111/j.1467-1770.1994.tb01113.x

Coady, J., & Huckin, T. (1997). *Second language vocabulary acquisition* (eds ed.). Cambridge: Cambridge University Press.

Dörnyei, Z. (2001). *Teaching and researching motivation.* Harlow, England: Longman.

Ellis, N. C. (1994). Consciousness in second language learning: Psychological perspectives on the role of conscious processes in vocabulary acquisition. *AILA Review*, *11*, 37–56.

Fraser, C. (1999). Lexical processing strategy use and vocabulary learning. *Studies in Second Language Acquisition*, *21*, 225–241. http://dx.doi.org/10.1017/S0272263199002041

Gardner, R. (1985). *Social Psychology and Second Language Learning: The role of attitudes and motivation.* London: Edward Arnold.

Gass, S. (1999). Incidental Vocabulary Learning. *SSLA*, *21*, 319–333.

Gray, J. R. (1999). a bias toward short-term thinking in threat-related negative emotional states. *Personality and Social Psychology Bulettine*, *25*, 65-75. http://dx.doi.org/10.1177/0146167299025001006

Huckin, T., & Coady, J. (1999). Incidental vocabulary acquisition in a second language. *Studies in Second Language Acquisition*, *21*(2), 181–193. http://dx.doi.org/10.1017/S0272263199002028

Hulstijn, J. (2003). Incidental and intentional learning. In C. D. Long, *The handbook of second language acquisition* ((Eds.) ed., pp. 349–381). Oxford: Blackwell.

Hulstijn, J., Hollander, M., & Greidanus, T. (1996). Incidental vocabulary learning by advanced foreign language students: The influence of marginal glosses, dictionary use, and reoccurrence of unknown words. *Modern Language Journal*, *80*, 327– 339. http://dx.doi.org/10.1111/j.1540-4781.1996.tb01614.x

Kim, Y. (2006). Effects of Input Elaboration on Vocabulary Acquisition Through Reading by Korean Learners of English as a Foreign Language. *TESOL QUARTERL*, *40*(2), 341. http://dx.doi.org/10.2307/40264526

Kroll, F. J., & Stewart, E. (1994). Category interference in translation and picture naming: Evidence for asymmetric connections between bilingual memory representations. *Journal of Memory and Language*, *33*(2), 149-74. http://dx.doi.org/10.1006/jmla.1994.1008

Laufer, B., & Hulstijn, J. (2001). Incidental Vocabulary Acquisition in a Second Language: the contrast of Task-Induced Involvement. *Applied Linguistics*, *22*(1), 1-26. http://dx.doi.org/10.1093/applin/22.1.1

Lin, C. C., & Huang, H. M. (2008). Meaning-inferred gloss and meaning-given gloss on incidental vocabulary learning. *Journal of National Taiwan Normal University: Humanities & Social Sciences*, *53*(2), 87-116.

Lomicka, L. (1998). To gloss or not to gloss: an investigation of reading comprehension online. *Language learning & technology*, *1*(2), 41-50.

Nation, I. (2001). *Learning vocabulary in another language.* Cambridge: C.U.P.

Nation, I. S., & Coady, J. (1988). Vocabulary and reading. In R. C. (Eds.), *Vocabulary and language teaching* (pp. 97–110). London: Longman.

Paribakht, S. (2005). The Influence of First Language Lexicalization on Second Language Lexical Inferencing: A Study of Farsi-Speaking Learners of English as a Foreign Language. *Language Learning*, *55*(4), 701–748. http://dx.doi.org/10.1111/j.0023-8333.2005.00321.x

Paribakht, T. S., & Wesche, M. (1999). ''Incidental'' vocabulary acquisition through reading: An introspective study. *Studies in Second Language Acquisition*, *21*(2), 203–220.

Pellicer-S ánchez, & Schmitt, N. (2010). Incidental vocabulary acquisition from an authentic novel: Do Things Fall Apart? *Reading in a Foreign Language*, *22*(1), 31–55.

Pulido, D. (2007). The Relationship Between Text Comprehension and Second Language Incidental Vocabulary Acquisition: A Matter of Topic Familiarity? *Language Learning*, *57*(1), 155–199. http://dx.doi.org/10.1111/j.1467-9922.2007.00415.x

Urano, K. (2000). Lexical Simplification and Elaboration: Sentence Comprehension and Incidental Vocabulary Acquisition. MA. Dissertation, University of Hawaii.

Vidal, K. (2011). A Comparison of the Effects of Reading and Listening on Incidental Vocabulary Acquisition. *Language Learning*, *61*(1), 219 258. http://dx.doi.org/10.1111/j.1467-9922.2010.00593.x

Waring, R. (2000). The 'State Rating Task' - an alternative method of assessing receptive and productive vocabulary. Kiyo, Notre Dame Seishin University. *Studies in Foreign Languages and Litreature*, *24*(1), 125-154.

