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The Effects of Planning Time Conditions and Writing Typeon the Writing Quality of Iranian EFL Writers

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Abstract

In the present study, the effects of four planning time conditions (pre-task, extended task, freewriting, and control) were investigated over the quality of expository and argumentative writings of 108 undergraduate EFL writers. The maximum time limit was 30 minutes for all the four groups of the study. Theresults revealed significantly higher writing quality in the freewriting condition in both argumentative and expository writings. The results also showed that compared with the effects of the writing quality. Moreover, argumentative writings were of higher quality than expository writings. Being placed in different writing modes was not decisive in the choice of planning time conditions. The results may have pedagogical implications for EFL writing instructors and theoretical implications for EFL writing researchers.

Keywords: Argumentative Writing, Expository Writing, Planning Time Condition, Writing Quality

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1. Introduction

Writing as one of the least properly understood, and in most instances even misunderstood language skills has duly captured the attention of researchers in applied linguistics (Silva & Matsuda, 2002). Many scholars have likened writing tasks in their complexity and thought- demanding exercise to the game of chess (Newell & Simon, 1972). The production of this cognition-dependent task necessarily demands the synchronization and coordination of planning, transcribing, and revising as three cognitive processes (Ong, 2014) with their subcomponent processes such as monitoring and evaluating (Flower & Hayes, 1980; Olive & Kellogg, 2002; Torrance & Jeffery, 1999). In addition to planning for the macro-level aspects of a writing task, a writer needs planning for the logistic and contextual aspects of writing such as paragraph development, connectors, word choice, and contextual understanding (Collins & Gentner, 1980; Ong & Zhang, 2013). As asserted by Singer and Bashir (2004), writing necessitates the activation and coordination of several linguistic skills such as spelling, semantics, syntax, and other writing conventions as well as orthographic and graphomotor skills. Ellis (2005) asserts that both speakers and writers have to decide what to say and what to write and how to do them. Therefore, linguistic performance, whether spoken or written, needs planning as one of its inseparable parts. The performance of a writer is affected by the planning, subplanning, and revising processes which are involved in the loading and reloading of a writer's limited working memory, the failure of which results in the deterioration of the text produced by the writer (Butterfield, Hacker, & Albertson, 1996; McCutchen, 1996; Ong& Zhang 2013). According to Ellis (1987), planning makes it possible for the learner to have access to those linguistic forms which have not yet been completely automated.Similarly,Skehan (1996) believes that planning sets free the learner's attentional resources and leads them towards linguistic outputs.

Planning has been ascribed to several divisions, classifications, and types in ESL writing. It has also been studied in various contexts and under different conditions and situations in writing task studies. Whalen and Menard (1995) have identified three types of planning: pragmatic, textual, and linguistic planning. Pragmatic planning concerns contextual aspects of writing such as the addressee, the intentionality behind writing and its topic development. Textual planning deals with maintaining coherence within the sequences of ideas inside a text. Finally, the linguistic planning encompasses the writers'

occupations with solving a linguistic problem such as their decisions on the grammaticality of the sentences. Depending on whether planning is considered from the vantage point of the writer or the text, it has been classified into process planning and text planning by Hayes and Gradwohl Nash (1996), the former dealing with the writer and the strategies used by him to achieve his goals in writing and the latter with the text itself and its form and content.

2. Literature Review

In both L1 and L2 studies, researchers have adopted conflicting orientations and approaches toward planning. Two distinctive trends in planningare proposed by Elbow (1973, 1981) and Wason (1980), who favor freewriting and argue for its benefits in contrast with Flower and Hayes (1980, 1981) who commend planning and consider it as a characteristic of skillful writers. Elbow (1973, 1981) asserts that freewriting exerts less pressure on the cognitive faculty of writers and allows the discovery of novel and original ideas. It also increases the coherence of their writing. Flower and Hayes (1980,1981),considering the writings of skilled and unskilled writers by employing a kind of think-aloud procedure, assert that skilled writers use planning strategy while unskilled writers who plan to produce texts of better quality. It has also been claimed that freewriting strategy is not supported by empirical studies (Hayes, 2006).

