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About

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From the Editor

Dear IEJES reader,

We are excited and happy to publish the first issue of 2021 (Volume 5, Issue 9). We will be with our readers in the same excitement in each of our future issues.

Many thanks to the authors who have shared their studies from Turkey and Iran with us as well as to the referees who have made contributions with their valuable ideas, IEJES's previous and update editorial board and DergiPark Team. Thank you to Prof.Dr. Selahattin ARSLAN, Prof.Dr. Selahattin KAYMAKÇI, and Assist.Prof.Dr. Murat POLAT for supporting to IEJES in 2020 years.

I would like to say welcome Prof. Dr. Arda ARIKAN from Akdeniz University, and Assist.Prof.Dr. Nazime TUNCAY from Bahçeşehir Cyprus University.

In the present issue, there are four research articles. Our authors present in this issue are composed of researchers working in different universities and institutions. These are alphabetically; *Fenerbahçe University, İstanbul Aydın University, İstanbul Şehir University, Marmara University, Middle East Technical University, Payame Noor University of Khalkhal*. Besides, there are also teachers working in the *Ministry of National Education and Science and Art Center*.

We look forward to seeing you in 2021 Volume 5 Issue 10 of the International e-Journal of Educational Studies (IEJES). We are inviting submission of manuscripts for the forthcoming issue.

Yours Sincerely

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Research Article

Lexical Elaboration and Typographical Enhancement: Their Discrete and Combined Impact on Incidental Vocabulary Learning*

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Abstract

The present study examined two input modification techniques, namely lexical elaboration (LE) and typographical enhancement (TE), and the combination of these two (LE & TE) to seek the difference among them as far as incidental vocabulary learning through reading is concerned. Ninety-six Iranian EFL students whose reading proficiency was at intermediate level were divided into four groups and respectively read texts which were (a) lexically elaborated, (b) typographically enhanced, (c) both lexically elaborated and typographically enhanced, or (d) unmodified baseline. Right after reading, their incidental vocabulary learning was assessed by means of a modified version of Paribakht and Wesche's (1997) Vocabulary Knowledge Scale (VKS). Results of the ANOVA demonstrated a significant difference among the four groups. In order to pinpoint where the differences exactly lay, a multiple comparison was done through the application of a post-hoc Scheffe Test. The results suggested that students performed significantly better on a text that had undergone both modification techniques (i.e. double-treatment). However, lexical elaboration alone did not have a statistically significant effect on incidental vocabulary learning through reading. More interestingly, there was no significant difference between the double-treatment and typographical enhancement groups although their mean scores were different.

Keywords: Input modification, lexical elaboration, typographical enhancement, incidental vocabulary learning

1. INTRODUCTION

In the field of second/foreign language acquisition, there is a consensus that vocabulary learning occurs more efficiently through *context* (İlter, 2019; Krashen, 1989; Pigada & Schmitt, 2006; Shokouhi & Askari, 2010). There are also studies that suggest *incidental* learning from the context plays a prominent role in L2 vocabulary acquisition (Hulstijn, 2013; Webb, 2008). However, despite this constructive interaction between context and vocabulary learning, Kim (2006) asserts, "not all contexts are intrinsically reader friendly" (p. 342). He maintains that most written materials do not include sufficient clues to help the learner infer meaning. Likewise, the existing clues are not often saliently marked in the text; therefore, readers may fail to notice such clues and thereby, due to these deficiencies, they would not learn the meaning of the unfamiliar words encountered in the text. Considering these shortcomings and the fact that many language learners feel apprehensive or reluctant when facing the overwhelming task of vocabulary learning, making some modifications in the written input may prove to be a practical way to enhance text comprehensibility and vocabulary acquisition.

As far as comprehensibility of input is concerned, a good number of studies have addressed its indispensable connection with learning a second language in general and learning L2 vocabulary in particular. Kim (2006) cites Krashen and Terell (1983) as the pioneers who proclaimed this view by saying that "acquisition depends crucially on the input being comprehensible. And comprehensibility

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is dependent directly on the ability to recognize the meaning of key elements in the utterance. Thus, acquisition will not take place without comprehension of vocabulary" (p. 343).

Nevertheless, a tough challenge that L2 learners have to deal with is that a big proportion of the authentic texts are not intrinsically comprehensible for them. In other words, if we consider the L2 texts as the context for vocabulary acquisition, majorly the ones that have been enriched or modified for pedagogical purposes (*Pregnant* according to Mondria & Wit-de Boer, 1991) can facilitate vocabulary learning. Regarding text modification, two popular techniques have been widely used by researchers: S*implification* and *elaboration*. As simplification normally entails complete removal of unfamiliar lexis and/or syntactic structures, it has been proven counterproductive in many L2 learning contexts. On the other hand, elaboration intends to keep the text essentially as intact as possible by simply providing high-frequency definitions for the low-frequency unknown words immediately after their occurrence in the text (Brewer, 2008).

Input enhancement is another notion that goes under the rubric of text modification. This type of modification technique, likewise, attempts to make linguistic elements of interest salient to the learner's attention in order to make the target features noticed and ultimately enhance the comprehensibility and acquirability of the input. Input enhancement can be implemented in two contexts. Occurring in a textual context, it takes the form of *typographical* (visual) enhancement. Bolding, italicizing, and underlining are examples of this kind of modification. Likewise, when input enhancement is applied to an oral context, it is formulated as *intonational* (acoustical) enhancement that can be manifested in the form of a slow speech rate, vocal emphasis on keywords, repetition, etc. Since the focus of the present study was on written input, enhancement was examined in the form of typographical modification in the textual context.

1.1. Theoretical Framework of Lexical Knowledge

The notion of lexical knowledge, or the understanding of what it means to know a word, lies at the heart of vocabulary learning research. Multiple scholars have been trying to build valid frameworks to define and measure this complex construct objectively. Richards (1976), initially, developed a framework that considered vocabulary knowledge a multi-faceted construct, which encompassed such features as syntactic, semantic, and pragmatic knowledge of the word in addition to its meaning. Despite its relative comprehensiveness, Richards's (1976) framework did not embrace the receptive and productive aspects of vocabulary knowledge that were highlighted later by other researchers.

It was Nation (1990, 2001), for example, who developed an analytical classification that differentiated receptive (i.e. passive) and productive (i.e. active) knowledge of vocabulary. Accordingly, the ability to use a word is a complex process and different from understanding its meaning. The latter, as Nation (1990) asserts, applies to only a small proportion of what native speakers know about a given word. He further added to the proposed aspects of vocabulary knowledge by supplementing three major categories of meaning, form, and use in both receptive and productive forms of knowledge and eventually, by building on his framework, designed the Vocabulary Size Test.

Paribakht and Wesche (1993) developed a somewhat similar approach to examine the nature of lexical knowledge. They proposed a framework called 'Vocabulary Knowledge Scale' (VKS) which was initially used to measure the vocabulary knowledge of students in an ESL program. They modified this scale in the following years, and its optimized versions (Paribakht & Wesche, 1997; Wesche & Paribakht, 1996) were introduced and used in miscellaneous studies later (See e.g. Pulido, 2004; Rott & Williams, 2003). Through VKS, the learners self-report their knowledge of each vocabulary item by choosing (and completing) a statement from a five-leveled scale that ranges from not having encountered the word before (level 1) to being able to use the word item in a sentence (Level 5). Since this framework has been used successfully in multiple studies producing valid measures of learners' vocabulary knowledge, a shortened three-leveled version of it, the same as the

one adapted and used by Folse (2006, p. 281), was utilized in the current study, too, in order to gauge the learners' vocabulary learning through reading.

1.2. Incidental vs. Intentional Vocabulary Learning

In a broad educational sense, incidental learning happens when there is no explicit intention to learn a particular construct, or when the primary goal is to learn something other than the target skill, etc. In more specific terms, incidental vocabulary learning signifies the concomitant lexical acquisition from a task which is not deliberately aimed at vocabulary learning such as comprehending the main idea of a text or communicating a message (Laufer, 2003). However, it is worth noting that incidental here does not imply neglecting the words while doing an activity. Rather, as Laufer (2003) maintains, learners "may attend to the words (for example, using them in sentences, or looking them up in the dictionary), but they do not deliberately try to commit these words to memory" (p. 574).

To put it succinctly, the studies that explore incidental vocabulary leaning require learners to perform a task without informing them beforehand that their recollection of meaning will be assessed afterwards. Conversely, in intentional vocabulary learning, learners are well aware of the forthcoming test on their vocabulary knowledge.

In line with the arguments above, multiple studies have examined vocabulary learning as a by-product of reading where the unfamiliar items are encountered in a textual context (e.g. Ponniah, 2011; Vidal 2010; Webb, 2008). The significance of textual context (i.e. reading text) had initially been highlighted by Krashen (1989) who counts it as a type of comprehensible input that enables the L2 learners to comprehend language and enrich their vocabulary repertoire. Nonetheless, despite these theories and findings, some researchers (e.g. Frantzen, 2003) have indicated that sole reliance on the reading context can be insufficient and that ambiguous contexts will not be helpful for inferring the meaning of unfamiliar vocabulary. It is argued that while reading context may contain the meaning, it does not necessarily reveal it to the readers. Moreover, if the correct meaning of the word is not congruent with learners' knowledge of the world, or if the learners assume they have grasped the message, contextual clues are ignored. Laufer (2003) goes one step further by stating that some reading contexts can even mislead the learners. To exemplify, she mentions the sentence "people were drinking, singing, laughing, brawling" (p. 571), and asserts that majority of the readers wrongly equate 'brawling' with 'having a good time'. With regard to these problems, and in order to rectify input deficiencies, such modification techniques as lexical elaboration and visual enhancement have been proposed by several scholars.

1.3. Input Modification and L2 Vocabulary Acquisition

Input modification theory which is realized in such techniques as lexical elaboration and typographical enhancement, is grounded on the belief that mere exposure to linguistic features is not sufficient for language acquisition, or at least mastery, to take place. Various studies have supported this theory by showing that L2 learners, although exposed to certain features, can fail to recognize them in naturalistic input and as a result, the input does not become intake.

To illustrate, Zahar, Cobb, and Spada (2001) examined the influence of contextual richness and exposure frequency on L2 vocabulary acquisition through reading. Referring to the results of their study, they argued that vocabulary leaning does not occur solely through exposure to the written input and recommended that either direct vocabulary instruction or instructionally modified texts be provided to this end. Likewise, Moradian and Adel (2011) compared the results of exposure to explicitly elaborated, implicitly elaborated, and unelaborated texts to see if these variations play a part in readers' vocabulary learning. Particulary, they enquired into implicit and explicit elaborative devices to find out if they can serve as autonomy enhancing tools that would help L2 learners recognize the meaning of the unfamiliar words without the aid of dictionary or instructor. The results of their study clearly indicated that explicit elaboration had a more influential role on L2 vocabulary acquisition. Choi (2016) also investigated the impact of typographical enhancement specifically on the

learning of collocations. Two versions of a text were given to the participants, one with typographically enhanced collocations and the other in baseline form without any enhancement or modification. Based on the results of the post-reading collocation test, the group that read typographically enhanced texts outperformed the other group. Therefore, the results of this study, too, support the theories that underscore the significance of textual modification on learning.

Conversely, there are several studies that demonstrate neutral or contradictory results, and some others point to the inefficacy of input modification tools in making a significant difference as far as the learning of desired linguistic features are concerned. Kim (2006), for instance, investigated Korean students' English vocabulary learning through reading by using lexical elaboration and typographical enhancement techniques. He applied and examined these devices both separately and combined. The results revealed that neither of the input modification techniques alone could assist the participating learners in recognizing the meaning of the unfamiliar vocabulary. However, when combined, they proved to facilitate meaning recognition of target vocabulary items.

In another study, Petchko (2011) investigated the impact of written input enhancement on incidental vocabulary learning of a group of intermediate EFL students from miscellaneous language backgrounds. The experimental group were exposed to twelve nonsense words that were visually enhanced in the given text while the control group read the same text but in its baseline unmodified form. The results of the post-test which had measured learners' noticing, recognition and recall of the meaning, indicated no significant variation between the groups. Moreover, after interviewing the participating students, the researcher found out that both groups had noticed most of the target word items regardless of them being enhanced or not. More recently, Gutiérrez, Serrano and García (2019) investigated the influence of typographical enhancement and word frequency on the vocabulary acquisition of Spanish L2 learners during reading tasks. To this end, the target words which were typed in bold appeared with a frequency of one, five or ten times in the text. Another version of the same text was also read by the participants where the target items had remained unmodified. Students sat a pre-test on word form and meaning recognition before doing the reading task. The post-tests were also conducted two times, once immediately after and once two weeks after the reading activities were done. According to the results, frequency of appearance significantly contributed to the recognition of form (i.e. spelling) and meaning. However, typographical enhancement (i.e. words in bold) only improved form recognition, and even that occurred in the immediate post-test, leaving no long-term gains. As it was observed above, although multiple studies have examined the role of input modification techniques on the acquisition of lexical forms and meanings, the findings are far from consistent. Therefore, further research needs to be done in order to draw a reliable conclusion in this regard.

1.4. Purpose of the Study

The present study intended to explore the effects of lexical elaboration, typographical input enhancement, and their combination on incidental vocabulary learning through reading. Concerning lexical elaboration, definitions or high-frequency synonyms of the target words (i.e. unfamiliar vocabulary items) were added immediately after their occurrence in the text between commas, and as for typographical enhancement, the target words were written in bold. Overall, the following combinations were examined:

1. Lexically elaborated text with no typographical enhancement (+LE -TE)
2. Typographically enhanced text with no lexical elaboration (+TE -LE)
3. Both lexically elaborated and typographically enhanced text (Double treatment +TE +LE)
4. The original baseline text with no modification (-TE -LE)

1.5. Research Questions

1. Does lexical elaboration have a statistically significant effect on incidental vocabulary learning through reading?

2. Does typographical enhancement have a statistically significant effect on incidental vocabulary learning through reading?

3. Does the combination of both lexical elaboration and typographical enhancement (i.e. double treatment) have a statistically significant effect on incidental vocabulary learning through reading?

4. Which type of input modification is more effective for incidental vocabulary learning through reading? Lexical elaboration, typographical enhancement, or a combination of both?

2. METHOD

2.1. Participants

A total of 176 male and female undergraduate students majoring in English language teaching (ELT) at Islamic Azad University of Khalkhal were initially invited to sit the reading proficiency test. The participating students were in the first to fourth years of their studies, their ages ranging from 19 to 25. Based on their scores, 142 students whose scores stood in the 18-23 band (out 30) were funneled into the next selection stage. This score range aligns with the *high-intermediate* level band which is set by Educational Testing Service (ETS) for the TOEFL test. In the next stage, the homogeneity test was administered, and 96 students whose scores fell within one standard deviation above or below the mean score were ultimately chosen for this study. They were then randomly assigned to four groups, each consisting of 24 participants.

2.2. Instrumentation

2.2.1. Reading passage

The participants read a one-page short story with roughly 400 words that contained 12 target words. The passage was taken from Yoshii's (2006) and with regard to the intended group, it either was left unmodified or underwent modification by being lexically elaborated and/or typographically enhanced. In the lexically elaborated text, brief definitions or synonyms of the target vocabulary were provided between commas immediately after the words' appearance. As for the typographically enhanced text, the TWs were simply typed in bold. In sum, the following four text types were designed and given to the relevant groups:

Text 1: Lexically elaborated with no typographical enhancement [+LE -TE]
Text 2: Typographically enhanced, without any lexical elaboration. [-LE + TE]
Text 3: Both typographically enhanced and lexically elaborated. [+LE +TE]
Text 4: Neither typographically enhanced nor lexically elaborated (i.e. unmodified baseline text) [-LE - TE]

2.2.2. Target words

Fifteen low-frequency TWs available in the passage that were perceived to be unfamiliar to the participants were selected. To make sure that the words were completely unknown to the groups, one week prior to the initiation of the study, the vocabulary checklist test was administered. Out of the 15 target words, three came to be known by some of the participants. Therefore, they were eliminated and there remained 12 absolutely-unknown words. These vocabulary items were selected as the final target words. It is worth noting here that some previous studies have examined various parts of speech of the target words. However, the current research focused exclusively on TWs' verb forms to constrain the variables influencing the result of the study.

2.3. Testing Materials

2.3.1. Proficiency test: A reading part of an English proficiency test of TOEFL (Adopted from Phillips, 2005) was used to measure the reading proficiency of the initially invited 176 students. The 60-minute test contained 3 passages and 30 items (each item weighed 1 point), and 142 students whose scores fell in the 18-23 band (out 30) were selected. This score range is in accordance with the *high-intermediate* level band which is set by Educational Testing Service (ETS) for the TOEFL test.

2.3.2. Test of homogeneity: To ascertain the participants' homogeneity, another reading part of TOEFL (Adopted from Phillips, 2005) was given to the 142 students who had previously been selected. Similarly, it consisted of 3 passages and 30 questions. Eventually, based on the results, 96 students whose scores were within one standard deviation above or below the mean were selected as the participants of this study.

2.3.3. Vocabulary checklist: As a pretest, a vocabulary checklist was used to ensure that all the selected target words were unknown to the participating students. They were given a list of twenty-five vocabulary items (15 TWs and 10 distractors) and were asked to indicate whether they knew the meaning of the words or not. For the items that were checked as 'known', the students had to provide an English synonym/definition or a Persian equivalent. As mentioned earlier, twelve words that turned to be absolutely unfamiliar were identified and selected for the study. A similar method for target vocabulary (TW) selection (i.e. vocabulary checklist) had been used successfully in a number of previous studies producing valid results (e.g. Folse, 2006; Kim, 2006).

2.3.4. Post-test: A modified three-leveled version of Paribakht and Wesche's (1997) Vocabulary Knowledge Scale (VKS), the same as the one used by Folse (2006), was completed as a post-test by the participants (Table 1). According to Paribakht, (2005), the VKS "has been shown to be sensitive enough to pick up incremental gains in the initial stages of learning particular words"(p.708).

Scoring of this scale granted one point if a correct meaning was provided (in form of a valid English synonym, definition, or alternatively translation in L1). Also, the students could score one more point if they could use the given TW in meaningful example sentence. In sum, each item would receive a score of 0, 1, or 2 (See Table 1).

Table 1. Vocabulary Knowledge Scale (Folse, 2006; Adapted from Paribakht and Wesche, 1997)

Score	Category
0	1. I don't know the meaning of this word.
1	2. I know the meaning of this word. It means _____
2	3*. I can use this word in a meaningful sentence. Write your sentence here: _____
(*An answer to #3 requires an answer to #2 as well)	

2.4. Procedure

During the reading session, the participants, who had been randomly assigned to four groups, were asked to read the passage under the following four conditions: Group A read the lexically elaborated version of the text in which the definitions or synonyms of the unfamiliar words were presented between commas immediately after the TWs. The target items were not typographically enhanced in group A's text. Reversely, group B read the typographically enhanced version with no lexical elaboration. The TWs were simply typed in bold. Group C's passage was both lexically elaborated and typographically enhanced; and finally, group D (i.e. control group) inferred the meanings of TWs without the aid of textual modification. That is, their text was neither lexically elaborated nor typographically enhanced.

It is worth mentioning that in order to create optimal conditions for incidental vocabulary learning, the students were not informed beforehand that their vocabulary learning would be assessed. Rather, immediately after the reading session, they received the VKS post-test. At the beginning of the

reading session, the groups were simply instructed to read their designated texts and answer the comprehension questions.

2.5. Data analysis

After the necessary data were obtained from the post-test scores, they were tabulated in various forms. The means and standard deviations of all groups were computed and compared. Then a one-way analysis of variance (ANOVA) was applied to measure the differences among the four groups. Likewise, by using the Scheffe test, the results were compared to pinpoint precisely where the differences lay. Overall, to fulfill the objectives of this study the following statistical analyses were done;

Analysis 1. A descriptive report on means, standard deviations, and standard error of the four groups in the vocabulary post-test.