Watanabe, Y. (1997). Input, intake, and retention: Effects of increased processing on incidental learning of foreign language vocabulary. *Studies in Second Language Acquisition*, *19*, 287–307. p://dx.doi.org/10.1017/S027226319700301X

Webb, S. (2008). The effects of context on incidental vocabulary learning. *Reading in a Foreign Language*, *20*(2), 232–245.

Yoshii, M. (2006). L1 and L2 glosses: Their effects on incidental vocabulary learning. *Language Learning and Technology*, *10*(3), 85-101.

Appendix

State Rating Tasks

Student's name:

Have you ever read the book entitled "Twenty Thousand Leagues under the sea"?

Please rate your knowledge of the following words by selecting an appropriate letter: A, B, C, D and E according to the statement mentioned in each band:

E → I do not know this word (completely unfamiliar, partially familiar, i.e. knowing only its form or its meaning)

D → I think I understand this word but I don't know how to use it

C → I think I understand this word and I know how to use it

B → I understand this word but I don't know how to use it

A → I understand this word and I know how to use it

	E	D	C	B	A
commander					
narwhal					
sight					
assist					
wreck					
weapon					
sailor					
keel					
destroy					
stir					
inspect					
bullet					
expedition					
ivory					
equipment					
resist					
harpooner					
sword					
author					

glory					
specimen					
scientific					
purpose					
monster					
pour					
spare					
announce					
knot					
vessel					
supply					
submarine					
enthusiasm					
steady					

Motivation Questionnaire

جنسیت .... سن .... رشته ....

كاملا موافقم	موافقم	نظری ندارم	مخالفم	كاملا مخالفم	عبارات	
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا به من این امکان را می دهد تا با مردمی که انگلیسی صحبت می کنند راحت تر باشم.	

					یادگیری انگلیسی می تواند برای من مهم باشد زیرا به من این امکان را می دهد تا با مردم مختلف ملاقات نموده و با آنها ارتباط برقرار کنم.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا به من این توانایی را می دهد تا هنر و ادبیات انگلیسی را درک کرده و ارزش آن را بفهمم.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا به من این توانایی را می دهد تا آزادانه در فعالیت های گروهی دیگر فرهنگ ها شرکت کنم.
					برایم مهم است که انگلیسی را یاد بگیرم تا با زندگی اجتماعی ملتهای انگلیسی زبان آشنا شوم.
					یادگیری انگلیسی برایم مهم است زیرا به این وسیله می توانم درک بهتری از موسیقی پاپ داشته باشم
					هر چه بیشتر با مردمان انگلیسی زبان آشنا می شوم علاقه ام به آنها بیشتر می شود.
					یادگیری انگلیسی برای من مهم است.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا به این وسیله می توانم به دوستان و آشنایان خارجی ام ارتباط بهتری داشته باشم.
					دوست دارم بیشتر در مورد انگلیسی زبانان بومی (ساکن انگلیس و آمریکا) آشنا شوم.
					مردمان انگلیس دوست داشتنی و مهربانند.

					مردمان آمریکا شاد و مهربانند.
					یادگیری انگلیسی برای من مهم است زیرا در آینده شغلی به آن احتیاج خواهم داشت.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا مرا فردی آگاه تر می سازد.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا ممکن است روزی در پیدا کردن شغل خوب به من کمک کند.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا اگر انگلیسی بدانم دیگران به من احترام بیشتری می گذارند.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا به این وسیله می توانم مطالب مورد نیازم را در اینترنت جستجو کنم.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا میتوانم از وقایعی که در دنیا اتفاق می افتد بهتر با خبر شوم.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا یادگیری زبان به من احساس موفقیت می دهد
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا یاد گیری زبان به من احساس شادابی می دهد.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا فرض بر این اسست که یک انسان تحصیل

					کرده زبان انگلیسی بداند.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا به این وسیله می توانم فیلمها و ویدئوها و رادیوهای انگلیسی زبان را بهتر بفهمم.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا به این وسیله می توانم کتاب های انگلیسی زبان را بهتر بفهمم.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا این امکان را به من می دهد تا مردمان دیگر نقاط دنیا را بهتر بشناسم.
					یادگیری انگلیسی می تواند برای من مهم باشد زیرا بدون آن نمی توانم در هیچ زمینه ای موفق باشم.

مهارت زبانی خود را چه اندازه تخمین می زنید؟   خیلی بد   بد   متوسط خوب خیلی خوب

آیا انگیزه برای یاد گیری زبان انگلیسی بعد از آمدن به دانشگاه در شما تقویت شد یا نه؟ چرا؟   با تشکر از همکاری شما