The amount of time the writers spend on planning and other planning related issues have also captured the attention of researchers. Mancho'n and Roca de Larios (2007)investigated whether EFL writers' proficiency levels, composing language (L1 vs. L2), and the stages of their writing activity had any effect upon their planning time. They found that the EFL writers' proficiency levels did influence planning time in both L1 and L2 writing compositions,but their composing language (Spanish or English) did not have any significant effect. Kellogg (1987) asserts that in the first stage of the writing process in both L1 and L2, planning takes up a major portion of the writing time, but it begins to decrease over time. Transcribing takes up time in the middle stage of the writing act, but over time it becomes somewhat constant regardless of the writer's writing in L1 or L2(Roca de Larios, Marı'n, & Murphy, 2001; Roca de Larios, Murphy, Mancho'n, &Marı'n, 2008).The revising aspect becomes dominant in the final stage of the writing

process (Piolat, Kellogg, &Farioli, 2001; Roca de Larios, et al., 2001; Van den Bergh &Rijlaarsdam, 2007; Van der Hoeven, 1999). Proper orchestration of these three components (planning, transcribing, and revising) determines the quality of writing(Ong,2014).

Planning, planning time and various components of writing task including the writers' general language proficiency, the language of writing (L1 v. L2), the task environment, the text quality, and the writers' perception of the task have been studied concerning the temporal distribution of metacognitive processes and the amount of time spent over different stages of writing in the process of composition (see Mancho'n& Roca de Larios, 2007; Ong, 2014; Ong, & Zhang, 2013; Roca de Larios et al., 2001; Roca de Larios, Mancho'n, & Murphy, 2006; Roca de Larios et al., 2008). Roca de Larios et al. (2008) noticed that writers withdifferent L2 proficiency levels spent the greatest amount of their writing time over the formulation of the content of their writing and that their time distribution over the initial, middle, and final stages of composition process was not equal.

Van den Bergh and Rijlaarsdam (2007) assert that the distribution of cognitive processes is affected by the writer's perceptions of the writing task and by both the external and internal environment of the task. The external task environment component encompasses a writer's social and physical milieu. It includes factors that are external to the cognition of the writer. The internal component includes the writer's cognitive factors such as his memory systems, his motivations, and his affective conditions. Among task environment factors, planning time and task conditions have been probed concerning their effects on the metacognitive processes of writers. In this line, Kellogg (1990) has proposed two contrasting hypotheses: the Overload Hypothesis and the Interaction Hypothesis. The Overload Hypothesis builds on the notion that preplanning would provide opportunities for the writer to free spaces in his limited working memory and reduce the burdens on his cognitive capacity to focus more on the transcribing stage during the composition process and thereby produce texts of better quality. Kormos (2011) sees the transcribing stage of paramount significance for EFL writers because concentrating on this stage would increase the problem-solving ability of L2 writers. Kellogg (1988)investigated the effects of outlining and no outlining and also polished versus rough draft on the text quality of L1 writers and intended to see if these strategies reduced the cognitive attentional overload of these writers. The results displayed that outlining and rough draft led to the reduction of

attentionaloverload, but it was the outlining strategy that caused improvement in text quality. The Interaction Hypothesis, on the other hand, postulates that planning would degenerate text quality. This hypothesis builds upon the earlier studies of Elbow (1973, 1981), favoring free-writing which requires writers not to plan and begin to write immediately after confronting a task-prompt. The rationale behind the Interaction Hypothesis is that writing process is typically holistic, recursive and non-linear, and as such its natural process may be impeded by different strategies of pre-planning such as outlining and draft writing because these strategies may obstruct the writers' employment of opportunities which come up in the process of interactions among immediate planning, transcribing, and reviewing. The Interaction Hypothesis of Kellogg (1990) has affinities with Galbraith's (1999, 2009) Knowledge Constituting model which asserts that ideagenerating occurs under no planning conditions and the transcribing stage provides the opportunity for the generation of ideas.