Analysis 2. One-way ANOVA to conclude if the differences among the groups were significant or not.

Analysis 3. Scheffe test for multiple inter-group comparisons to see where the differences exactly lay.

3. RESULTS

Analysis 1. The descriptive statistics of the four groups obtained from the vocabulary post-test are presented in Table 2. As it depicts, the participants who read the text with both lexically elaborated and typographically enhanced target words have the highest mean for incidental vocabulary learning (Mean = 16.54). Those who read the typographically enhanced text are the second in rank (Mean = 13.83) standing right above those who read the lexically elaborated text (Mean = 13.04). Finally, the ones who read the baseline text with no lexical elaboration or typographical enhancement (i.e. control group) are at the bottom (Mean = 10.33).

Table 2. Descriptive statistics of the four groups in vocabulary post-test

Group	N	Mean	SD	Std. error	95% confidence interval for mean	
					Lower Bound	Upper Bound
A. (+LE)	24	13.0417	5.17081	1.05549	10.8582	15.2251
B. (+TE)	24	13.8333	4.97530	1.01558	11.7324	15.9342
C. (+LE +TE)	24	16.5417	3.86713	.78938	14.9087	18.1746
D. Control group	24	10.3333	3.87485	.79095	8.6971	11.9695
Total	96	13.4375	4.96686	.50693	12.4311	14.4439

Analysis 2. In order to determine if the differences among the groups were significant or not, a one-way ANOVA was applied on the collected data. According to the results illustrated in Table 3, the differences are significant (Sig .000).

Table 3. ANOVA on vocabulary post-test results

	Sum of squares	df	Mean Square	F	Sig
Between G	470.042	3	156.681	7.694	.000
Within G	1873.583	92	20.365		
Total	2343.625	95			

Analysis 3. A Scheffe test was also used to see where the differences exactly lay (Table 4). It was found that group C (+LE +TE) was significantly different from groups A (+LE) and D (i.e. Control group), but there was no significant difference between groups A (+LE) and B (+TE) at .05 level of significance although their means had a gap. Group A's performance was not different from group D's either, but the difference between groups B and D was significant.

Table 4. Scheffe test for multiple comparisons

(I) group	(J) group	Mean Difference (I- J)	Std. Error	Sig	95% confidence interval	
					Lower Bound	Upper Bound
1	2	-.79167	1.30272	.929	-4.2004	2.6171
	3	-3.50000*	1.30272	.042	-6.9087	-.0913
	4	2.70833	1.30272	.168	-.7004	6.1171
2	1	.79167	1.30272	.929	-2.6171	4.2004
	3	-2.70833	1.30272	.168	-61171	.7004
	4	3.5000*	1.30272	.042	.0913	6.9087
3	1	3.5000*	1.30272	.042	.0913	6.9087
	2	2.70833	1.30272	.168	-.7004	6.1171
	4	6.20833*	1.30272	.000	2.7996	9.6171
4	1	-.70833	1.30272	.168	-6.1171	.7004
	2	-3.5000*	1.30272	.042	-6.9087	-.0913
	3	-6.20833*	1.30272	.000	-9.6171	-2.7996

*The mean difference at the .05 level, 1=Lexical elaboration (group A), 2=Typographical enhancement (group B), 3=Lexical elaboration and typographical enhancement double treatment (group C), 4= Unmodified baseline (control group).

4. DISCUSSION

As the findings of this study indicate, textual input modification techniques of lexical elaboration and typographical enhancement have an interactive and reciprocal influence on vocabulary learning. Initially, it seemed that group A (+LE) whose mean score was 13.0417 (Table 2), had a clear advantage over group D (i.e. control group) regarding the chances of learning vocabulary because they were exposed to the synonyms or definitions of the target words while reading. Nevertheless, this difference according to the Scheffe test results is not significant. In other words, as far as vocabulary learning through reading is concerned, lexical elaboration is not statistically more effective than regular lexical inferencing from unmodified text.

Similarly, the TWs in group B's (+TE) text were typographically different from those in group D's who read an unenhanced baseline text. As previous researchers (e.g. Bishop, 2004; Kim 2006) have found, when L2 learners read a text where target words are enhanced, they often give a second look at those items, which in turn can provide a better opportunity for deeper vocabulary leaning. Therefore, it is not a surprise that group B's mean score was higher than group D's. The results of Scheffe test also confirm that this difference is significant at $p < .05$

As for group C (+LE +TE), the target words were both typographically enhanced and lexically elaborated. This group scored significantly higher than the readers of the unmodified baseline text (group D). This indicates that, these two textual modification techniques, when accompanying each other, would have a profound effect on vocabulary learning. As the data in Table 4 revealed, the difference between the groups C and D was significant at $p < .05$. However, although the difference of mean scores between groups C and B was great, too, the results of the Scheffe Test showed that this difference was not significant. Therefore, there was not a significant difference between groups C and B as far as the effect of textual modification on incidental vocabulary learning is concerned. That said, group C was highly different from groups A and D as it obtained the top rank mean score among the groups.

These results are in line with those of Kim's (2006) which substantiate the fact that typographical enhancement makes target words perceptually salient that in turn can make learners notice neighboring words as well. Attention to the neighboring words is important due to the fact that they may include elaborations of the TWs. As a result, typographical enhancement can potentially form a transparent link between the TW items and their lexical elaborations (i.e. meaning).

Moreover, as it was demonstrated in Table 2, either of these two types of modification, even when used alone, were still more effective than the unmodified input as they yielded higher mean scores (although in the case of lexical elaboration, its effectiveness was not great from a statistical standpoint). More interestingly, typographical enhancement happened to be more effective than lexical elaboration although their mean scores were not so much different (Group A's mean = 13.04, group B's mean = 13.83). This can be justified in the sense that in typographical enhanced texts, students focus on the enhanced unknown linguistic features, and according to (Laufer, 2003), this attention getting procedure paves the way for the second stage where L2 readers try to make their utmost effort to successfully guess the meaning of the unfamiliar words. In addition to that, when L2 readers are required to read a text, they normally pay more attention to the main ideas than the new words. Therefore, typographically enhanced texts help L2 readers process the target words more deeply which would in turn boost their comprehension and encourage them to spot and decipher more of the unknown words.

The findings of the present research can also be corroborated through Involvement Load Hypothesis proposed by Hulstijn and Laufer (2001). According to this hypothesis, a typical reading task entails two cognitive processes, namely 'search' and 'evaluation'. In the search phase, the reader attempts to find the meaning of the unknown words, and during evaluation, the reader applies his/her guesses in the context to see if they fit meaningfully. According to Hulstijn and Laufer (2001), the combination of these factors can promote vocabulary learning. They also maintain that when new lexical items are processed more elaborately, that is, when more attention is paid to the words' meaning, spelling, grammatical category, pronunciation, etc., Involvement Load is boosted and a higher level of learning takes place. Obviously, the modification technique of typographical enhancement applied in the current study has had a significant effect on drawing the learners' attention to the TW features. This in turn has made the cognitive processes of search and evaluation, which are embodied in the lexically elaborated items, more fruitful. The results of this study clearly verify the interaction between the two modification techniques and how they are instigating the vocabulary learning processes.

5. CONCLUSION

Limitations in L2 vocabulary knowledge can deprive the learners from communicating and expressing ideas in the target language effectively. Moreover, many researchers in the field of L2 teaching/learning proclaim that reading is the major source for vocabulary development. However, as various studies have indicated, reading alone is unlikely to facilitate vocabulary acquisition. Accordingly, modifying the written input and providing L2 learners with comprehensible input plays a pivotal role in building lexical knowledge. As the results of the present study show, two techniques of written input modification, namely lexical elaboration and typographical enhancement, can boost vocabulary learning of L2 learners while exposing them to native like features that are absent in other forms of modification (e.g. input simplification). Although an alleged flaw of textual elaboration is increasing the length and linguistic complexity of the input, it conveniently neutralizes this drawback by multiplying opportunities for dealing with the text information, which in turn can improve the comprehensibility of the input that is an indispensable prerequisite for language learning.

Moreover, unknown words are not noticed in the text sometimes or learners may simply assume that they know them while, in fact, they do not. Similarly, the contextual information can happen to be ambiguous or misleading for the learners. Therefore, as a response to such deficiencies, the combination of the two types of input modification, with regard to the results of this study, proves to be an ideal technique for vocabulary acquisition through reading.

Clearly, current trends in L2 instruction place an unprecedented emphasis on using unmodified authentic material, and becoming a competent L2 user means being able to interact and

comprehend such 'untampered' material. Therefore, although comprehensibility-enhancing techniques should be recognized, caution should be exercised when they are chosen and applied so that the essential natural features of the baseline input are maintained. To this end, lexical elaboration and typographical enhancement represent optimal modification techniques that take the natural features of the input away to the least possible extent. Due to this prominent advantage, these techniques should be prioritized in the L2 teaching curricula, especially for the preparation of the reading materials. It seems necessary that EFL reading material developers reconsider the widely held belief that linguistic simplification is the only viable way of modifying input. Apart from the advantage of preserving the natural features of the baseline text, lexical elaboration and typographical enhancement can be used conveniently because adding definitions/synonyms or modifying unknown words visually would not need much time and effort on the part of the teachers or text designer; yet, they can yield significantly positive effects on L2 vocabulary acquisition as was observed in this study. Perhaps, further studies can investigate how information technology can be harnessed to make these techniques even more convenient and efficient. Interactive versions of modified reading texts, rich in multimedia enhancement may prove to have positive effects beyond the findings of this study. Hence, it creates a reasonable line of research for more investigation. As a final remark, it is worth noting that the present study, like any other of its sort, suffered from certain limitations that inevitably impose restrictions on the interpretation and generalization of its results. For instance, such variables as age and gender were not controlled; hence, the results may differ across various age groups or among males and females. Moreover, since this study was conducted on the high-intermediate EFL learners, its results cannot be generalized to other levels.

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6. REFERENCES

Bishop, H. (2004).*The effect of typographic salience on the look up and comprehension of the unknown formulaic sequence.* In N. Schmitt (ed.), *Formulaic Sequence* (pp.227-243). Amsterdam: John Benjamin Publishing Co.

Brewer, B. (2008). Effects of lexical simplification and elaboration on ESL readers' local-level perceived comprehension (Master's thesis). Brigham Young University. Retrieved from https://scholarsarchive.byu.edu/cgi/viewcontent.cgi?article=2664&context=etd

Choi, S. (2016). Processing and learning of enhanced English collocations: An eye movement study. *Language Teaching Research*, *21*(3), 403-426. doi:10.1177/1362168816653271.

Folse, K. S. (2006). The effect of type of written exercise on L2 vocabulary retention. *TESOL Quaterly*, *40*(2), 273-293. doi: 10.2307/40264523

Frantzen, D. (2003). Factors affecting how second language Spanish students derive meaning from context. The *Modern Language Journal*, *87*(2), 168-199. doi: 10.1111/1540-4781.00185

Gutiérrez, C. H. S., Serrano, M. P., & García, P. R. (2019). The effects of word frequency and typographical enhancement on incidental vocabulary learning in reading. *Journal of Spanish Language Teaching*, *6*(1), 14-31. doi: 10.1080/23247797.2019.1590000

Hulstijn, J. H. (2013). Incidental learning in second language acquisition. In C. A. Chapelle (Ed.), *The encyclopedia of applied linguistics* (Vol. 5, pp. 2632-2640). Chichester: Wiley-Blackwell.

Hulstijn, J. H. & Laufer, B. (2001).Some empirical evidence for the Involvement Load Hypothesis in vocabulary acquisition. *Language Learning*, *51*(3), 539-58.

İlter, İ. (2019). The efficacy of context clue strategy instruction on middle grades students' vocabulary development. *RMLE Online*, *42*(1), 1-15. doi: 10.1080/19404476.2018.1554522

Kim, Y. (2006). Effects of input elaboration on vocabulary acquisition through reading by Korean learners of English as a foreign language. *TESOL Quarterly*, *40*(2), 341-73.

Krashen, S. (1989). We acquire vocabulary and spelling by reading: Additional evidence for input hypothesis. *The Modern Language Journal*, *7*3(4), 440-464.

Krashen, S. D., & Terrel, T. D. (1983). *The natural approach: Language acquisition in the classroom.* Hayward, CA: Alemany Press.

Laufer, B. (2003). Vocabulary acquisition in second language: Do learners really acquire most vocabulary by reading? Some empirical evidence. *The Canadian Modern Language Review*. *59*(4), 567-587. doi: 10.3138/cmlr.59.4.567

Mondria, J. A., & Wit-de Boer, M. (1991). The effects of contextual richness on the guessability and the retention of words in a foreign language, *Applied Linguistics*, *12*(3), 249-267.

Moradian, M. R., & Adel, M. R. (2011). Explicit lexical elaboration as an autonomy-enhancing tool for acquisition of L2 vocabulary from reading. *Journal of Studies in Literature and Language, 3*(3), 153-159. doi: 10.3968/j.sll.1923156320110303.143

Nation, I. S. P. (1990). *Teaching and learning vocabulary*. New York: Newbury House Publishers.

Nation, I.S.P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Prs.

Paribakht, T. 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. doi: 10.1111/j.0023-8333.2005.00321.x

Paribakht, T. S., & Wesche, M. (1993). The relationship between reading comprehension and second language development in a comprehension-based ESL program. *TESL Canada Journal*, *11*(1), 9-29. doi: 10.18806/tesl.v11i1.623

Paribakht, T. S., & Wesche, M. (1997). *Vocabulary enhancement activities and reading for meaning in second language vocabulary acquisition*. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition: A rationale for pedagogy* (pp. 174-200). Cambridge: Cambridge University Press.

Petchko, K. (2011). Input enhancement, noticing and incidental vocabulary acquisition. *The Asian EFL Journal Quarterly*, *13*(4), 228–255.

Phillips, D. (2005). *Longman complete course for the TOEFL test: Preparation for the computer and paper tests*. White Plains, NY: Addison-Wesley Longman, Inc.

Pigada, M., & Schmitt, N. (2006). Vocabulary acquisition from extensive reading: A case study. *Reading in a Foreign Language*, *18*(1), 1-28.

Ponniah, R. J. (2011). Incidental acquisition of vocabulary by reading. *The Reading Matrix*, *11*(2), 135-139.

Pulido, D. (2004). The relationship between text comprehension and second language incidental vocabulary acquisition: A matter of topic familiarity? *Language Learning*, *54*(3), 469-523.

Richards, J. C. (1976). The role of vocabulary teaching. *TESOL Quarterly*, *10*(1), 77-89.

Rott, S. & Williams, J. (2003). Making form-meaning connections while reading: A qualitative analysis of the effect of input and output tasks on word learning. *Reading in a Foreign Language*, *15*(1), 45-74.

Shokouhi, H., & Askari, H. (2010). The effect of guessing vocabulary in reading authentic texts among pre-university students. *Journal of Second Language Acquisition and Teaching*, 17, 75-89.

Vidal, K. (2010). A comparison of the effects of reading and listening on incidental vocabulary acquisition. *Language Learning, 61*(1), 219-258. doi: 10.1111/j.1467-9922.2010.00593.x.

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

Wesche, M., & Paribakht, T. S. (1996). Assessing second language vocabulary knowledge: Depth vs. breadth. *Canadian Modern Language Review*, 53, 13-39.

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

Zahar, R., Cobb, T., & Spada, N. (2001). Acquiring vocabulary through reading: Effects of frequency and textual richness. *The Canadian Modern Language Review*, *57*(4), 541-572.

Research Article

A Specific Implementation of Reflective Journals in Self-Regulating Academic Presentation Skills*

Seher BALBAY [1]

Abstract

Reflection journal writing is recognized as an effective learning activity in facilitating learners' self-regulative skills and abilities and their academic performance in the literature. It is evident that self-regulation is of vital importance in learning. Hence, this study aims to investigate self-reflective journal writing on university students' self-regulation strategies in a scope of academic presentation and speaking course. An exploratory mixed-method research design was adopted. The participants were selected with convenience sampling method and included 94 undergraduate students studying at a prominent English-medium instruction public university. The data was collected through an online questionnaire, and students' reflections on the 'Reflection Journal' task, which aimed to develop their awareness of the strategies that work for their own learning. Students were assigned to videotape their two main presentations during a required language course, and to keep a journal to reflect on certain points predetermined by the course instructor. The study aims to both investigate the perceptions of students about self-regulated learning in presenting, and the effectiveness of the journal task in promoting their learning. The findings indicated that the majority of students benefited from the task which helped them to reflect on their own micro-level presentation skills. This study concluded that reflective journal keeping could facilitate students' self-regulation and learning performance when developing academic presentation skills.

Keywords: Self-regulated learning, reflection journal, academic presentation skills, self-regulation

1. INTRODUCTION

As Bayraktaroğlu (2017) puts it 'when we encourage students to focus on the process of learning rather than the outcome, we help them consciously examine their own contribution to their learning' (Scharle & Szabo, 2000), which is called 'self-regulation'. This practice is defined as the composition of "self-generated thoughts, feelings and actions that are planned and cyclically adapted to the attainment of personal goals" (Zimmerman, 2000, p.14). It refers to various ways to monitor, control, and regulate learning (Schunk & Zimmerman, 1994). Self-regulation exists as an ongoing activity (Pintrich, 2000). It is defined as an active, constructive process in which students set goals for their learning based on past experiences within the contextual features of the current environment (Pintrich, 2000). Learners with self-regulation skills and behaviours are "metacognitively, motivationally, and behaviourally active participants in their own learning process" (Zimmerman, 1989, p. 329). They direct their own efforts and learn to acquire knowledge and skills without depending on any other member of instruction. Zimmerman (2000) defines self-regulation in three stages; namely, forethought (before), performance or volitional control (during), and self-reflection (after) phases. The *forethought* phase includes task analysis and self-motivational beliefs, the second performance or volitional control referring to self-control and self-observation, and the final one is where students experience *self-reflection* which includes self-judgement and self-reaction.

In the literature there are different definitions of self-regulation, but the most common one promotes the use of different cognitive and metacognitive strategies to control and regulate one's own

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learning (Pintrich, 1999). Self-regulation is of vital importance due to its critical role in the learning process and hence to student success (Shea, Hayes, Smith, et al., 2013). The current study sought to reveal a specific implementation of self-regulation in the learning process called the Reflection Journal. The '*Reflection Journal'* designed and evaluated in this study aims to encourage students to take responsibility for their own learning. Learners can underachieve if their learning activity is not 'scaffolded' by a task that would change their attitude to performing it better, because they risk perceiving their abilities as stable. By writing about their weaknesses and strengths and monitoring the strategies they could or could not employ, anticipations about future performances, by reflecting on their achievements and failures, their personal goals, students were expected to develop specific strategies to be able to give effective presentations. The rationale behind the design of the task was mainly to assist their problem-solving efforts in their own presentation skills. The assumption behind this rationale is that students who can make use of a reflection task in their own skills development process, are easily influenced by extrinsic factors, whereas students better at self-regulation are 'self-starters, strategic learners, and self-reactive to task performance outcomes, they are 'self-motivated, they plan their learning and develop self-monitoring strategies' (Deci, 2009).

Since metacognitive theories of learning attribute great importance to supportive learning environments to achieve success (Paris & Byrnes, 1989), the students of the aforementioned presentation skills course were assigned to observe themselves paying deliberate attention to aspects of their own behaviour, and accordingly develop individual learning strategies with the aid of keeping their Reflection Journal. Students were given prompts as to guide them to anticipate and predict their performance before, during and after a presentation. They were asked to compare their behaviour with their goals, which is especially important because 'the belief that one is making progress enhances self-efficacy' (Çubukçu, 2009).

1.1. Literature Review

Little (2007) in his article quotes Holec emphasizing the importance of students' having control in their own learning when he states that 'when the learner himself determines the goals and content of the learning objectives, universal knowledge is replaced by subjective, individual knowledge.' He also adds that only then, the learner, himself constructs and dominates his reality. Yet, especially, in the Turkish education system, where learners are not traditionally given a surplus of opportunities to be in charge of their learning, there is resistance to going outside the traditional passive role that the school assigns them. It is not common for students to have personal agendas. However, actually, 'it is in our nature to be autonomous' (Little, 2007, 17). 'Autonomy is one of the three basic needs that we must satisfy in order to achieve a sense of self-fulfilment' (Deci, 1996, p. 2). Deci supports this argument by claiming that our feeling of competence is achieved when we successfully confront and overcome challenges. Applied to the contexts of formal learning, students must be given tangible opportunities to achieve the little challenges they set for themselves, so that they are motivated (volitional) for prospective ones. Teachers should also consider the fact that students' autonomy will be undermined if they do not feel that their effort is paying off' (Little, 2007).

When lacking the skills to look back and reflect in retrospect, students will fail to self-regulate, as it is less likely that they become responsive to their own performances and skills. Hence, the major cause of failure in learning is believed to be 'lack of self-regulation'. Underachievers have difficulty assessing their abilities and being self-critical (Borkowski & Thorpe, 1994). Therefore, self-efficacy -personal beliefs about one's capabilities to learn or perform skills- is not realized, intended learning does not take place, and teachers end up grading students' already present proficiency rather than their achievement, which would eventually even make formative tests totally redundant, and unreliable.

Bruner (1986, p. 132) defines the autonomous learner as one that has a capacity for reflective intervention; that is instead of having to control students all the time, students should have a stance and develop strategies to "penetrate knowledge for their own use; share and negotiate the results of their penetrations". Helping learners adopt such roles in their own learning is the teacher's job today since both what the Council of Europe in the English Language Portfolio, and the constructivist theories suggest is the design of learner centred tools in language education for 'school knowledge' to become what Barnes (1976) calls 'actual knowledge'. So, what can we do to train learners to take responsibility of their own learning? Apparently, teachers should cooperate with learners to accept the idea that their own efforts are crucial for progress (Scharle & Szabo, 2000).

Learners whose intellectual capacity and creativity are enhanced, enjoy learning mainly because their thinking skills are engaged. Hence, the aim of education on the large scale is or should be to raise thinkers. Good thinkers are autonomous learners, and autonomy in learning comes with monitoring one's progress closely and employing the cognitive strategies to survive in changing circumstances. Hence, rethinking over one's own performance and benefiting from this practice is 'self-regulated learning' and simply 'the control over students' thinking to affect their behaviour' (Çubukçu, 2009). But, how does one foster these aforementioned abilities? There are a thousand ways to guide learners to reflective thinking, yet what can teachers do to integrate a self-scrutinizing activity specifically in their contexts? Apparently, to that end, planning tasks for courses and eventually constructing courses that would gear up to students' needs is a must for students to steer their own progress. Thus, instruction should set forth the rules to follow to achieve autonomy and self-regulation in learning. Kent (1997) and Moon (1999) promote journals as vehicles of self-evaluation.

Through a review of the literature, the application of reflection journal writing can be seen in different disciplines. Mak and Wong (2017) refer to the benefits of keeping portfolios in developing self-regulation to empower students in their control of their own learning process. Likewise, Gleaves, Walker and Grey (2008) focused on reflective journal writing as diary writing with students on information and communication technology, and they determined that reflection journals facilitate understanding and controlling learning. Reflection journals are identified to be effective learning activities in promoting learners' thinking about their own learning in nurse education as well (Thorpe, 2004). McCrindle and Christensen (1995) studied the impact of reflection in student journals on cognitive ability and academic performance in a biology course. They concluded with the finding that keeping journals improved learners' academic performance and cognitive ability. In a later study, Lew and Schmidt (2011) evaluated whether reflection journal writing is effective in promoting self-reflection, academic performance, and learning of undergraduate students, and they indicated the benefits of reflection journals' in enhancing learners' self-reflection, academic performance, and learning to some extent. In a more recent study, Al-Rawahi and Al-Balushi (2015) similarly found positive effects of reflective journal writing on students' self-regulation strategies in a science course. With this purpose in mind, this study designed a self-reflective journal writing activity in an academic speaking and presentation skills course.

The research conducted in this study investigates the effectiveness of a self-reflection journal, a self-regulation scaffolding instrument, designed to make students, to reflect on their own learning process. In having them keep a 'Reflection Journal'- students were asked to reflect on their own learning process. They were required to keep it throughout the semester and to update it after their presentations in class. With the specifically designed task being a required one in the course, it was intended that students would look thoroughly at their personal goals and objectives when presenting, and critically elaborate on the factors prone to have an effect on their performance, observe the individual outcomes of their presentation performance, and write down a reflection. The journal task was intended to make students 'think over' their thinking and learning to be able to 'take over' their thinking and learning, because it is an undeniable fact that there is a correlation between

metacognition (their thinking on their thinking) and self-regulation in the process of learning. That is to say performance-oriented tasks, if short term strategies are developed, can lend themselves to 'self-scrutiny' so that one can come up with, especially, short term survival strategies. Hence, the current study aims to observe and evaluate the effectiveness of the task, the Reflection Journal, designed to investigate the effectiveness of the reflection journal in the Academic Speaking Skills course on the participants' self-regulated learning skills. Specifically, two research questions guide this study:

- What are students' perceptions on the effectiveness of the reflection journal on regulating their learning?
- How does the reflection journal contribute to students' self-regulated learning skills?

2. METHOD

2.1. Research Design

This study adopts a mixed-method research design which is defined by Creswell and Plane Clark as "a procedure for collecting, analysing, and "mixing" both quantitative and qualitative methods in a single study or a series of studies to understand a research problem (2011, p.535, as cited in Creswell, 2012). With a combination of both qualitative and quantitative data, a better understanding of the research problem that is being studied and a more complete picture of the phenomenon occurs (Fraenkel, Wallen, Hyun, 2012). Therefore, this type of design; though being time-consuming is stronger than other research where only one type of data is collected. It should be noted that this type of design is not solely collecting two types of data, rather collecting two types of data and then merging, linking, and integrating them. For this reason, mixed-method research is more popular and common in educational research (Creswell, 2012; Fraenkel, et al., 2012). From the types of mixed-method research designs, the current study uses an exploratory design in which researchers begin with qualitative data to explore a phenomenon, and then collect quantitative data to explore relations inside it (Creswell, 2012).

2.2. Research Context

Academic Speaking Skills course is a required course offered to students of all the departments to enhance students' speaking and academic presentation skills. Students taking the Academic Speaking Skills course are expected to give three main presentations throughout the semester, and one as the final exam of the course, at the end of the semester. Instructors' main role when providing input and feedback through out the course is to facilitate the process of self-regulation so that students can benefit from analyses of their process of learning.

The template form that the students could use if they wanted to for their entries, and the guiding questions can be seen in Appendix 1 and 2. The loosely structured rubric which was shared with the students much before they wrote their journal entries is in Appendix 3. Some students made an animated video of their journals and shared their reflections publicly which can be seen on the Journal Playlist of the course supplementary materials channel on YouTube (http://bit.ly/2i42Q4t). Therefore, except for those students who did not prepare an animated video (a total of 33 students), made entries on the Reflection Journal.

2.3. Participants of the Study

The set of participants in the study were mostly second year students from various departments who were taking the compulsory Academic Speaking Skills course offered by the Department of Modern Languages at a well-known public university in Turkey. The participants included 94 undergraduate students, selected based on the convenience sampling method, a type of nonprobability sampling method based on the criteria of being readily available, accessible, and willing to participate (Creswell, 2012). They were informed about the aim of the research, and that

their participation was voluntary. Thereafter students were encouraged to fill out the online questionnaire.

Of the 94 students who responded to the online survey, most of them (n = 55, 59%) were male whereas the remaining (n = 39, 41%) were female. They were from different disciplines including the Faculty of Engineering (n = 55, 5%), Arts and Sciences (n = 24, 26%), Economy and Administrative Sciences (n = 9, 10%), and the Faculty of Education (n = 6, 6%). The diverse background of the participants enhances the generalizability of the findings.

2.4. Data Collection Instruments and the Procedure

The data was collected through a survey, which was self-developed, specifically for this particular research aiming to evaluate the effectiveness of keeping a Reflection Journal task in promoting self-regulated learning skills. While designing the survey, a short form of Online Self-regulated Learning Questionnaire (Barnard, Lan, To, Paton & Lai, 2009) was adapted to suit the aim and scope of this study. The questionnaire includes a total of 20 items, two on demographics, and the remaining 17 on self-regulated learning skills used in writing the Reflection Journal, in addition to the questions on the effectiveness and function of the journal in promoting self-regulated learning skills, and the last question is an open-ended one for any extra comments. The questions were then reviewed by three experts to provide credibility. A total of 94 students responded to the online survey.

2.5. Data Analysis

The data was analysed particularly based on descriptive statistics. There is only one reverse item (item-12) in the survey, therefore it was reverse coded in the analysis process. The analysed data was accumulated to find out the effectiveness of the Reflection Journal and how it promoted students' self-regulated learning skills. To this end, participants' entries on the Reflection Journal were also examined to triangulate the quantitative data; however, a normal qualitative coding was not done. The entries on the Reflection Journal were checked and examined according to which and how they fit or match with cyclical phases of self-regulation that thoroughly guide the current study. The next part provides the findings of the study.

3. FINDINGS

The descriptive statistics referring M as mean score, and SD as standard deviation about the survey items are provided in Table 1.

Table 1. Each word of the table subtitle should be in lower case (Font size:10)

Likert Type Items	Mean	SD
1. I know what is expected from me in my Reflection Journal.	4.2	0.84
2. I set goals for my presentations.	4.1	0.76
3. I keep a high standard for developing my presentation skills.	4.1	0.74
4. I set goals to help me manage my timing when presenting.	4.1	0.86
5. I am aware of my weaknesses and strengths in presenting.	4.5	0.58
6. I am aware of what kind of distracters to ignore when I am presenting.	4.1	0.82
7. I know the ideal physical setting to prepare my presentations.	4.1	0.88
8. I know how to determine my comfort zone in a presentation setting.	3.9	0.89
9. I record my presentations to see my weaknesses and strengths after the presentation.	2.6	1.56
10. I make notes right after my presentations to be able to write my reflection journal.	2.8	1.48
11. Writing the reflection journal entry makes me more aware of what to avoid in my next presentation.	3.9	1.02
12. I write my reflection journal without a deep analysis of my presentation because it is time-consuming.	2.7	1.20
13. I try to write the journal entry on the same day I present so that I don't forget the details about how my presentation went.	2.2	1.22
14. I share my feedback with my classmates if they ask me about the strengths and weaknesses of their presentation.	3.4	1.19

15. When I am writing my reflection journal, I find it helpful to ask for my friends' feedback on my presentation.	3.2	1.25
16. I make use of the rubric of the presentation when writing my reflection journal.	4.0	1.03
17. I make use of the journal questions when writing my reflection journal.	3.9	1.06

N=94

As can be seen in Table 1, the highest mean score belongs to the item-5 'I am aware of my weaknesses and strengths in presenting', which is very critical for any learner during the learning process. The second highest mean score belongs to the first item which is 'I know what is expected from me in my Reflection Journal'. The lowest mean score is for item-13 'I try to write the journal entry on the same day I present so that I don't forget the details about how my presentation went', followed by item-9 which is 'I record my presentations to see my weaknesses and strengths after the presentation'.

Considering the first research question which concerns students' perceptions of self-regulated learning in academic presenting, items numbered 2, 3, 4, 5, 6, 7, 8, 9, and 14 were asked. The majority of students, 81% (*n* = 76) stated that they set goals for their presentations which is thought to be the first step in regulating one's learning. Also, 79% (*n* = 74) declared to keep a high standard for developing their presentation skills. Moreover, 75% (*n* = 71) said that they set goals to help them manage their time when presenting. In addition, 66% (*n* = 62) of the students who participated in the survey reported that they were aware of their weaknesses and strengths in presenting, which is indispensable to taking an action towards setting the next objective in their zone of proximity. To exemplify, one student expressed the following.

> *"I spent 3 hours to choose I topic, I am a very picky person in a negative sense. I wanted to choose between the flu virus, misconceptions about evolution and Virtual Reality devices. I then proceeded to read about the material, and then was unsure about which material should be used for the content of my presentation. I guess preparing a presentation in one day is not good, I should think it over several days, more time for my brain to work things out. In all honesty, I didn't rehearse at all. I added too much content, knowingly, but I do like the subject." (Student5)*

Another student stated that:

> *"Although I was not well prepared, I felt so relaxed before the presentations…Since I develop some strategies to decrease my anxiety before the presentations. For example, I didn't eat too much, drink coffee or smoke. I also visualize the scene that I present something to the audience. Before the presentations I did my research properly and I got lots of points related to the topics, but I didn't memorize the whole thing intentionally." (Student13)*

From the above sample statements of students' entries in the Reflection Journal, it was clear that they were aware of their weaknesses and strengths in presenting and accordingly tried to take some precautions. They tried to plan their presentation strategically, setting goals for themselves. This stage is referred to as forethought and performance/volitional control in cyclical self-regulatory phases by Zimmerman (2000). Writing in their Reflection Journal, they can observe and judge themselves and thereby might become more self-regulated in future. That is: The Reflection Journal could be inferred to help promoting students' self-regulation skills.

Similarly, 66% (*n* = 62) of the sample were aware of what might distract them when they were presenting. Again, at the same ratio, students reported that they knew also know the ideal physical setting to prepare their presentations. Furthermore, 67% (*n* = 63) knew how to determine their comfort zone in a presentation setting. Actually, the survey asked whether students were aware of their time management skills, the distracters to ignore, and their comfort zone too, and the results reveal that on average about 66% (*n* = 62) of the students were aware of their competence in each of the constructs of a presentation, which would make it more likely for them to make a thorough examination of their performance. However, only 22% (*n* = 21) of the students recorded their presentations to see their

weaknesses and strengths after the presentation although it was highly recommended by the instructors. The resistance could be interpreted as students' not being used to taking initiative and responsibility for their own learning. However, 66% (n = 62) found it helpful to obtain feedback from classmates when considering the strengths and weaknesses of their presentation.

In terms of the second research question which concerns the degree to which the Reflection Journal promotes students' self-regulated learning skills in presenting, items numbered 1-10-11-12-13-15-16-17 were asked to the students. Of these items, item-12 was reverse-coded because it was a reverse item. The findings indicated that the majority of the students (82%, n = 77) knew what is expected from them in keeping their Reflection Journal. On the contrary, only a small percentage of students (22%, n = 21) found it useful to make notes reflecting on their presentations later the same day.

However, in relation to writing the Reflection Journal, most students (72%, n = 68) stated that writing it made them more aware of what to avoid in their next presentation, which shows the undeniable benefit of keeping such a journal. On this issue, for instance; one of them stated that:

> *"Since anxiety is something very physical to me (which was especially apparent in my voice shaking in first presentation and my jittery bodily movements in the second), I think beta-blockers taken one hour before the presentations are a good idea. I also aim to be more organized for the final presentation now that I've got the gist of it - it apparently comes down to being practical and planned, and it is not about speaking English well. I also look forward to stroll through possible presentation topics for the final presentation." (Student6)*
>
> Other students reflected:
>
> *"I definitely plan to remember to make eye-contact in my next presentations. In addition, rehearsing with different words and sentences may help me get ready for the presentation without memorizing it. My audience looked like they understood my quotations because I used clear and easily understandable ones. I felt relieved after my presentations and thought that it wasn't necessary to get stressed about it that much. I think this will help me with my anxiety problem in the future presentations." (Student24)*
>
> *"If I could present again, I would have more eye contact with the audience to present more effectively and to get more immediate feedback. I think the details in the content were enough in both of my presentations considering the time limits. In the future, I think that I will again keep the amount of content the same. Also, I could add a joke to lure the attention of the audience and I think that can be helpful to deliver my message easily. So, in the next presentations, I will be more eager to have jokes." (Student17)*

From the above sample student entries, it was clear that the Reflection Journal facilitating self-evaluation helped them to promote volitional performance control described in the cyclical self-regulatory phases by Zimmerman (2000).

Less than half of the students (44%, n = 41) said they wrote their Reflection Journal without a deep analysis of their presentation because they thought this would be time-consuming. They generally did not prefer to write their Reflection Journal on the same day that they presented. Actually, this might have given them a chance to de-familiarize themselves from their own performance, and then to have a more objective perspective when they viewed their video recording later. So, the fact that they preferred not to write their reflections on the same day may even be an asset.

In terms of the function of the Reflection Journal to obtain feedback from their friends, 66% of the students (n = 62) found it useful and helpful. This finding demonstrates how peer feedback helped students to reflect on one's own development, and this clearly provides evidence to believe that self-regulated learning and self-efficacy does not necessarily involve the presenter only, but it involves

peers too in the process. On the contrary, reflection is definitely enhanced through more interaction during peer feedback.

The rubric for any task assigned to students and evaluated should be transparent to students, yet it is uncommon for students to analyse the rubrics shared with them in detail. In this case, though, the rubric was a guide since apparently, it was referred to by 66% (n = 62) of the students when they were keeping their journals. Similarly, the questions provided as guidelines were referred to by the same percentage of students, which implies that they did make use of personal inspection questions to have an insight on their presentations when completing the journal task.

4. DISCUSSION and CONCLUSION

Although self-regulation, autonomy and agency are terminology widely used and continuously redefined in the literature, they still remain to be 'muddy' (Thomas & Rose, 2018), it is a common understanding that adapting self-regulatory behaviour through reflection of actual school performances develops learning strategies. Former context-situated qualitative method studies on school-based intervention to promote self-regulation support the fact that the design of tasks play a significant role in students' learning process in several ways (Rose, Briggs, Boggs, Sergio & Ivanova-Slavianskaia, 2017). The Reflection Journal was designed to make students think about and control their own learning by raising their awareness on their weak and strong skills, and the personal strategies they could develop to overcome hindrances for more effective presentations. 'The conscious realization of what strategies are applied in a given activity increases the chances of transfer to other tasks' (Scharle & Szabo, 2000). The results of the present study clearly revealed that the intended awareness was at least triggered by the task. Yet, the results also indicated that the Reflection Journal was somewhat effective in making the students think in retrospect and reflect on their learning experience. Another study whose participants were also university level students, conducted in Taiwan with experiment and control groups indicate the contribution of reflective sharing discussions on students' motivation (Wang, Chen, Lin & Hong, 2017). There is a positive correlation between the reflective discussions and positive thinking, learning motivation and self-regulation which was one of the findings of this study on reflective journals as well. Therefore, this study is in line with the earlier studies concluding that reflection and journal keeping have an undeniable positive influence on students improved academic performance, self-reflection, and learning (Al-Rawahi, & Al-Balushi, 2015; Gleaves et al., 2008; McCrindle & Christensen, 1995, Lew & Schmidt, 2001). It seems to have made minor details that they would not otherwise dwell on, important for them. Yet, a minority of students did not make a thorough personal analysis of their own learning strategies. The comments ended up being superficial and repetitive. The major reason for this may be the design of the task since students may have a negative attitude towards a writing task in English classes and may have seen the task as one of the students puts it 'another burden on their shoulders' in the open-ended question. Still, they believed that the journal was designed to make themselves improve their performance rather than having the teacher 'make it magically for them' as another student words it in the open-ended question. The responsibility for being an autonomous learner even at university level does not seem to be fully appreciated in this context. Unfortunately, not many students said they enjoyed cooperating and collaborating with their classmates not for the sake of more grades, but for learning reasons. While they still valued the teacher as the transmitter of information, they did gain autonomy, they said through the feedback they received from their friends before they wrote down their journal entry.

4.1. Limitations and Suggestions

Regarding the limitations of this study, first of all, the results were based on 94 students who volunteered to participate. Those students who volunteered might have been more attentive, hardworking and motivated than others, and hence their survey results should not be generalized to a wider population. Secondly, the survey was given by the class teacher which may be a drawback in the

reliability of the research instrument since students may have been a little hesitant in sharing their honest ideas, assuming that their responses were not really anonymous. Not only being graded by the instructor but also being supportive of the motivation she had toward designing and requiring a task that required self-inspection and development might have made some of the answers biased in that students might have been under the influence of their relationship with the instructor as a latent variable affecting their replies to the questions on the survey. Thirdly, the participants may have felt obliged to give mostly socially acceptable feedback about each other's presentations before they wrote their journal entries, which might also have resulted in a more overall and tolerant analysis of themselves in their journals, with most thinking highly of their performance. Finally, having to use the target language to reflect on their presentations may have presented a further barrier for students when reporting their true feelings.

Future research might focus on self-regulation through keeping a close watch of one's own performance and developing and trying out personal strategies even more now that the shift in education towards distance and online education because of the recent epidemic which had to lockdown the brick and mortar schools all over the world and which forced a remote emergency teaching alternative on teachers of all levels. Assessment testing information is becoming old fashioned and much less meaningful every day, when personal discovery and development shadows the knowledge of input and emphasises the development of skills. So, research can focus on investigating the impact of reflective journals in online teaching, especially the presentation-oriented courses offered online.

The central argument of this study is that self-regulated learning should become an educational goal in our classes, to that end, not only language teachers but also all teachers are advised to devise instruments to support metacognition on the process of learning. It can be achieved if tasks are designed to affect learning of knowledge and skills systematically through having students generate ideas, feelings and actions (Zimmerman, 2000). As little expressed it very simply; 'language learner autonomy is not an optional extra' (2007, p.27). Hopefully, the students who were required to regulate their learning, and reach self-efficacy were motivated to promote a lifelong autonomous learning experience since the perception of the students of the coursework, their motivation and self-regulation are found to be correlated in previous research (Alzubaidi, Alridge, & Khine, 2014). Such reflection tasks are not very common in the education system in which this research was conducted, but apparently students do benefit from them to a large extent, therefore, when designing required tasks in any curriculum, it would be unacceptable to underestimate the value of one's own reflection on his learning strategies. Self-regulation skills could bring success to a great extent enhancing an awareness and capability of managing time, task strategies, goal orientations, making judgements about one's own learning, self-reaction, etc. Therefore, it is highly recommended to focus on self-regulation skills of students to achieve desired goals. As a concluding remark, to emphasize the importance of self-regulation John Gardner states that "The ultimate goal of the educational system is to shift to the individual the burden of pursuing his own education" (as cited in Lan, 2010) which is the motto of Zimmerman and Schunk's book on the topic (1989).

Ethics Committee Permit Information

Name of the board that carries out ethical evaluation: Middle East Technical University Applied Ethics Research Center

The date of the ethical assessment decision: 04/08/2020

Ethical assessment document number: 28620816/222

5. REFERENCES

Al-Rawahi, N. M., & Al-Balushi, S. M. (2015). The effect of reflective science journal writing on students' self-regulated learning strategies. *International Journal of Environmental and Science Education, 10*(3), 367-379. doi: 10.12973/ijese.2015.250a

Alzubaidi, E., Aldridge, J. M., & Khine, M. S. (2014). Learning english as a second language at the university level in jordan: Motivation, self-regulation and learning environment perceptions. *Learning Environments Research, 19*(1), 133-152. doi:10.1007/s10984-014-9169-7

Barnard, L., Lan, W. Y., To, Y. M., Paton, V. O., & Lai, S. L. (2009). Measuring self-regulation in online and blended learning environments. *The Internet and Higher Education*, *12*(1), 1-6. https://doi.org/10.1016/j.iheduc.2008.10.005.

Barnes, D. R. (1976). *From communication to curriculum*. Harmondsworth: Penguin Education.

Bayraktaroglu, S. (April 27, 2017). *Seminar on the report of british council on english language education in turkey*. Ankara, Turkey: Middle East Technical University.

Borkowski J. & Thorpe, P. (1994). *Life span perspective on underachievement in self-regulation of learning and performance.* Dale Schunk & Barry Zimmerman (Eds.). NJ: Lawrence Erlbaum Associates.

Bruner, J. S. (1986). The language of education. J.S. Bruner, *Actual Minds, Possible Worlds* (pp. 121-133). Cambridge, MA: Harvard University Press.

Council of Europe (2001) *Common european framework of reference for languages: Learning, teaching, assessment*. Cambridge: Cambridge University Press.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston: Pearson.

Çubukçu, F. (2009). Learner autonomy, self-regulation and metacognition. *International Electronic Journal of* Elementary *Education*, *2*(1), 53-64.

Deci, E. L. & Flaste, R. (1996). *Why we do what we do: Understanding self-motivation*. New York: Penguin.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (8th ed.). New York: McGraw-Hill.

Gleaves, A., Walker, C., & Grey, J. (2008). Using digital and paper diaries for assessment and learning purposes in higher education: A case of critical reflection or constrained compliance? *Assessment & Evaluation in Higher Education*, *33*(3), 219-231. https://doi.org/10.1080/02602930701292761

Lan, W. (2005). Self-monitoring and its relationship with educational level and task importance. *Educational Psychology*, *25*(1), 109-127. https://doi.org/10.1080/0144341042000294921

Kent, R. (1977) *Room 109: The promise of a portfolio classroom*. Portsmouth, NH: Boynton/Cook

Lew, M. D., & Schmidt, H. G. (2011). Self-reflection and academic performance: Is there a relationship? *Advances in Health Sciences Education, 16*(4), 529.

Little, D. (2007). *Language learner autonomy: Some fundamental considerations revisited*. *Innovation in Language Learning & Teaching*, *1*(1), 14-29. https://doi.org/10.2167/illt040.0

Mak, P., & Wong, K. M. (2017). Self-regulation through portfolio assessment in writing classrooms. *ELT Journal*, *72*(1), 49-61. doi:10.1093/elt/ccx012

McCrindle, A. R., & Christensen, C. A. (1995). The impact of learning journals on metacognitive and cognitive processes and learning performance. *Learning and Instruction, 5*(2), 167-185. https://doi.org/10.1016/0959-4752(95)00010-Z

Moon, J. (1999). *Learning journals: A handbook for academics, students and professional development*. London: Kogan Page.

Paris, S. G. & Byrnes, J. P. (1989). The constructivist approach to self-regulation and learning in the classroom. B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning and academic achievement: Theory, research and practice* (pp. 169-200). New York: Springer-Verlag.

Pintrich, P. R. (1999). The role of motivation in promoting and sustaining self-regulated learning. *International Journal of Educational Research*, *31*(6), 459-470. https://doi.org/10.1016/S0883-0355(99)00015-4

Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation*. San Diego, CA: Academic Press.

Rose, H., Briggs, J.G., Boggs J.A. Sergio, L., & Ivanova-Slavianskaia, N. (2017). A systematic review of language learner strategy research in the face of self-regulation. *System*, *72*, 151-163.

Scharle, A. & Szabó, A. (2000). *Learner autonomy: A guide to developing learner responsibility*. Cambridge: Cambridge University Press.

Schunk, D. H. & Zimmerman, B. J. (1994). *Self-regulation of learning and performance: Issues and educational applications.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Schunk, D. H, & Zimmerman, B. J. (Eds.). (1998). *Self-regulated learning: From teaching to self-reflective practice*. New York: The Guilford Press.

Shea, P., Hayes, S., Smith, S. U., Vickers, J., Bidjerano, T., Gozza-Cohen, M., Jian, S. B., Pickett, A. M., Wilde, J. & Tseng, C. H. (2013). Online learner self-regulation: Learning presence viewed through quantitative content-and social network analysis. *The International Review of Research in Open and Distributed Learning*, *14*(3), 427-461. https://doi.org/10.19173/irrodl.v14i3.1466

Thomas, N. & Rose, H. (2018). Do language learning strategies need to be self-directed? disentangling strategies from self- regulated learning. *TESOL Quarterly 17*(3), 489-491. doi:10.2307/3586262

Thorpe, K. (2004). Reflective learning journals: From concept to practice. *Reflective Practice, 5*(3), 327-343. https://doi.org/10.1080/1462394042000270655

Wang, H., Chen, H., Lin, H., & Hong, Z. (2016). The effects of college students' positive thinking, learning motivation and self-regulation through a self-reflection intervention in Taiwan. *Higher Education Research & Development, 36*(1), 201-216. doi:10.1080/07294360.2016.1176999

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. M. Boekaerts, P. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation, research, and applications* (pp. 13–39). California, USA: Academic Press.

Zimmerman, B. J. & Schunk, D. H. (1989). *Self-regulated learning and academic achievement:* Theory, research, and practice. New York: Springer-Verlag.

Appendix 1. Journal entry

- Write a paragraph of 75-100 words in each box below reflecting on the **content/ organization/ language/ delivery/ audio-visual aids** of your presentation.
- You may refer to **the document (p. 126)** in the course book or the **presentation rubrics** available on *department web site > compulsory courses > 211*.
- Some of the aspects you might want to write about can be specific points about your **presentation skills, worries, strategies you have used/ will use to overcome technical/ physical/ emotional problems.**

Before the presentation

During the presentation

Strengths of my presentation were... Weaknesses of my presentation were...

Future plans/ anticipated problems/ possible remedies

Appendix 2. Reflection questions in writing the reflection journal

Before the presentation

1. How anxious was I? Was my anxiety manageable?
2. What strategies can I use to deal with my anxiety?
3. Does what I eat or drink before the presentation matter?
4. Have I checked my comfort zone in the classroom?
5. Do I need to decide how to keep my hands from shaking? In case of emergency, do I have an acceptable object (the remote, my note cards or a board marker maybe) to hold handy, or a lectern to hide behind until I feel fine on the spotlight?
6. Have I rehearsed well (standing up, in front of an audience, etc.)? Have I rehearsed too many times and memorized my content?
7. Have I timed my presentation?
8. Have I checked the remote, the laser, the speakers, etc. before I started?
9. If I don't get help from my friends can I start the slideshow myself, use the blank button on the projectors' remote, etc.?
10. Am I genuinely interested in what I am presenting? Besides nerves, am I excited to be talking about this topic?

During the presentation

1. What kind of immediate feedback has helped me?
2. Which friends were more comforting to keep eye contact with, why?
3. Was I actually interested in what I presented?
4. Was my choice of topic of any interest to my audience? Why/ why not? How could I tell?
5. What do I assume that my audience will remember after my presentation? Why? What did I do that made them remember it?
6. Have I put any effort into relating my content to the audience's background somehow?
7. Have I decided when to pause a little to help my audience decipher my content, to help myself take a breath, to emphasize the importance of what I have just said or would say next, etc.?

8. Which bookish words did not mean much to my audience?
9. Which sentences do I think needed to be paraphrased for my audience to follow me easily?
10. Was my ***outline audience-friendly? Di I help my audience follow me using signposts?***

***After* the presentation**

In retrospect:

1. What would I definitely do differently if I could present again?
2. Would I include more details or fewer, if I could rearrange my content?
3. Did my audience look like they understood my quotation/s, and its importance? If not what could I have done to deliver its message to them?
4. Was there any part that I could add personal content, a joke or an anecdote to enhance the message I intended to give?
5. Did I have a few authentic English fillers in my mind to avoid awkward silence when I was thinking?
6. I would never again....
7. It was a good idea to....
8. When I finished I felt....
9. I can teach myself to....
10. I can survive without....

Appendix 3. **Journal entry rubric**

		3	**2**	**1**	**0.5**
Content	The student: ● effectively reflects on his/her presentation process in terms of: ➢ **Anticipated achievements/ problems** ➢ **Strengths and weaknesses** ➢ **His/her future plans** ● justifies the comments s/he makes by giving **specific evidence from the presentation**				
Organization	The student: ● uses **transitional & cohesive devices** effectively to connect ideas ● produces a text that **flows smoothly**	**1**	**0.7**	**0.5**	**0.2**
Language	The student: ● makes accurate use of **grammar & vocabulary** ● makes accurate use of **punctuation & spelling**	**1**	**0.7**	**0.5**	**0.2**

Research Article

Interaction Increasing Factors: Research on E-learning Content Design*

Hülya SOYDAŞ ÇAKIR, [1] **Erhan AKYAZI** [2]

Abstract

Interaction is one of the key elements for learning and it also has a significant role in increasing efficiency in e-learning programs. Several studies indicate that high level of learner and content interaction provided by e-learning programs brings learner satisfaction and achievement. During the learning process, content interaction provides an effective means to reach learning goals. Successful content design and adequate content interaction items are essential to sustain attention, provide motivation, achieve high levels of satisfaction of learning and provide significant increase in learning performance. In this study, perception and expectation of 236 e-learners are examined to observe the outcomes of content design in learning. The items required for content interaction are classified under three main topics as Attention-Motivation, Satisfaction and Learning Performance. The research model is based on how efficient design of these items helps to increase learner and content interaction. The increase of interaction will result in learner achievement. Therefore, the efficiency of the e-learning process will correlate with higher levels of learner-content interaction. Adequate and efficient content design contributes to effective learning.

Keywords: Interaction, information technologies, e-learning, content design

1. INTRODUCTION

Active learning methods that are beneficial for the learner are preferred in order to increase the efficiency in education. Interaction plays an important role in e-learning applications in order to increase effectiveness of education. In this study, it is discussed how to increase the interaction required for e-learning to become more efficient for the learner. The importance of content interaction for increasing learner success in the e-learning environment is being investigated. Accepting that an e-course with sufficient interactive e-learning content is increasing the success of the learner, the perception of items required for content interaction are examined.

High level of interaction makes it possible to gain attention, to provide motivation, to achieve high levels of satisfaction and provide significant increases in learning performance. Interaction provides active learner participation in the instructional and performance improvement process. Interaction allows learners to adapt learning experiences to meet their own specific abilities and needs. It enables the new ideas to be classified, to be transferred to present concept frameworks and promotes intrinsic motivation for the learner (Wagner, 1997). Instructional interaction is defined as a sequence of events that is engaging the learner in meaningful activity, providing feedback and influencing learning (Shank, 2003). Interaction defines all attitudes of individuals and groups with each other. It is commonly defined as a continually evolving process like communication (Simpson & Galbo, 1986). According to Jonassen, interaction points to activity between two organisms (Jonassen, 1988). Being interactive meant that the user could intervene and change content of the environment they were accessing (Lister, Dovey, Giddings, Grant & Kelly, 2009). Two properties were identified for

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interaction; the direction of communication and control over the communication process. These features; adaptable and applicable to explain the different levels of human-human, human-system and human-content interaction (Jones, 2003). Interaction can take place in a wide range of information and communication technologies, from low degree such as the use of interactive television or touch screens to high-level applications such as virtual reality where multiple functions are used. The user entering a command with a keyboard or making a selection with the mouse may create a certain restriction for the interaction that may occur. The selections can only mark operations previously programmed on the computer. Although technological elements are pointed out from this perspective, interaction always has a social and communicative dimension (Andrews & Haythornthwaite, 2002). Interactivity is process related and is a variable property of communication settings, not a characteristic of the medium. It is the dimension of the relationship between message series and in particular the closeness of subsequent messages to the previous ones. Researchers state that communication is mostly related to the aim of interaction. The interaction primarily places shared interpretive contexts. Interactivity is associated with the dimensions of acceptance and satisfaction and also related to items such as motivation, learning and cognition (Rafaeli & Sudweeks, 1997).

E-learning can be interpreted as an innovative approach for the presentation of student-centered, interactive, facilitative and adequately designed learning environment to anyone, anytime and anywhere using the features and resources of various digital technologies. Innovative learning methods are taking place in our lives in addition to traditional education approaches. E-learning is considered as a product of these new innovative learning methods by the support of digital technologies (Khan, 2005). Interactions have positive impact on learners' sense of community and continuous use intention of e-learning platforms (Luo, Zhang & Qi, 2017). E-learning courses should be designed to facilitate more targeted, intentional and engaging interactions (Abrami, Bernard, Bures, Borokhovski & Tamim, 2010). Content interactions should be used adequately to provide quality learning experiences.

1.1. Content Design

Content is a central element for each e-learning program. Some key considerations should be considered when developing an e-learning program for selection of content type. Designing learning materials for learners using new technologies will not be the same as designing lecture notes for traditional education. Attention should be paid to the format and appropriate use of psychology.

The research findings emphasize that the main factor that improves students' learning is the use of technology rather than technology itself. The content of a well-designed interaction carries learning from recognition and understanding to higher levels such as analysis, synthesis and evaluation (Erlich, 2009). Interaction is regarded as part of a system in which the learner is not only a passive information receiver, but also a contact with the learning material that responds to human activities. Interaction enables active learner involvement in the process of teaching, training and performance development. It allows learners to adapt their learning experiences to meet their own abilities and needs. Giving responsibility to the learners also promotes participation and initiation of interactions (Weiser, Blau & Eshet-Alkalai, 2018). The most practical method of designing an effective interactive learning experience is to consider the goals and objectives of the specific learning experience. In this respect, it is much more convenient and effective to start choosing the strategies and tactics necessary to achieve the desired results in learning experience. So, interaction can serve as a product of clearly conceptualized, well-designed and well-developed training. It enables classifying new ideas and transferring them to existing concept frameworks, providing internal motivation for learners (Wagner, 1997). Applications that allow the knowledge to be permanent and to be connected with real life serve for the purpose of learning. Many researches emphasize the importance of active participation and collaboration among learners to ensure effectiveness in online learning (Swan, Shen & Hiltz, 2006).

The collaboration of instructional designers and project team is essential in the process of successful content development. Content design needs to be done with effective planning with interface, navigation, technical elements and others. Learning content should be motivating and attractive, clear and appropriate to the level of education provided. Designing the content by using activities helps to increase learner engagement (Rayens & Ellis, 2018). Accessible resources and communication activities appropriately planned between learners and instructors contribute to learning.

1.2. Relationship between Content and Interaction

Basic items in the interaction can be defined as content, process and structure. Content refers to the topic or task that people are working on. The procedure expresses the emotional, intellectual and behavioral dynamics among the participants. When content is more easily identifiable and reviewable it receives more attention (Jaques & Salmon, 2007). The interactivity of the courses is an important feature including techniques that prompt high psychological engagement for learning (Calvin & Mayer, 2016).

Content is one of the basic elements of a course design. Learners may have perception about the activities they encounter with the content. They report high levels of satisfaction in the courses those they think well designed. Diversity and activities in content should be consciously addressed in order to support interactions that make learning enjoyable (Wilson & Albion, 2009). Learners who like practicing prefer activities that include real-life experiences, simulations and similar exercises. For the learners who prefer visual elements, applications such as virtual tours, animations and concept mapping are effective. Consequently, when content is designed and distributed sufficiently, it will become more enriching and engaging for learners (Bonk & Zhang, 2008). In education, different methods are used for course transfer as Bloom's Taxonomy, Keller's ARCS model and Gagne's Nine Events which are widely known ones. These models provide guidance in creating an interactive content. Learning objectives are summarized under three major domains by Benjamin Bloom as cognitive, psychomotor and affective domains. Six categories in the cognitive domain as knowledge, comprehension, application, analysis, synthesis and evaluation form Bloom's hierarchical structure (Bloom, 1956). In 2001, a group of psychologists, theorists, researchers and specialists published a revision of Bloom's Taxonomy pointing to a more dynamic conception shown in Figure 1 (Anderson & Krathwohl, 2001). The content created using these categories will include different instructional activities.

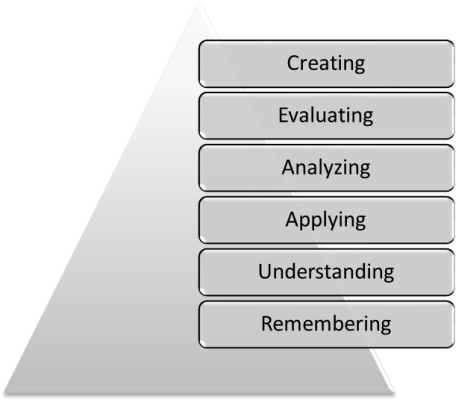

Figure 1. Educational objectives of revised Bloom's Taxonomy (derived from Anderson & Krathwohl, 2001, p. 268)

The ARCS Model, which was developed by Keller based on studies on motivation and instructional design, consists of four main categories that take into account motivation and performance in the learning process (Figure 2) (Keller, 1987).

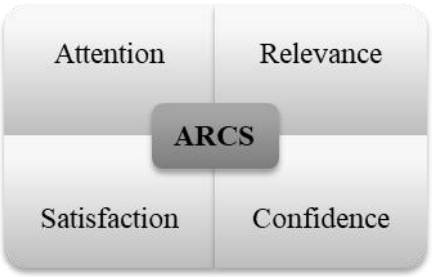

Figure 2. Categories of ARCS Model

Engaging learner with full attention is an essential feature of learning. Content of the learning material should therefore be designed as to arouse curiosity. Relevance is also equally important for the motivation of the learner, and the learner should believe that the content for learning is relevant to their context. It should also be ensured that the content meets the learning objectives. Other than these requirements, expectations from the learner should be established very clearly, and constructive feedback should be provided to build confidence in the learner. In order to serve appropriate learning content to each learner adaptive e-learning environments should be designed (Premlatha & Geetha, 2015). The content design should enable the learner to apply knowledge while acquiring new skills. To keep the learner motivated, it is useful to experiment different content supported with simulations, applications and games. The learners can be rewarded by praise and certification when target performance is achieved.

Integrating interactive applications into syllabus design to improve content may help increase motivation and facilitate learning outcomes. Modified content with interactive applications should encompass clear objectives, relevant examples and appropriate content activities which will affect and improve learner performance by facilitating learning (Chua & Montalbo, 2014; Keller, 2010).

In his book published in 1965, Gagne created a nine-step process which he coined as Nine Events of Instruction to describe different teaching methodology These nine steps are used for interaction in syllabus design in the conventional approach to achieve learning (Figure 3). The same nine steps can also be applied to interactive applications. A well-defined instructional design approach assists the production of effective learning materials (Hirumi, 2002).

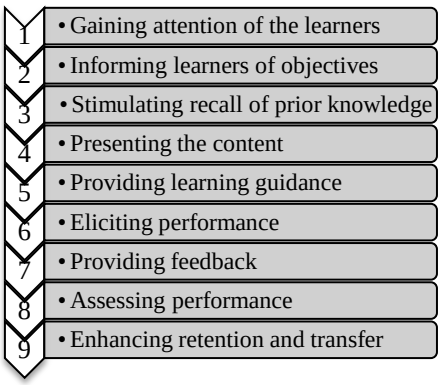

Figure 3. Gagne's Nine Events of Instruction (Gagne, Briggs & Wager, 1992**)**

Learning experience should be engaging to guarantee learner interest in the learning process. Engagement in the learning process enables the learner to apply their knowledge, transfer it into the real world and therefore, retrieve the information far more easily (Schone, 2007). The major prerequisite of learner engagement is successful content design. E-learners report higher levels of satisfaction if they consider the course to be well-designed. Therefore, it is essential that content design conforms to basic methodology principles of teaching which is connecting learning objectives with material design. In order to promote interaction, content should be entertaining and include a variety of activities.

2. METHOD

This research is held to examine and evaluate the perceptions and attitudes of the e-learners toward content interaction increasing factors in e-learning programs. The relationship between proper content design and sufficient content interaction levels are asked to the participants under different definitions.

In the study, undergraduate and graduate students attending to an e-learning course were selected as the research universe. A survey research was prepared in order to evaluate the perception of e-learners. Participants were expected to be attending at least one e-course and to answer research questions for a particular e-course they have attended. Students were contacted one-to-one and asked to fill in questionnaires consisting of four leaflets or to participate online in the questionnaire loaded in the Marmara University Survey System. 247 students attending an e-learning course participated in the research. The questionnaire form of 11 of the students participating in the study was excluded from the evaluation due to incomplete or incorrect completion. The answers of the remaining 236 participants were analyzed and interpreted. The valid questionnaires participating in the study are analyzed by SPSS (Statistical Packages for Social Sciences) software. Descriptive findings have been presented and these findings were first evaluated by the demographic characteristics of the learners. Descriptive statistics were used to analyze the data. Then, the analysis findings of the research were presented and different tests were used for the advanced analysis.

Survey study has been prepared in accordance with the purpose of the research to be conducted. The literature and research on content interaction in e-learning were used for the survey questions. As a result of the literature review, the interaction items are summarized under 3 main topics (Table 1). Those topics are, Attention- Motivation, Satisfaction and Learning Performance. The main topics are not declared to the participants, but only the sub-items are asked to be identified. Totally 37 sub-items are asked for the opinion of learners to determine at which level each item provides interaction in e-learning. Then the learners are asked to clarify that at which level the same item is found in their e-learning program. They verified those levels by six grades as (1) Any, (2) Few, (3) Some, (4) Enough, (5) Much, (6) Totally.

Table 1. Interaction Items and Sources

Attention - Motivation Items:	**Sources (Authors & Organisations):**
Having user-friendly content design	Allen (2008) Chickering & Ehrmann (1996) Driscoll & Carliner (2005) Hannafin & Hooper (1989) Holmberg (1995) Ice, Akyol, Swan & Richardson (2010) Keller (1987) Khan (2005) Pallof & Pratt (2005) Salmon (2002) Spratt(2009) Sharp & Huett (2006) Tu & Yen (2007) Wagner (1997)
Allowing learners developing ideas by content applications	
Making learner to pay attention and remain engaged by content design	
Having sufficient time and attention of the instructor in the program	
Arousing curiosity of the learner by content design (e.g. audio-music, image-video)	
Evaluating learning by using some applications like tests, etc.	
Using social media applications	
Arousing desire in learning process by content applications	
Arousing confidence of the learner by the feedback of true/false answers or by similar applications	
Satisfying the student's sense of winning and rewarding	
Providing scheduling opportunity for the learner (individual/academic calendar)	
Satisfaction Items:	**Sources (Authors & Organisations):**
Ease of use	Allen (2003) Blackboard Inc.(2011) Hillman, Willis & Gunawerda (1994) Jung, Choi, Lim & Leem (2002) Lewis & Whitlock (2003) Novitzki (2009) Roblyer & Wiencke (2004) Sun, Tsai, Finger, Chen & Yeh (2008) Swan (2001) Thurmond & Wambach (2004) UWG-DDEC (2006) Wilson (2007)
Proper processing of course materials	
Reaching technical support by using different instruments (e.g. phone, e-mail)	
Meeting expectations by the represented content	
Being of the content close related to the subject	
Having subjects complementing each other	
Sufficiency of the including content	
Having sufficient feedbacks	
Having on-time feedbacks	
Feeling comfortable while using the content	
Reaching to content whenever required	
Availability of reaching to content again if desired	
Availability of the content to reach much information (e.g. links, rich media content)	
Existence of the content applications having opportunities to make practice (e.g. exercises, projects)	
Designing of the content suitable to the e-learning environment	
Learning Performance Items:	**Sources (Authors & Organisations):**
Giving the objectives and requirements at the beginning of the course in order to succeed	Ally (2004) Blackboard Inc.(2009) Chickering &Ehrmann (1996) Dabbagh (2007) Gagne (1985) Hannafin & Hooper (1989) Naidu (2006) Schone (2007) Shank (2003) Stevens & Viles (2006) Swan, Shen & Hiltz (2006) Urdan & Weggen (2000) Van Dam (2007) Wilson & Albion (2009)
Using of the knowledge gained from the course in the following applications	
Using content applications those enable the learner for recalling of the prior knowledge	
Using applications for understanding the subject better (e.g. animation, simulation)	
Giving opportunity for different learning styles in the program	
Providing performance evaluation of the learner by the program (e.g. evaluation exams, tests)	
Providing learner self controlled learning by making their own choices	
Enabling to explore by content	
Directing learner to research by content	
Increasing attention and retention rates by content	
Forming desire to succeed in the program	

3. FINDINGS

E-learners are aged between 18 and 48 participating in the research. The average age of the participants is nearly 27. There are 96 females (nearly 41%) and 140 males (nearly 59%) e-learners. 72 (30,5%) participants are married, and 164 (69,5%) of them are single due to the level of average age. The participants are asked for their internet usage familiarity. Most of them are using the internet 3-5 hours or more in a day. Less than 20% of the learners are using it less than 1 or 2 hours. For most of the participants, the program which they are attending is their first experience of e-learning. Only 31,8% of them have attended any other e-learning programs in the past. When they are asked if they prefer to attend another e-learning course, nearly 75% of the learners inform positive attitude toward attending any other e-learning programs in the future. The e-learners are asked how much they are satisfied with the interaction level of the content of their e-course. They inform that they are satisfied with interaction level of their e-learning program with majority frequency (nearly 40%). 30% of them inform that they are less satisfied with the interaction level of the course. Only 10% of the participants are totally not satisfied with the interaction level of their e-learning program. When the e-learners are asked if the content of their course is appropriate to be designed as an e-course, most of the learners (68%) accept that the course content is appropriate for being designed as an e-learning course. In the research, participants are asked whether they would recommend their e-course to other students, nearly 37% of the participants inform that they strongly recommend and 20% of them inform that they highly recommend their e-learning program to others.

Cronbach's coefficient (α) is used to test reliability and the value $0.80 \leq \alpha < 1.00$ is considered to be highly reliable. The results for each interaction item of the study prove that research is quite reliable (Table 2).

Table 2. Reliability Statistics

	Cronbach's Alpha	N of Items
Attention-Motivation	.932	11
Satisfaction	.958	15
Learning Performance	.955	11

By the use of correlation analysis remarkable accepted hypotheses are summarized. As one of the accepted hypotheses by the result of Chi-square test at 0.001 level of significance, there is a positive correlation between satisfaction degree with the content interaction level of the e-course and the desire to participate in another e-learning program later. It is observed that those who are satisfied with the content interaction level of the taken e-course have a positive attitude for joining another e-learning program later.

As another hypothesis accepted by the result of Chi-square test at 0.001 level of significance, there is a relationship between the degree of content interaction level satisfaction of the e-course and the degree of recommending e-learning program to the others. Those who were not quite satisfied with the content interaction level of the e-learning program they received, state that they will either not recommend the program or recommend it at a significantly low level. Those, on the other hand, who were highly satisfied with the content interaction level of the course would strongly recommend the program.

There is also a relationship between the degree of satisfaction of the content interaction level of the e-course and the degree to which the course content is appropriate to be designed as an e-learning program as an accepted hypothesis. The result of Chi-square test is at 0.001 level of significance. The majority of the participants who were not satisfied with the content interaction degree of e-learning believe that the content of the lesson is not appropriate for e-learning. On the

contrary, the participants who were satisfied with the content interaction degree of the e-learning program, believe that the content of the lesson is appropriate for e-learning.

According to the research, the satisfaction degree of e-course content interaction level is highly low between ages 18 and 23 (Table 3). Positive attitude to the e-learning programs tends to increase as the age of participants increases. There is a correlation between age groups and the agreement of that content applications increases interaction (Table 4). With the growth of age, the attitude to e-learning programs changes. Post-graduate programs being designed much detailed and much concerned about learners' needs are one of the factors increasing satisfaction in elder ages. E-courses which have poor interaction levels are considered as boring by the learners. Using ordinary content causes loss of attention. Young learners pointed out those negative designs and proved the importance of content interaction.

Table 3. Cross results for the difference between satisfaction degree of e-learning content interaction and different age groups

		How much are you satisfied with the content interaction level of this e-course?					Total
		Any	**Few**	**Some**	**Enough**	**Much-Completely**	
	18-23	20	18	15	24	8	85
Age Group	24-30	3	9	19	43	19	93
	31 and over	1	3	8	30	16	58
Total		24	30	42	97	43	236

Table 4. The analysis of correlation between satisfaction degree of e-learning content interaction and different age groups

	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	44,613	8	0,000
Likelihood Ratio	45,045	8	0,000
Linear-by-Linear Association	36,513	1	0,000
N of Valid Cases	236		

The research indicates a significant difference between the importance of items to provide interaction in e-learning and the existence of the same item in the learners' present e-courses. The learners agree that the items under the topics of Attention-Motivation, Satisfaction and Learning Performance provide interaction in e-learning programs. Attention and motivation have to be provided during the process as learners voted in the research.

3.1. Difference Analysis of Interaction Increasing Factors

Interaction factors are analysed through Paired-samples t test in the research. Table 5 demonstrates the standard and average deviation values for 37 factors under "opinion" and "current situation" columns, the "t" value of test results and the "P" value of whether any different results of the test results are meaningful or not.

The result of the analysis indicates that for all the given factors of 0.001 significance level, there is a difference between "opinion" and "current situation". There is measurable distinction between the factors that participants believe contributes to e-learning program and that the same factor takes place in the e-learning program they received.

Table 5. Difference analysis of interaction increasing factors

		(Opinion)			(Current Situation)				
		''To what extent do you agree that this item provides interaction in e-learning?''			''To what extent is this item included in your e-learning program?''				
		Mean	N	Standart Deviation	Mean	N	Standart Deviation	t	p
1.	Having user-friendly content design	4,56	236	1,138	3,48	236	1,232	13,063	0,000
2.	Allowing learners developing ideas by content applications	4,47	236	1,12	3,33	236	1,21	13,192	0,000
3.	Making learner to pay attention and remain engaged by content design	4,68	236	1,143	3,33	236	1,221	15,39	0,000
4.	Having sufficient time and attention of the instructor in the program	4,8	236	1,08	3,64	236	1,231	13,112	0,000
5.	Arousing curiosity of the learner by content design (e.g. audio-music, image-video)	4,87	236	1,092	3,25	236	1,261	16,785	0,000
6.	Evaluating learning by using some applications like tests, etc.	4,54	236	1,089	3,36	236	1,231	14,73	0,000
7.	Using social media applications	4,56	236	1,196	3,06	236	1,37	16,242	0,000
8.	Arousing desire in the learning process by content applications	4,78	236	1,115	3,36	236	1,252	15,278	0,000
9.	Arousing confidence of the learner by the feedback of true/false answers or by similar applications	4,67	236	1,159	3,29	236	1,318	15,522	0,000
10.	Satisfying the student's sense of winning and rewarding	4,4	236	1,27	3	236	1,348	15,397	0,000
11.	Providing scheduling opportunity for the learner (individual/academic calendar)	4,53	236	1,139	3,61	236	1,346	10,283	0,000
12.	Ease of use	4,86	236	1,2	3,92	236	1,279	10,944	0,000
13.	Proper processing of course materials	4,84	236	1,248	3,81	236	1,363	11,71	0,000
14.	Reaching technical support by using different instruments (e.g. phone, e-mail)	4,85	236	1,073	3,64	236	1,279	13,373	0,000
15.	Meeting expectations by the represented content	4,84	236	1,137	3,68	236	1,206	13,812	0,000
16.	Being of the content close related to the subject	5	236	0,954	4,07	236	1,197	12,784	0,000
17.	Having subjects complementing each other	4,86	236	0,98	4	236	1,137	12,306	0,000
18.	Sufficiency of the including content	4,94	236	1,068	3,69	236	1,207	14,504	0,000
19.	Having sufficient feedbacks	4,76	236	1,209	3,47	236	1,312	14,086	0,000
20.	Having on-time feedbacks	4,7	236	1,226	3,42	236	1,311	13,565	0,000
21.	Feeling comfortable while using the content	4,84	236	1,087	3,96	236	1,266	11,212	0,000
22.	Reaching to content whenever required	5,03	236	1,099	4,17	236	1,235	11,348	0,000
23.	Availability of reaching to content again if desired	4,99	236	1,074	4,22	236	1,232	10,062	0,000
24.	Availability of the content to reach much information (e.g. links, rich media content)	4,89	236	1,113	3,36	236	1,245	16,407	0,000
25.	Existence of the content applications having opportunities to make practice (e.g. exercises, projects)	4,84	236	1,199	3,25	236	1,311	16,502	0,000
26.	Designing of the content suitable to e-learning environment	5,04	236	1,131	3,66	236	1,218	15,436	0,000
27.	Giving the objectives and requirements at the beginning of the course in order to succeed	4,5	236	1,208	3,52	236	1,27	12,341	0,000
28.	Using of the knowledge gained from the course in the following applications	4,58	236	1,234	3,58	236	1,307	12,344	0,000
29.	Using content applications those enable the learner for recalling of the prior knowledge	4,64	236	1,123	3,53	236	1,273	13,161	0,000

30.	Using applications for understanding the subject better (e.g. animation, simulation)	4,82	236	1,211	3,09	236	1,354	17,122	0,000
31.	Giving opportunity for different learning styles in the program	4,34	236	1,27	3	236	1,322	15,156	0,000
32.	Providing performance evaluation of the learner by the program (e.g. evaluation exams, tests)	4,54	236	1,2	3,41	236	1,303	13,761	0,000
33.	Providing learner self controlled learning by making their own choices	4,48	236	1,218	3,31	236	1,288	13,332	0,000
34.	Enabling to explore by content	4,78	236	1,104	3,26	236	1,303	15,818	0,000
35.	Directing learner to research by content	4,76	236	1,169	3,34	236	1,358	14,654	0,000
36.	Increasing attention and retention rates by content	4,8	236	1,185	3,33	236	1,308	14,973	0,000
37.	Forming desire to succeed in the program	4,8	236	1,209	3,56	236	1,378	13,257	0,000

In this research, total score of effectiveness of contribution to e-learning interaction and the score of attending the e-learning program have been taken into consideration to calculate the content interaction factors under the three categories. All these scores have been compared to Sample Pairs t-tests. The results under Opinion are demonstrated as (A) and results under Current Situation are indicated as (B). Total scores seem to differentiate according to 0.001 meaningfulness level. Although participants think that Attention-Motivation, Satisfaction and Learning Performance items provide interaction in e-learning, there is a significant difference between their views that they are included in the e-learning program (Table 6).

Table 6. Analysis of score differences in Opinion and Current Situation

	Mean	**Standart Deviation**	**Standart Deviation Mean**	**t**	**Significance**
A. Attention-Motivation Total	4,6252	0,88043	0,05731	19,101	0,000
B. Attention-Motivation Total	3,3363	0,99659	0,06487		
A. Satisfaction Total	4,8856	0,88961	0,5791	17,774	0,000
B. Satisfaction Total	3,7537	0,97309	0,06334		
A. Learning Performance Total	4,6402	0,99217	0,99217	17,998	0,000
B. Learning Performance Total	3,3552	1,10354	1,10354		

In this research, scores of interaction factors of Attention-Motivation, Satisfaction and Learning Performance under "Opinion" and "Current Situation" have been analysed separately based on different variables. All the scores for each group have then been evaluated through Independent Sample Pair t-test to conclude whether there is a difference between participants who would like to attend another e-learning program and participants who would not like. Research finding suggests significant difference between participants who would like to attend another e-learning program and participants who would not like to under total interaction scores of Attention-Motivation, Satisfaction and Learning Performance of "Opinion" and "Current Situation". Those who would like to attend another e-learning program seem to agree more than those who would not like to further attend an e-learning program in that all items provide interaction in e-learning. The total scores of descriptive finding for different age groups for current e-program have further been tested via One-way ANOVA to see whether there are any differences between age groups.

Table 7. Difference analysis of "Current Situation" factors and different age groups

ANOVA

Current Situation Attention-Motivation Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39,32	2	19,66	23,603	0,000
Within Groups	194,082	233	0,833		
Total	233,402	235			

Current Situation Satisfaction Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	41,757	2	20,878	26,911	0,000
Within Groups	180,768	233	0,776		
Total	222,525	235			

Current Situation Learning Performance Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	44,409	2	22,204	21,399	0,000
Within Groups	241,773	233	1,038		
Total	286,181	235			

The test results reveal that there is a significance between total scores of interaction factors of Attention-Motivation, Satisfaction and Learning Performance under "Current Situation" among different age groups (Table 7). Compared to all participants, learners between the ages of 18-23 claimed that interaction items were less involved in their e-learning program. In a similar manner, Attention-Motivation, Satisfaction and Learning Performance items under "Opinion" were tested through One-way ANOVA to search whether there were any differences among different age groups or not. Test results indicated that participants between the ages of 18-23 agreed less with the idea that content applications were increasing interaction compared to other age groups. Higher age groups have a different attitude towards e-learning programs, mainly, they conveyed more satisfaction if post-graduate programs were prepared in more detail and learner needs were taken more into consideration.

3.2. Analysis of Content Interaction

In the last part of the research, learners were asked how much of the commonly used interactive applications were contributing to interaction in e-learning (Table 8). The responses were analysed through Friedman Test to be able to rank the applications (Table 9).

Table 8: Content Interaction Application Ranking

Content Interaction Application	Mean Rank
Visual, video, presentation apps	4,32
Providing efficient and on time feedback	4,29
Click for further information	4,11
Technical support	3,98
Various simulations	3,81
Dynamic links within and outside the program	3,79
Various formats of evaluations	3,70

Table 9. Friedman Test Statistical Table of content interaction applications

N	236
Chi-Square	26,791
df	6
Asymp. Sig.	,000

Analysis results demonstrate that visual, video and presentation applications get the highest mean rank. The lowest one is the various formats of evaluation. Factors that increase content interaction in e-learning are classified as Attention-Motivation, Satisfaction and Learning Performance. As a result of the research, there is a significant difference between any interaction item that learners believe that it contributes to interaction in e-learning and the status of the same item in their e-course. The fact that Attention-Motivation, Satisfaction and Learning Performance factors provide interaction in e-learning falls into the "enough-much" band. Learners also emphasize the importance of content design in e-learning programs. Among these factors, learners support that attention and motivation are especially important and should be sustainable throughout the program. The item which learners believe provide highest interaction under Attention-Motivation factor is its ability to arouse curiosity which can be maintained through the use of applications such as sound, music, visuals and videos. It is deliberately important for learners that the instructor in the program allocates enough time and attention. Learners strongly agree that content interaction highly contributes to maintaining interaction through arousing the will to learn during the program process. Other factors that increase interaction in e-learning can be listed as; content design is interesting and continuous, feedback for correct and wrong answers is confidence building, content design is user friendly and social media applications are somehow adapted in the program.

Learners seemed to agree with the fact that the same Attention-Motivation factors in their e-learning program was in the "some-enough" band. They believe that gain and reward after the program was not satisfactory enough. Use of social media in the present e-learning programs is not efficient yet either. Learners do not find the interest arousal level of the existing programs very high. Feedback mechanisms do not tend to build confidence in learners. Similarly, learners claimed that providing an outlet for opinion forming, that the design is interesting and continuous, that it helps create awareness in the learner about their improvement, and that it is user friendly regarding Attention-Motivation factors where content design dominates turned out to be a little higher than the mean average. The item regarding providing the student with the opportunity of careful planning and scheduling and the fact that instructors allocate enough time and attention although has the highest mean average, it still below the desired level.

The mean average of agreeing with the fact that 15 technical items affect interaction in e-learning under satisfaction band is slightly higher than those under Attention-Motivation band. Students highly agree that the following items in the given order strongly affect interaction in e-learning; content design is in accordance with the e-learning environment, the content is accessible and the content is closely related with the topic. If all these items are provided, it is believed that content interaction will improve. The items that most learners agreed would highly contribute to interaction in e-learning are as availability of reaching to content again if desired, sufficiency of the including content, availability of the content to reach much information, proper processing of course materials, having subjects complementing each other, reaching technical support by using different instruments, meeting expectations by the represented content, feeling comfortable while using the content, existence of the content applications having opportunities to make practice. Finding these items reflecting satisfaction in the current e-learning program ranked in "much" band. From the same list, the items of highest mean average are; availability of reaching to content again if desired, reaching to content whenever required, being of the content close related to the subject and having subjects

complementing each other. Research results suggest that these four items ranked higher than the others in e-learning program.

Learners in the research believe that factors under Learning Performance contribute to interaction in the "enough-much" band. In this group, it is accepted that use of animations to explain topics and the design of the course aimed to maintain and sustain interest will provide intrinsic motivation which will increase the interaction. The item under learning performance with the lowest mean average is that, e-learning addresses different learning styles, as they are not sufficiently embedded into the program. Among the 11 items under this title, the least addressed item is related to giving opportunity for different learning styles. Similarly, applications used for explaining topics and many other factors of learning performance seem to be under the expectations.

In brief, learners agree that factors increasing Attention-Motivation, Satisfaction and Learning Performance positively influence content interaction. However, they do not rank highly in terms of being present in the program. Learners are quite aware that content interaction increasing factors are very important in e-learning programs. They hold the expectation that e-learning programs should be designed within the framework of their own syllabus with high content interaction.

4. DISCUSSION and CONCLUSION

E-learning is widely used in many graduate and post-graduate programs as well as distance education and as a portal of learning for all age groups supporting the opportunity of lifelong learning. Learners are more active and autonomous that they can plan on their own, have confidence and are open to innovations by e-learning applications. Such applications provide variation in learning by learning environment, materials, methods used and distribution. Executing a class in the digital environment does not only require technological infrastructure but it also requires a new design (Allen, 2008; Khan, 2005). The course and content design should be considered in detail as the main steps in the e-learning process for the achievement of both learner and institution. Interaction is a key concept in e-learning process providing efficiency and qualified learning experience (Swan, 2001; Weiser et al., 2018; Wilson, 2007).

Learner-content interaction contributes to learning and success in the e-learning environment (Erlich, 2009; Luo et al. 2017; Thurmond & Wambach, 2004). In e-learning environments, presenting a course in conventional methods where information is presented isolated, will be conceived as boring and meaningless. An e-learning program should never mean transferring an existing course into a digital platform without being redesigned. It will be more advantageous if interaction element is used in such a way that learner is interested, motivated, content and demonstrates improvement in performance. Design has a prominent effect on encouraging the participant to learn more (Chua & Montalbo, 2014; Hirumi 2002). Applications which motivate and satisfy the participant during the learning process will be beneficial. With the help of content interaction, it is possible to retain information. With the positive contribution of interaction, information can easily be stored in memory and recalled when the same information is desired. Learner motivation can similarly be maintained through content interaction (Ally; 2004; Keller, 2010; Rayens & Ellis, 2018). Fluent and flexible course flow with adequate content design provide efficient learning experiences. Considering the positive contributions of active learning for the learner, content interaction applications in e-learning should be carefully arranged.

As a result of the research, learners have positive attitude towards e-learning. However, as factors providing content interaction are not yet at the desired level, learners tend to have a less positive attitude towards current e-courses. The more widespread and appropriate use of content interaction items will be useful in eliminating dissatisfaction. Programs with structures of interactive e-learning content provide success for institutions, instructors and learners. It is crucial to consider content interaction in design and dissemination of the course. Content design should be done with an

expert team and all conditions should be met for the interaction. Learners should be encouraged to learn and allowed to be more active in the learning process in order to create efficient e-learning programs.

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5. REFERENCES

Abrami, P. C., Bernard, R. M, Bures, E. M., Borokhovski, E. & Tamim, R. (2010, July). Interaction in distance education and online learning: Using evidence and theory to improve practice. The Evolution from Distance Education to Distributed Learning 2010 Research Symposium, Bloomington, Indiana, July 20-23.

Allen, M. W. (2003). Michael Allen's guide to e-learning: Building interactive, fun and effective learning programs for any company. New Jersey, USA: John Willey & Sons, Inc.

Allen, M. W. (2008). *Best practices in online course development*. In Handbook for workplace learning proffessionals (pp. 251-270). In E. Biech (Ed.), The American Society for Training & Development (ASTD), Maryland: United Book Press.

Ally, M. (2004). *Foundations of educational theory for online learning*, In T. Anderson & F. Elloumi (Eds), Theory and practice of online learning (pp. 3-31), Canada: Athabasca University.

Al-Rawahi, N. M., & Al-Balushi, S. M. (2015). The effect of reflective science journal writing on students' self-regulated learning strategies. *International Journal of Environmental and Science Education, 10*(3), 367-379. doi: 10.12973/ijese.2015.250a

Anderson, L. W. & Krathwohl, D. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York, USA: Longman.

Andrews, R. & Haythornthwaite, C. (2007). The SAGE handbook of e-learning research. Wiltshire: Cromwell Press Ltd.

Blackboard Inc. (2011) Blackboard exemplary course program rubric. Retrieved from https://www.evansville.edu/centerforlearning/downloads/Course-Development-Process/Blackboard-Exemplary-Course-Rubric.pdf

Bloom, B. S. (1956). *Taxonomy of educational objectives: Book 1 Cognitive domain*. New York, USA: Longman.

Bonk, C. J. & Zhang, K. (2008). *Empowering online learning*. San Francisco, USA: Wiley & Sons Inc.

Chickering, A. & Ehrmann, S. C. (1996). Implementing the seven principles: technology as lever, *AAHE Bulletin*, October, 3-6.

Clark, R. C. & Mayer, R. E. (2016). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*, Fourth Edition, New Jersey: Wiley & Sons, Inc.

Chua, C. & Montalbo, J. (2014). Assessing students' satisfaction on the use of virtual learning environment (VLE): An input to a campus-wide e-learning design and implementation. *Information and Knowledge Management, 3*(4), 108-116.

Dabbagh, N. (2007). The online learner: Characteristi*cs and pedagogical implications.* Contemporary Issues in Technology and Teacher Education, *7*(3), 217-226.

Driscoll, M. P. (2000). *Psychology of learning for instruction*. Second edition. Boston, USA: Allyn & Bacon.

Driscoll, M. & Carliner, S. (2005). *Advanced web-based training strategies: Unlocking instructionally sound online learning*. San Francisco: John Wiley & Sons, Inc.

Erlich, Z. (2009). *Integrating new technologies to promote distance learning*. In P. Rogers, G. Berg, J. Boettcher, C. Howard, L. Justice & K. Schenk (Eds.), Encyclopedia of distance learning (pp. 1228-1243), Second edition, Hershey, USA: IGI Global.

Gagne, R. M. (1985). *The conditions of learning and the theory of instruction*. Fourth edition. New York, USA: Hlot, Rinehart and Winston.

Gagne, R. M., Briggs L. J. & Wager W. W. (1992). *Principles of instructional design*. 4th Edition. Orlando, USA: Harcourt Brace College Publishers.

Hannafin, M. J. & Hooper, S, (1989). An integrated framework for cbi screen design and layout. Computers in Human Behaviour, *5*(3), 155-165.

Hillman, D. C., Willis, D. J. & Gunawerdena, C. N. (1994). Learner-interface interaction in distance education: An extension of contemporary models and strategies for practitioners. *The American Journal of Distance Educatio*n, *8*(2), 30-42.

Hirumi, A. (2002). The design and sequencing of e-learning interactions: A grounded approach, *International Journal on E-Learning*, *1*(1), 19-27.

Holmberg, B. (1995). The evolution of the character and practice of distance education, *Open Learning*, *10*(2), 47-53.

Ice, P., Akyol, Z., Swan, K. & Richardson, J. C. (2010). *The relationship between indicators of the community of inquiry framework and online student retention*. In S. Gülseçen & Z. A. Reis (Eds.), Third International Conference on Innovations in Learning for the Future 2010: e-Learning (pp. 256-266). İstanbul: T.C. İstanbul Kültür University Publication, No: 125.

Jaques, D. & Salmon, G. (2007). *Learning in groups: A handbook for face-to-face and online environments*. Oxon, UK: Routledge.

Jonassen, D. H. (1995). Supporting communities of learners with technology: A vision for integrating technology in learning in schools. *Educational Technology*, *35*(4), 60-63.

Jones, S. (2003). *Encyclopedia of new media: An essential reference to communication and technology*. New York: Sage Publications, Inc.

Jung, I., Choi, S., Lim, C. & Leem, J. (2002). Effects of different types of interaction on learning acheivement, satisfaction and p*articipation in web-based instruction. Innovations in Education and Teaching International*, *39*(2), 153-162.

Keller J. M. (1987). Development and use of the ARCS model of motivational design. *Journal of Instructional Development*, *10*(3), 2-10.

Keller J.M. (2010). *Motivational design for learning and performance: The ARCS model approach*. New York, USA: Springer.

Khan, B. H. (2005). *Managing e-learning strategies: design, delivery, implementation and evaluation*. Hershey: Information Science Publishing.

Lewis, R. & Whitlock, Q. A. (2003). *How to plan and manage an e-learning programmme*. Cornwall, UK: MPG Books Limited.

Lister, M., Dovey, J., Giddings, S., Grant, I. & Kelly, K. (2009*). New media: A critical introduction*. Second edition, Oxon: Routledge.

Luo, N., Zhang, M. & Qi, D. (2017). Effects of different interactions on students' sense of community in e-learning environment. *Computers & Education*, 115, 153-160.

Naidu, S. (2006). *E-learning a guide of principles, procedures and practices*. 2nd revised edition, Commonwealth Educational Media Centre for Asia (CEMCA). New Delhi: Aishi Creative Workshop

Novitzki, J. E. (2009). *Necessities for effective asynchronous learning*. In P. Rogers, G. Berg, J. Boettcher, C. Howard, L. Justice & K. Schenk (Eds.), Encyclopedia of distance learning (pp.1468-1474), Second edition, Hershey, USA: IGI Global.

Palloff, R. M. & Pratt, K. (2005). *Collaborating online: Learning together in community*. San Francisco, USA: Jossey-Bass.

Premlatha, K. R. & Geetha, T. V. (2015) Learning content design and learner adaptation for adaptive e-learning environment: a survey. *Artificial Intelligence Review*, 44, 443-465.

Rafaeli, S. & Sudweeks, F. (1997). Networked interactivity. *Journal of Computer-Mediated Communication*, 2(4).

Rayens, W. & Ellis, A. (2018). Creating a student-centered learning environment online. *Journal of Statistics Education*, *2*6(2), 92-102.

Roblyer, M. D. & Wiencke, W. R. (2004). Exploring the interaction equation: Validating a rubric to assess and encourage interaction in distance courses. *Journal of Asynchronous Learning Networks*, *8*(4), 25-37.

Shank, P. (2003). Interaction with instructional content in e-learning programs or courses. The Elearning Guild, Survey Series / October 2003. Retrieved from https://www.elearningguild.com/pdf/1/survey-oct03.pdf

Salmon, G. (2002). *E-tivities: The key to active online learning*. London, UK: Kogan Page Limited.

Schone, B. J. (2007). Engaging interactions for eLearning. ElearningPulse. Retrieved from https://faculty.mercer.edu/codone_s/tco425/2012/EngagingInteractionsForELearning

Sharp, J. H. & Huett, J. B. (2006). Importance of learner-learner interaction in distance education. *Information Systems Education Journal*, *4*(46), 3-10.

Simpson, R. J. & Galbo, J. J. (1986). Interaction and learning: Theorizing on the art of teaching. *Interchange, 17*(4), 37-51.

Sun, P. C., Tsai, R. J., Finger, G., Chen Y. & Yeh, D. (2008). What drives a successful e-learning? An empirical investigation of the critical actors influencing learner satisfaction, *Computers&Education*, 50, 1183-1202.

Swan, K. (2001). Virtual interactivity: Design factors affecting student satisfaction and perceived learning in asynchronous online courses, *Distance Education*, *22*(2), 306-331.

Swan, K., Shen, J. & Hiltz, S. R. (2006). Assessment and collaboration in online learning. *Journal of Asynchronous Learning Networks*, *10*(1), 45-62.

Thurmond, V.A. & Wambach, K. (2004). Understanding interactions in distance education: A review of the literature. *International Journal of Instructional Technology and Distance Learning*, *1*(1), 9-33,

Tu, C. H. & Yen, C. J. (2007). *A study of multi-dimensional online social presence*. In R.V.Nata (Ed.), Progress in Education, 14, 41-68. New York, USA: Nova Science Publishers, Inc.

Urdan, T. A. & Weggen, C. C. (2000). *corporate e-learning: exploring a new frontier, equity research*, WR Hambrecht + Co., March.

Wagner, E. D. (1997). Interactivity: from agents to outcomes. *New Directions for Teaching and Learning*, 71, 19-26.

Weiser, O., Blau, I. & Eshet-Alkalai, Y. (2018). How do medium naturalness, teaching-learning interactions and students' personality traits affect participation in synchronous e-learning? *The Internet and Higher Education*, 37, 40-51.

Wilson, J. (2007). *An examination of the relationships of interaction, learner styles and course content on student satisfaction and out comes in online learning*. Dissertation Doctor of Education, Faculty of Education, University of Southern Queensland.

Wilson, J. & Albion, P. (2009). *Interaction, learner styles and content in online courses: Implications for teacher preparation*. In I. Gibson, R. Weber, K. McFerrin, R. Carlsen, D. Willis (Eds.), Proceedings of SITE 2009-Society for Information Technology & Teacher Education International Conference, 571-578.

Research Article

Investigating the Goal Orientations for Teaching of Teachers in Turkey According to Different Variables*

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Abstract

The research aimed to examine the teachers' goal orientations for teaching in terms of different variables. The relational survey method was used in the research. The participants of this research consists of 496 teachers. The "Goal Orientations for Teaching Scale" developed by Butler and Shibaz (2014) and adapted into Turkish by Yıldız Saban and Baştuğ (2016) was used as a data collecting tool. The scale consists of four sub-dimensions which are the ability approach, mastery, student relations, and work avoidance. The teachers who volunteered to participate in the research filled out the prepared data collection tool over the internet. While analyzing the data; mean, standard deviation, mode, median, skewness, and kurtosis values of each sub-dimension were calculated. Pearson correlation was used to determine the relationship between sub-dimensions. Independent samples t-test and one-way analysis of variance (ANOVA) were used to determine the effect of gender, educational level, years of work experience, branch, and weekly course load on the goal orientations for the teaching of teachers. According to the findings; there was a low linear correlation between student relations, mastery and ability approach goal orientations. A low level of a linear relationship between the ability approach and work avoidance goal orientations has been found. As a result of the difference tests, it was determined that the dimensions of mastery and work avoidance differed according to gender, while the mastery and ability approach differed according to the education level, and ability approach and work avoidance differed according to weekly course load.

Keywords: Goal orientations for teaching, learning environment, motivation, teacher

1. INTRODUCTION

The attention and care of students in the learning process are linked to the atmosphere of the class and the standard of educational learning settings greatly impacts the motives of students (Yıldızlı, Saban & Baştuğ, 2016). Although a stimulating environment for the person to learn is the learning setting, it is also an area for the instructor to be encouraged to educate. As per Jesus and Lens (2005), for three main reasons, eagerness and motivation of teachers are essential issues in the educational plan: the motivation of the teacher has an essential influence on student morale, and it is essential for the implementation of educational changes, and it is critical for themselves to be content and happy. Considering the literature of motivation, the information allows us to gain fresh perspectives regarding incentives of teachers to choose to pursue the teaching as a profession, their goals for future professional practice and advancement opportunities, future vocational plans, and effects on pupil's learning and achievement (Richardson & Watt, 2010). The principle of expectancy-

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value, self-determination, and achievement-goal are the three current motivational theories that illustrate the aspects of a teacher's motivation (Schieb & Karabenick, 2011).

The hypothesis of expectancy-value theory offers a structure for comprehending the incentive of teachers to choose teaching as a profession, by taking effects for self-improvement, educational institutions, and government policies into consideration (Watt & Richardson, 2007). Internal and external motivations and a collection of fundamental psychological factors that encompass incentives are the key parts of self-determination theory (Gagné & Deci, 2005). The hypothesis predicts that the implementation of internal motives or the acceptance of further self-determined forms of external motives depends on the fulfillment of following three fundamental emotional factors: the need for communication (need to build relationships with others), success (the need to feel successful in achieving desired results), and autonomy (the need to personality initiate and control the behaviors). Based on the dualistic framework which is suggested by achievement-goal theory (AGT) (Nicholls, 1989), the prime motivation of a person is to show proficiency or capability when engaged in a setting of performance (e.g., classroom). Two key components are included in the AGT: objective orientation (i.e. understanding of the ability of a person for a task) and psychological atmosphere (i.e. interpretation of the social context). Therefore, the inclination of a person may be changed (i.e. skill / focusing on tasks vs. success / ego-centered) to accomplish a task based on how the achievement is described by the social context (Pintrich, 2000).

Besides, to decide how numerous factors cultivate or restrict the motivations of teachers, responsive, clear, rigorous hypotheses and measures are important at the basis of effects setting where the object is present (Catalán, Serrano, Lucas, Clemente & García-González, 2018). AGT has enabled the carrying out many studies in which the teachers' goal orientations were investigated in different socio-cultural contexts (Butler & Shibaz, 2008; Dresel, Fasching, Steuer & Nitsche, 2013; Han, Yin & Wang, 2015, 2016; Malmberg, 2008; Schiefele, 2017; Yıldızlı, Saban & Baştuğ, 2016). Goal orientations reflect the efforts of teachers and individual goal preferences in their careers to become successful (Butler, 2007; Butler & Shibaz, 2014; Elliot & Mcgroger, 2001). In recent years, goal orientations for teaching have been recognized as a key aspect of teacher motivation, and its different aspects which are considered significant have been questioned for the quality of the learning and teaching process (Butler & Shibaz, 2014; Cho & Shim, 2013; George & Richardson, 2019; Mansfield & Beltman, 2014; Saban & Yıldızlı, 2017). The hypothetical framework of these studies is based on the AGT.

The fundamental premise of AGT can be stated as various achievement-goal orientations create different motivation systems and this condition results in different cognitive, affective and behavioral outcomes (Elliott, 2005). In other terms, the theory of achievement-goal offers a clear basis for interpreting the underlying goals of cognition, behavior, and emotions of teachers in the teaching process (Butler, 2007; Retelsdorf & Günther 2011). The achievement goal theory focuses on why individuals try to achieve a certain goal (Urdan & Maehr, 1995). Issues regarding why an individual who sets a goal for himself/herself in the learning process determines this specific goal, how s/he will reach this goal, and according to which standards s/he will evaluate his/her performance are all related to the goal orientation. This structure also provides a framework for the individual to understand why s/he has shown this performance (Yıldızlı, Saban & Baştuğ, 2016). Consequently, the achievement-goal orientations are linked to the personal actions of individuals as well as the motivations that drive them and can lead individuals to adopt the behavior directly (Maehr & Zusho, 2009). Butler (2007) noted that schools and classrooms provide an achievement context not just for students but also for teachers and claimed that the achievement-goal theory also offers a basis for examining the teachers' goal orientation for teaching.

Butler (2007) gathers teachers' goal orientation in the teaching process under four factors such as mastery, ability approach (i.e., performance approach), ability avoidance (i.e., performance avoidance), and work avoidance. According to Elliot (2005), the goal orientations are expressed as teachers' efforts which are cognitively represented for the specific goals during the teaching process. Teachers seeking mastery goal orientation, looking to enhance their professional skills, assess their professional skills based on task demands and prior outcomes (Mansfield & Beltman, 2014). Teachers with the ability-approach goal aim to show their superior teaching skills to their colleagues, while those with the ability-avoidance goal tend to avoid showing low teaching skills (George & Richardson, 2019). Finally, teachers with a work-avoidance goal are motivated to reduce their workload and effort made for a specific work (Mascret, Elliot & Cury, 2017). Butler (2012) expanded the teachers' goal-orientation model, which was a four-factor framework, by introducing the dimension of student relations. Teachers who adopt student relations goal orientation care about establishing personal relationships with students and strive to make them feel that they are sincere and value them (Butler, 2012).

Goal orientations guide thoughts, behaviors, and emotions (Schutz, Crowder & White, 2001). Teachers with different goal orientations for teaching play a role as social agents who affect the determination of the students' individual goal orientation by creating a particular motivational environment in the classroom (Dresel, Fasching, Steuer, Nitsche & Dickhäuser, 2013; Senko, Hulleman & Harackiewicz, 2011). Teachers' goal orientation for teaching directly affects teaching activities, students' perceptions about these activities, as well as students' learning and motivation (Butler & Shibaz, 2014; Dresel et al., 2013; Kucsera, Roberts, Walls, Walker & Svinicki, 2011; Retelsdorf & Günther 2011; Schiefele & Schaffner, 2015; Wolters & Daugherty, 2007). It can be seen from the relevant literature that teachers' goal orientation for teaching influences not just their teaching motivation but also the motivation of their students to learn and their perception of learning activities. This condition is considered as having a significant role on all educational levels in terms of the quality of teaching service.

The researches in the literature reveal the relationship between teachers' goal orientation and various variables. Teachers' mastery goal orientation is a significant predictor of teacher commitment (Han, Yin & Wang, 2016), student-centered teaching understanding (Han, Yin & Wang, 2015), help-seeking behaviors, cognitively stimulating instructions (Butler, 2007; Butler & Shibaz, 2014). There is a positive relationship between mastery goal orientation and "perceived teacher support for students asking questions and help-seeking" (Butler & Shibaz, 2008), "high self-efficacy perception for teaching" (Nitsche, Dickhauser, Fasching, & Dresel, 2011). Besides, negative relationships were observed between mastery goal orientation and student perceptions regarding teachers' prevention of seeking help and asking questions (Butler & Shibaz, 2008) and stress and professional burnout (Fasching, Dresel, Dickhäuser & Nitsche, 2010). It has been observed that there is a positive relationship between ability approach goal orientation and loyalty to students and teaching (Han, Yin & Wang, 2016). Teachers with goal orientation of the ability approach perceive help-seeking positively (Butler, 2007). Teachers who have work avoidance goal orientation are determined with characteristics of having higher social norms, supporting more shallow learning strategies (Retelsdorf & Gunther, 2011), having less commitment to their students (Han, Yin, & Wang, 2016), making less investment in their students and wishing to finish working days with the least workload (Butler, 2012). Significant relationships between student relations goal orientation and different teaching practices/approaches of teachers were also revealed (Butler, 2012). Furthermore, student relations goal orientation is the only goal orientation that predicts the outcome of social support, a framework that determines the relationship between teacher and student (Butler & Shibaz, 2014).

Related researches show that teachers' goal orientation for teaching is related to classroom behaviors and various psychological variables. Nevertheless, very little yet understood regarding how contextual and personal factors form the teachers' goal orientation for teaching. To understand the factors that affect teachers' motivation in educational environments, it is important to consider teachers' goal orientation for teaching. At the same time, it is assumed that further empirical research should be conducted to document the variables that play a significant role in the goal orientation of teachers for teaching in different cultures. By taking into account the fact that the researches about goal orientation for the teaching of teachers in Turkey are limited in number (Saban & Yıldızlı, 2017; Yıldızlı, Saban & Baştuğ, 2016), the current research was planned to be carried out in the different provinces of Turkey with teachers working in different branches and was intended to examine the teachers' goal orientations for teaching.

To this end, answers were sought to the following questions:

1) What are the levels of teachers' goal orientation for teaching?
2) Is there a relationship between goal orientations?
3) Do goal orientations differ according to gender, educational background, years of work experience, branch, and weekly course load?

2. METHOD

This section includes details on the design of the research, the participants, the tool for data collection, data collecting procedure, and data analysis.

2.1. Research Model

In the research, a relational survey model, which is a subtype of the general survey model, was applied in order to examine teachers' goal orientations for teaching in terms of different variables (gender, educational background, years of work experience, branch, and weekly course load) and to demonstrate to relationship between goal orientations. Using this model, attempts have been made to evaluate the direction and extent to which the relationships between two or more variables change (Karasar, 2014).

2.2. Participants

The participants of this research were all teachers working in various provinces of Turkey in the 2017-2018 academic year, which consists of 496 people. 59.7% (n=296) of the participants are female and 40.3% (n=200) are male. 24.2% (n=120) of teachers work in basic sciences and 75.8% (n=376) of them work in social sciences. Considering their educational status, 9.9% of them received postgraduate education and 90.1% of them received undergraduate education. The years of work experience of 14.1% (n=70) is between 1-5 years, 23.6% (n=117) of them worked for 6-10 years, 19.8% (n=98) of them worked for 11-15 years and 42.5% (n=211) of them worked for 15 years and more. Considering the course hours they have in a week, 13.9% (n=69) of them have 6-15 hours, 21% (n=104) of them have 15-25 hours, 40.3% (n=200) of them have 25-30 hours, and 24.8% (n=123) of them have 30 and more hours.

2.3. Data Collecting Tool

In the research, "Goal Orientations for Teaching Scale", which was developed by Butler and Shibaz (2014) and adapted to Turkish by Yıldızlı, Saban, and Baştuğ (2016), was utilized. The scale consists of four sub-dimensions. These sub-dimensions are "student relations", "mastery", "ability approach" and "work avoidance". Butler (2012) explained the goal orientation of teachers in the teaching process as follows:

- The teaches who have student relations goal orientation, aim to establish good relations with the students, to show that they value them and to behave sincerely;

- Teachers, who have mastery goal orientation, aim to learn and develop professional skills;
- Teachers who have the ability approach goal orientation aim to show their superior teaching skills;
- The teachers, who have work avoidance goal orientation, aim to finish the day with little effort.

The scale is a Likert type scale and the participants were asked to select the most appropriate one among the options between 1-never agree and 5-fully agree for the statements of the scale items. In the adaptation study, the reliability of the student relations factor has found as α =.673, the reliability of the mastery factor as α =.638, reliability of ability approach factor as α =.787, reliability of work avoidance factor as α =.605 and the reliability of whole-scale as α =.761. In this study, the reliability of the student relations factor is α =.792, the reliability of the mastery factor is α =.770, reliability of ability approach factor is α =.816, reliability of work avoidance factor is α =.792 and the reliability of the whole-scale is α =.751. Since the coefficients of scale validity are over 70, it was concluded that the questionnaires were reliable (Büyüköztürk, 2006; Tabachnick & Fidell, 2013).

2.4. Data Collecting Procedure

The research is limited to 496 teachers working in Turkey in the 2017-2018 academic year in various cities, and it is limited to quantitative data collected from these teachers using the "Goal Orientations for Teaching Scale". After taking the permission of the school principals, the data collection tool created in google form was delivered to teachers from instant messaging applications. Teachers were reminded that participating in the research was voluntary and that the results of this research could also only be used for scientific purposes, and their personal information will be protected and secured. The teachers who volunteered to participate in the research filled out the prepared data collection tool over the internet. The online data collection tool includes a Personal Information Form and Goal Orientations for Teaching Scale. The instruction was given to teachers to complete the surveys and explained in the google form to avoid any confusion. The justification helped to a great extent to reduce biased feedback. Researchers checked the completed surveys via google drive website.

2.5. Data Analysis

While analyzing the data of the research, firstly, the mean, standard deviation, mode, median, skewness, and kurtosis values of each sub-dimension were calculated and after analyzing the distribution, it was decided to apply parametric tests. Pearson correlation was applied to determine the relation of sub-dimensions with each other. Independent samples t-test and one-way analysis of variance (ANOVA) were conducted to determine the effect of gender, educational status, years of work experience, branch, and weekly course load on teachers' goal orientation for teaching. While multiple comparison techniques were used to determine the difference between groups during the one-way analysis of variance, the Games-Howell test was preferred because the variances of the mean values of the variables and the sample numbers were not equal (Kayri, 2009). To determine the effect of independent variables on dependent variables Cohen's d value was calculated (Cohen, 1988; Sawilowsky, 2009).

3. FINDINGS

Analyzes were performed and summarized in the tables in this section to show the the levels of teachers' goal orientation for teaching, the relationship between goal orientations, and the teachers' goal orientations for teaching in terms of different variables.

In the first question of the research, the levels of teachers' goal orientation for teaching were tried to be determined. The data regarding the levels of teachers' goal orientation for teaching are provided in Table 1.

Table 1. Descriptive statistics

Goal Orientations	Mean	Std. Dev.	Mode	Median	Skewness	Kurtosis
Student Relations	4.30	.65	5.00	4.33	-.739	-.019
Mastery	4.50	.48	5.00	4.50	-.889	.494
Ability Approach	3.63	1.00	4.00	3.75	-.671	-.131
Work Avoidance	2.28	.87	2.00	2.25	.562	-.058

In Table 1 which shows the values regarding the sub-dimensions of teachers' goal orientation for teaching, the mean score of the answers provided by the teachers to the items belonging to the sub-dimensions is mastery ($\bar{x} = 4.50$), student relations ($\bar{x} = 4.30$), ability approach ($\bar{x} = 3.63$) and work avoidance ($\bar{x} = 2.28$) respectively. This situation reveals that the teachers agreed with the items included in the mastery and ability dimension in their goal orientation. Even they were close to the status of agreeing with items of ability approach dimension, at the same time, they were indecisive about this status and they were not agreed with the work avoidance dimension. The mean values indicate that the teachers involved in the research plan their educational activities based on their professional knowledge to enhance their teaching and establish relationships with their students. Given the professional challenges they encountered, however, it was found that they did not tend to avoid work they did not agree with the related statements in the scale.

To determine which tests can be applied for analyzing the data; the values of mean, mode, median, skewness, and kurtosis of the variables that are the basis of the study were calculated. When we look at the distribution of the scores of the sub-dimensions, mean, mode, and median values are close to each other, and the skewness and kurtosis values indicate whether the series is normally distributed or not. The skewness and kurtosis coefficients are between +1 and -1, so this indicates that the data showed a normal distribution (Büyüköztürk, 2006; Tabachnick & Fidell, 2013).

In the second question of the research, the direction and level of the relationship between the sub-dimensions of teachers' goal orientation for teaching were tried to be determined. The data regarding these relationships are provided in Table 2.

Table 2. Correlation table of teachers' goal orientation for teaching

Goal Orientations	Mean	Std. Deviation	1	2	3	4
(1) Student Relations	4.30	.65	1	.379*	.291*	-.010
(2) Mastery	4.50	.48		1	.292*	-.011
(3) Ability Approach	3.63	1.00			1	.277*
(4) Work Avoidance	2.28	.87				1

*p< .05

When the relations between the sub-dimensions of the teachers ' goal orientation for teaching are evaluated according to the data in Table 2, it is found that there is a low linear correlation between the sub-dimensions of the student relations, mastery and ability approach and these three sub-dimensions operate together. A low level of a linear relationship between the ability approach sub-dimension and the work avoidance sub-dimension (r =.277) has been found.

To observe whether teachers' goal orientation for teaching change according to the gender, education level and branch, years of work experience and weekly course load; independent samples t-test was conducted to determine whether teachers' goal orientation for teaching varies according to gender, educational status, and branch, while one-way analysis of variance performed to observe if these goal orientations change according to the years of work experience and course load.

Table 3. Independent group t-test findings to assess whether teachers' goal orientation for teaching differentiates according to their gender

Goal Orientations	Gender	N	$\bar{X}$	SD	$Sh_{\bar{X}}$	t-Test t	sd	p	Difference	Effect V.
Student Relations	F	290	4.30	.65	.038	-.118	494	.906		
	M	200	4.31	.65	.046					
Mastery	F	290	4.54	.47	.027	2.297	494	.022*	F> M>	.20
	M	200	4.44	.49	.035					
Ability Approach	F	290	3.59	1.05	.061	-1.22	494	.222		
	M	200	3.70	.92	.065					
Work Avoidance	F	290	2.18	.82	.047	-3.313	494	.003*	M > F	.29
	M	200	2.42	.93	.049					

*p< .05

According to Table 3, teachers' goal orientation for teaching has a statistically significant difference in favor of women in mastery sub-dimension (p =.022). In other words, female teachers could be said to show higher mastery skills in educational and training activities than male teachers. In the work avoidance sub-dimension, the mean of male teachers is higher than female teachers in a statistically significant way (p =.003), in other words, it was concluded that male teachers tend to avoid professional problems more than their female peers. Cohen's d values calculated for the gender variable's effect on differentiation in both dimensions (d =.22 and d =.29) and it has shown that the effect observed is low (Cohen, 1988; Sawilowsky, 2009).

Table 4. Independent group t-test findings to assess whether teachers' goal orientation for teaching differentiates according to educational status

Goal Orientations	Edu. Status	N	$\bar{X}$	sd	$Sh_{\bar{X}}$	t-Test t	sd	P	Difference	Effect Level
Student Relations	Undergrad.	447	4.29	.65	.030	-1.126	494	.221		
	Post Grad.	49	4.21	.69	.099					
Mastery	Undergrad.	447	4.49	.49	.023	-2.447	67.62	.016*	PG> G	.28
	Post Grad.	49	4.63	.37	.054					
Ability Approach	Undergrad.	447	3.60	1.01	.048	-2.556	64.92	.013*	PG> G	.32
	Post Grad.	49	3.93	.83	.118					
Work Avoidance	Undergrad.	447	2.28	.88	.041	.052	494	.958		
	Post Grad.	49	2.27	.80	.114					

*p< .05

Independent group t-test findings which were conducted to assess whether teachers' goal orientations differentiate according to their educational status are provided in Table 4. In the Mastery (p= .016) and ability approach (p = .013) sub-dimensions, the mean scores of teachers who completed their postgraduate education are higher than the teachers who completed their undergraduate degree in a statistically significant way. Cohen d values which are calculated to determine educational status' effect on differentiation (d =.28 and d =.32) show that the effect observed is low (Cohen, 1988; Sawilowsky, 2009).

Table 5. Independent group t-test findings to assess whether teachers' goal orientation for teaching differentiates according to their branches

Goal Orientations	Branch	N	$\bar{X}$	sd	$Sh_{\bar{X}}$	t-Test t	sd	p	Difference	Effect Level
Student Relations	Soc. Sci.	376	4.32	.67	.034	1.175	494	.240		
	Basic	120	4.24	.59	.054					
Mastery	Soc. Sci.	376	4.50	.48	.025	-.380	494	.704		
	Basic	120	4.52	.48	.044					
Ability Approach	Soc. Sci.	376	3.63	1.02	.052	-.213	494	.831		
	Basic	120	3.62	.96	.087					
Work Avoidance	Soc. Sci.	376	2.26	.88	.045	-.739	494	.460		
	Basic	120	2.33	.86	.079					

*p< .05

Independent group t-test findings which were conducted to assess whether teachers' goal orientations differentiate according to their branches are provided in Table 5. The branches of teachers are grouped as social sciences (Turkish, Turkish Language, and Literature, Social Studies, History, Philosophy, Class Education, Religious Studies, English, German, Physical Education) and basic sciences (Physics, Chemistry, Biology, Mathematics, Primary School Mathematics, Science, Informatics Tech., Geography) and the significance of the difference between these two groups was examined. According to the test's findings, the goal orientations of the teachers participating in the research do not differentiate according to the branch.

Table 6. One-way variance analysis test results to determine whether teachers' goal orientations for teaching are differentiated according to their years of work experience

Goal Orientations	ANOVA Results											Post-hoc	Dif.
	Group	N	$\bar{X}$	sd	Var. Comp.	Sum of Squares	Sd	Mean Square	F	P	Effect V.		
Student Relations	1-5	70	4.22	0.64	Between groups	1.498	3	.499	1.159	.325			
	6-10	117	4.25	0.72	Within-group	212.014	492	.431					
	11-15	98	4.32	0.69	Total	13.512	95						
	15+	211	4.36	0.61									
	Total	496	4.31	0.66									
Mastery	1-5	70	4.47	0.44	Between groups	.493	3	.164	.686	.561			
	6-10	117	4.56	0.44	Within-group	117.739	492	.239					
	11-15	98	4.50	0.52	Total	118.232	495						
	15+	211	4.49	0.52									
	Total	496	4.51	0.49									
Ability Approach	1-5	70	3.53	1.07	Between groups	5.290	3	1.763	1.747	.156			
	6-10	117	3.52	0.98	Within-group	496.512	492	1.009					
	11-15	98	3.81	0.95	Total	501.802	495						
	15+	211	3.66	1.02									
	Total	496	3.64	1.01									
Work Avoidance	1-5	70	2.37	0.90	Between groups	3.492	3	1.164	1.517	.209			

6-10	117	2.31	0.81	Within-group	377.571	492	.767
11-15	98	2.39	0.89	Total	381.062	495	
15+	211	2.19	0.90				
Total	496	2.28	0.88				

*p< .05, Dif: Difference

Table 6 demonstrates the findings of one-way variance analysis to evaluate whether the goal orientations of the teachers for teaching vary due to their years of work experience. According to the results of the analysis, the professional seniority of teachers does not make a statistical difference in their goal orientation for teaching. Nevertheless, when the mean scores of the teachers' answers to the questions in the sub-dimensions are roughly measured, the student relations, mastery, and ability approach increase as the professional experience increases, whereas the mean score in the sub-dimension of work avoidance declines as the professional experience increases.

Table 7. One-way variance analysis test findings to assess whether teachers' goal orientations for teaching are differentiated according to their weekly course load

Goal Orientations					ANOVA Results						Post-hoc	Dif.
	Group	N	$\bar{X}$	sd	Var. Comp.	Sum of Squares	Sd	Mean Square	F	P	Effect V.		
Student Relations	6-15	69	4.34	0.69	Between groups	2.034	3	.678	1.577	.194			
	15-25	104	4.19	0.68	Within-group	211.479	492	.430					
	25-30	200	4.31	0.64	Total	213.512	495						
	30+	123	4.38	0.64									
	Total	496	4.31	0.66									
Mastery	6-15	69	4.55	0.51	Between groups	.773	3	.258	1.079	.358			
	15-25	104	4.46	0.51	Within-group	117.459	492	.239					
	25-30	200	4.48	0.49	Total	118.232	495						
	30+	123	4.56	0.45									
	Total	496	4.51	0.49									
Ability Approach	6-15	69	4.01	0.92	Between groups	15.892	3	5.297	5.364	.001	.18	Games-Howell	1>2
	15-25	104	3.60	0.94	Within-group	485.911	492	.988					1>3
	25-30	200	3.48	1.11	Total	501.802	495						
	30+	123	3.73	0.88									
	Total	496	3.64	1.01									
Work Avoidance	6-15	69	2.67	1.09	Between groups	14.169	3	4.723	6.333	.000	.19	Games-Howell	1>3
	15-25	104	2.29	0.80	Within-group	366.893	492	.746					1> 4
	25-30	200	2.25	0.81	Total	381.062	495						
	30+	123	2.11	0.85									
	Total	496	2.28	0.88									

*p< .05, Dif: Difference

The results of one-way analysis of variance to assess whether the teachers' goal orientation for teaching varies according to their weekly course loads are provided in Table 7. For student relations and mastery sub-dimensions, there was no statistically significant difference in the teachers' goal orientation. In the ability approach sub-dimension, teachers' goal orientations differ in a statistically significant way based on their weekly course load (p =.001). It was observed that this significant difference was observed between the teachers who attended the lessons for 6-15 hours a week and

those who attended the lessons for 15-25 and 25-30 hours, and it was in favor of the teachers who had lessons for 6-15 hours. In other words, teachers who had lessons for 6-15 hours tend to exhibit their ability approach more compared to those who had lessons for 15-25 and 25-30 hours. However, the weekly course load has a low effect on teachers' goal orientation for teaching (d =.18). There was also a significant difference in the goal orientation of teachers in the sub-dimension of work avoidance (p =.000). Although these numbers are considered as low rates as stated at the beginning, the observed difference has been observed. The observed difference is between the teachers who had lessons for 6-15 hours and teachers who had lessons for 25-30 hours and over 30 hours. According to this result, it can be said that teachers who had 6-15 hours of lessons tend to avoid work more than teachers who attend more hours of classes when faced with professional difficulties. From another point of view, since they tend to avoid work, they have fewer course hours.

4. DISCUSSION, CONCLUSION, and RECOMMENDATIONS

In this study, where teachers' goal orientation for teaching was examined, the sub-dimensions of mastery and student relations have the highest mean score while the work avoidance has the lowest mean score. Such findings indicate that the participant teachers feel mastered when they enhance their field expertise and abilities, sustain their professional development, and their students provide them with fresh ideas regarding the topic they are teaching. Along with this, participant teachers feel more successful when they have good relationships with their students and take care of them. When teachers are appreciated in the eyes of the school principal or their colleagues regarding sample lesson plans, the high success of students, professional awards, etc., this makes them feel successful professionally. This also points out that participant teachers do not ignore the problems they face in their professional lives and when they try to solve them, they feel successful. The results observed in other studies in the literature support current results (Han, Yin & Wang, 2015, 2016; Retelsdorf & Gunther, 2011; Saban & Yıldızlı, 2017; Yıldızlı et al., 2016).

When the relationships between the sub-dimensions of the teachers' goal orientation for teaching were examined, there was a significant positive relationship between student relations, mastery, and ability approach. It can be said that these orientations support each other. Teachers with mastery goal orientation, for example, tend to build good relationships with students, support their students more in their learning experiences, and thereby contribute to their social-emotional growth (Butler, 2012). In other researchs on the goal orientation of teachers, a weak and positively significant correlation between ability approach and work avoidance was observed (Butler, 2007, 2012; Yıldızlı et al. 2016, Saban & Yıldızlı, 2017). Butler (2007) claimed that current condition is peculiar to teachers, unlike other studies conducted with students, and it is related to the ability approach, although there is no relation between the work avoidance and teachers' positive teacher orientations such as mastery and student relations. Yıldızlı et al. (2016) reported that the work avoidance sub-dimension does not vary with other variables and is independent of these factors.

When examining the effect of gender on the teachers' goal orientation for teaching, it was noticed that female teachers in mastery sub-dimension aimed to learn and developed professional skills more than their male peers. It would appear that female teachers tend to desire respect for their teaching efforts and more than their male colleagues. Saban and Yıldızlı (2017) did not find a significant difference according to gender in the study conducted with classroom teachers. In the study conducted with classroom teachers, Tivikeli, Gonida, and Kiosseoglou (2015) stated that female teachers showed a statistically higher mastery orientation than male teachers. Similarly, Han, Yin, and Wang (2015) claimed that female teachers have higher mastery goals and ability approach goal orientations than male teachers.

While comparing the goal orientation of the teachers taking part in the study according to their educational background, it is found that the teachers completed a postgraduate education have higher

mastery and ability approach orientations than those who have an only undergraduate degree. It can be said that the increase in education level positively contributes to teachers' goal orientation for teaching.

No difference was reported in teachers' goal orientation according to their branches and years of work experience. When the mean scores were analyzed, it was observed that the mean scores of the branches are very close to each other, and while for the mean score of the professional seniority, as the years of work experience increases, the mean scores in student relations, mastery and ability approach increases, and however, mean score decreases in work avoidance. Based on the results obtained, it can be said that the professional experience contributed positively to the goal orientation. The reason for the lack of difference is thought to be due to teachers' efforts to demonstrate their pedagogical competencies and to develop these competencies rather than the branch education they receive. Saban and Yıldızlı (2017) reported that there is a difference in ability approach favoring the beginner teachers who have (1-5) years of experience compared to the experienced (6-10, 11-15 years) teachers, and in students relations dimension, it is in favor of beginner teachers who have 1-5 years of experience compared to the experienced (6-10, 11-15 years) teachers and when we look at teachers who worked for 6-10, 11-15 years and highly experienced teachers (working 16 years and more), the difference is in favor of the highly experienced (16 years and more) teachers. In their research, Han, Yin, and Wang (2015) stated that there was a difference in favor of less experienced teachers in terms of ability approach and work avoidance when teachers with less than 5 years of experience and teachers working over 15 years compared.

When the effect of teachers' weekly course load on their goal orientation for teaching was examined, it was observed that the teachers who have 6-15 hours of lessons showed higher ability approach goal orientation than those who have lessons between 15-25 and 25-30 hours. Similarly, it was noted that those who have 6 -15 hours of lessons had higher goal orientation of work avoidance than the groups who have 25 hours or more. This situation can be interpreted as teachers who have work avoidance goal orientation prefer having fewer lessons. The reason why there is no difference in mastery and student relations goal orientation in terms of course load can be explained by the fact that teachers' pedagogical perspective is not related to the course load.

As a conclusion drawn from a holistic point of view, it can be proposed that the pedagogical views of teachers are the key factor influencing the goal orientation of teachers. The willingness of instructors to build strong relations with students, to improve and show teaching skills reinforce each other particularly. The inclination to work avoidance adversely influences the drive of teachers to teach. The postgraduate school is generally preferred by teachers who would like to develop their academic and professional qualifications. Teachers pursue their postgraduate degree are educated to improve their competence and would like to demonstrate the knowledge and skills learned. This tendency is a result of the pedagogic perception of teachers. Having an intense or too free course load affects their teaching enthusiasm. Relying upon it, to improve their professional competence, teachers should be encouraged. There should be support for postgraduate education for teachers. The course hours of teachers must not be too less or too intense, and the permissible limit (15-21 lesson hours) decided may be recommended to be applied. For the improvement of effective communication skills, in-service training should be offered to improve the communication of teachers with their students.

For future studies, a more thorough understanding can be gathered on the goal orientation of teachers by utilizing qualitative methods. Especially, the examination of the relationship between the ability approach and work avoidance orientations is thought to be meaningful to contribute to the literature. In the school context, teachers can emerge as decisive social agents in managing their students' orientations by creating a certain motivational climate (Senko, Hulleman & Harackiewicz, 2011). Thus, the effects of teachers' goal orientations on students' motivation can be especially investigated. The correlations between the teaching goal orientations and learning-teaching

understanding, epistemological belief, and orientations in educational philosophy can also be explored by creating several models.

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5. REFERENCES

Ames, C. (1992). Classrooms: Goals, structures and student motivation. *Journal of Educational Psychology, 84,* 261-271.

Butler, R. (2007). Teachers' achievement goal orientations and associations with teachers' help seeking: Examination of a novel approach to teacher motivation. *Journal of Educational Psychology, 99*(2), 241-252. doi:10.1037/0022-0663.99.2.241

Butler, R. (2012). Striving to connect: Extending an achievement goal approach to teacher motivation to include relational goals for teaching. *Journal of Educational Psychology, 104*(3), 726-742.

Butler, R., & Shibaz, L. (2008). Achievement goals for teaching as predictors of students' perceptions of instructional practices and students' help seeking and cheating. *Learning and Instruction, 18*(5), 453-467.

Butler, R., & Shibaz, L. (2014). Striving to connect and striving to learn: Influences of relational and mastery goals for teaching on teacher behaviors and student interest and help seeking. *International Journal of Educational Research, 65,* 41-53.

Büyüköztürk, Ş. (2006). *Sosyal bilimler için veri analizi el kitabı*. [Manual of data analysis for social sciences]. Ankara: Pegem Yayınları. [Ankara: Pegem Publishing].

Catalán, Á. A., Serrano, J. S., Lucas, J. M. A., Clemente, J. A. J., & García-González, L. (2018). An integrative framework to validate the Need-Supportive Teaching Style Scale (NSTSS) in secondary teachers through exploratory structural equation modeling. *Contemporary Educational Psychology, 52,* 48-60.

Cho, Y. J., & Shim, S. S. (2013). Predicting teachers' achievement goals for teaching: The role of perceived school goal structure and teachers' sense of efficacy. *Teaching and Teacher Education, 32,* 12-21.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. New York, NY: Routledge.

Dresel, M., Fasching, M. S., Steuer, G., Nitsche, S., & Dickhäuser, O. (2013). Relations between teachers' goal orientations, their instructional practices and student motivation. *Psychology, 4*(7), 572-584.

Dweck, C. S. (1992). The study of goals in psychology. *Psychological Science, 3*(3), 165-167.

Elliot, A. J. (2005). A conceptual history of the achievement goal construct. In A. J. Elliot, & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 52-73). New York, NY: The Guilford Press.

Elliot, A. J., & McGregor, H. A. (2001). A 2×2 achievement goal framework. *Journal of Personality and Social Psychology, 80,* 501-519.

Fasching, M. S., Dresel, M., Dickhäuser, O., & Nitsche, S. (2010). Goal orientations of teacher trainees: Longitudinal analysis of magnitude, change and relevance. *Journal for Educational Research Online, 2,* 9-33.

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior, 26*(4), 331-362.

George, S. V., & Richardson, P. W. (2019). Teachers' goal orientations as predictors of their self-reported classroom behaviours: An achievement goal theoretical perspective. *International Journal of Educational Research, 98,* 345-355.

Han, J., Yin, H., & Wang, W. (2015). Exploring the relationship between goal orientations for teaching of tertiary teachers and their teaching approaches in china. *Asia Pacific Education Review*, *16*(4), 537-547.

Han, J., Yin, H., & Wang, W. (2016). The effect of tertiary teachers' goal orientations for teaching on their commitment: The mediating role of teacher engagement. *Educational Psychology*, *36*(3), 526-547.doi: 10.1080/01443410.2015.1044943

Jesus, S. N., & Lens, W. (2005). An integrated model for the study of teacher motivation. *Applied Psychology*, *54*(1), 119-134.

Karasar, N. (2014). *Bilimsel araştırma yöntemi*. [Scientific research method]. Ankara: Nobel Yayın Dağıtım. [Ankara: Nobel Publishing House].

Kayri, M. (2009). Araştırmalarda gruplar arası farkın belirlenmesine yönelik çoklu karşılaştırma (post-hoc) teknikleri [The multiple comparison (post-hoc) techniques to determine the difference between groups in researches]. *Fırat Üniversitesi Sosyal Bilimler Dergisi* [Fırat University Journal of Social Science], *19*(1), 51-64.

Kucsera, J. V., Roberts, R., Walls, S., Walker, J., & Svinicki, M. (2011). Goal orientation towards teaching (GOTT) scale. *Teachers and Teaching*, *17*(5), 597-610.

Maehr, M. L., & Zusho, A. (2009). *Achievement goal theory: The past, present, and future*. New York, NY: Routledge/Taylor US.

Malmberg, L.-E. (2008). Student teachers' achievement goal orientations during teacher studies: Antecedents, correlates and outcomes. *Learning and Instruction, 18,* 438-452. doi:10.1016/j.learninstruc.2008.06.003.

Mansfield, C. F., & Beltman, S. (2014). Teacher motivation from a goal content perspective: Beginning teachers' goals for teaching. *International Journal of Educational Research*, *65*, 54-64.

Mascret, N., Elliot, A. J., & Cury, F. (2017). The 3× 2 achievement goal questionnaire for teachers. *Educational Psychology*, *37*(3), 346-361.

Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review*, *91*(3), 328-346. doi:10.1037/0033-295X.91.3.328.

Nitsche, S., Dickhäuser, O., Fasching, M. S., & Dresel, M. (2011). Rethinking teachers' goal orientations: Conceptual and methodological enhancements. *Learning and Instruction*, *21*(4), 574-586.

Pintrich, P. R. (2000). An achievement goal theory perspective on issues in motivation terminology, theory, and research. *Contemporary Educational Psychology*, *25*(1), 92-104.

Retelsdorf, J., & Gunther, C. (2011). Achievement goals for teaching and teachers' reference norms: Relations with instructional practices. *Teaching and Teacher Education*, *27*, 1111-1119.

Richardson, P. W., & Watt, H. M. (2010). Current and future directions in teacher motivation research. In S. Karabenick & T. C. Urdan (Eds.*), The decade ahead: Applications and contexts of motivation and achievement* (pp. 139-173). Emerald Group Publishing Limited.

Saban, A., & Yıldızlı, H. (2017). Turkish primary school teachers' goal orientations for teaching. *International Online Journal of Educational Sciences*, *9*(2), 348-355.

Sawilowsky, S (2009). New effect size rules of thumb". *Journal of Modern Applied Statistical Methods*, *8*(2), 467-474.

Schutz, P. A., Crowder, K. C., & White, V. E. (2001). The development of a goal to become a teacher. *Journal of Educational Psychology*, *93*(2), 299-308.

Schieb, L. J., & Karabenick, S. A. (2011). Teacher motivation and professional development: a guide to resources. math and science partnership – motivation assessment program, University of Michigan, Ann Arbor, MI.

Schiefele, U. (2017). Classroom management and mastery-oriented instruction as mediators of the effects of teacher motivation on student motivation. *Teaching and Teacher Education, 64,* 115-126.

Schiefele, U., & Schaffner, E. (2015). Teacher interests, mastery goals, and self-efficacy as predictors of instructional practices and student motivation. *Contemporary Educational Psychology*, *42*, 159-171.

Senko, C., Hulleman, C. S., & Harackiewicz, J. M. (2011). Achievement goal theory at the crossroads: Old controversies, current challenges, and new directions. *Educational Psychologist*, *46*(1), 26-47.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Boston: Pearson.

Tivikeli, A., Gonida, E. N., & Kiosseoglou, G. (2015). Achievement goals for teaching and teacher efficacy: Their association with instructional practices. *Scientific Annals-School of Psychology AUTh*, *11*, 148-174.

Urdan, T. C., & Maehr, M. L. (1995). Beyond a two-goal theory of motivation and achievement: A case for social goals. *Review of Educational Research*, *65*(3), 213-243.

Watt, H. M., & Richardson, P. W. (2007). Motivational factors influencing teaching as a career choice: Development and validation of the FIT-Choice scale. *The Journal of Experimental Education*, *75*(3), 167-202.

Wolters, C. A., & Daugherty, S. G. (2007). Goal structures and teachers' sense of efficacy: Their relation and association to teaching experience and academic level. *Journal of Educational Psychology*, *99*(1), 181-193. doi: 10.1037/0022-0663.99.1.181

Yıldızlı, H., Saban, A., & Baştuğ, M. (2016). Öğretmeye yönelik hedef yönelimi ölçeği'nin Türkçe'ye uyarlanması [Adaptation of goal orientations for teaching Scale into Turkish]. *Elementary Education Online*, *15*(4), 1254-1267