In scrutinizing the planning aspect of writing, SLA researchers have focused on what students attend to in their writing and what effects their attentions have on their manner of language use. For Hayes and Gradwohl Nash (1996), planning in writing is considered a kind of reflection accompanied by other reflective procedures like decision making and inferencing strategies. A host of planning time studies have addressed the working memory and the learners' limited attentional resources in the working memory(Elbow, 1973, 1981; Kellogg, 1988, 1990; Mancho'n& Roca de Larios, 2007; Roca de Larios et al., 2001; Roca de Larios, et al., 2006; Roca de Larios et al., 2008). The working memory, its conditions, and limitations have been the focus and concerns of several studies that have had a performance-centered nature although their contributions might be compared to writing task findings. Skehan (1998) asserts that in their oral task performance, due to their limited attentional resources, the learners prioritize the allocation of these resources and trade off their oral performance outputs which are generally actualized in fluency, complexity, and accuracy. For instance, complexity in (oral) language performance is exchanged with accuracy because competing task requirements demand their share from the limited attentional resources. The hypotheses of Skehan (2003) are only applicable to performance-centered oral aspects of language and do not entail the cognitive processes and strategies behind these oral outputs. At the same time, in a writing task demand, where the main goal of the writer is to complete a task by relying on his limited attentional and

cognitive resources and capacities, the manner of execution and application of cognitive resources assumes great importance. However, as asserted by Ong (2014), the way L2 writersallocate their limited attentional resources to their cognitive capacities and processes is not known. The Cognition Hypothesis of Robinson (2007), which investigated performance-related issues, only centers on the targets and focus of learners' attentional resources.

Since the effects of the planning time conditions over the quality of writing can have implications both for teachers and educational designers.Following Ortega (2005) asserting the need for process-product approaches in planning studies, the present study considers both planning time conditions and writing mode over the writing quality of the Iranuian EFL writers.

To our knowledge, a big gap in the studies conducted so far regarding the two contrasting hypotheses of Kellogg (1990) is the impact of the writing prompt mode on the text quality and making a comparison of the employment of different modes such as descriptive, argumentative, expository, etc. in synchronic studies. Locating this gap, the present study intends to see if variations in the prompt mode of writing would make different results concerning the text quality of students with similar writing proficiency. More specifically, the present study attempts to address the following questions:

- 1. What are the effects of planning time conditions (pre-task, extended pre-task, free writing and control) over the quality of expository and argumentative writings of Iranian EFLwriters?
- 2. Are planning conditions predictors of argumentative vs. expository text quality?

3. Method

3.1. Participants

The original pool of the participants in the present study comprised 150 volunteered university students (M age = 22.5; age range: 20-24) majoring in English translation at Mofid University in Qom, Iran. The participants were all senior students who had finished their writing courses and were already familiar with various writing types such as descriptive, argumentative, expository and narrative writing, and all of them were informed about the general objectives of the research. Since the students' general proficiency influences their performance in writing (Mancho'n& Roca de Larios, 2007), the

participants' proficiency level was measured through the administration of a Preliminary English Test (PET) and based on the results 108 homogeneous students (56 females and 52 males)whose proficiency level was confirmed as upper-intermediate scoring between42 and 48 were selected.

3.2. Instrumentation

The PET test which includes four main skills: Reading (35 items), writing (7 items), listening (25 items), and speaking (an interview including four parts) was used to measure the proficiency level of the participants. The PET test used in the study was a sample of the Preliminary English Test adopted from *Objective PET* byHashemi and Thomas (2010), Cambridge University Press.

For measuring the text quality of the writing samples, Jacobs, Zinkgraf, Wormuth, Hartfiel, and Hughey's (1981) analytical rating scheme was used. In this scale, scripts are rated on various features of writing rather than giving a single score. Following this scale, five features were differently weighted to emphasize content (30 points), language use (25 points), organization (20 points), vocabulary (20 points), and mechanics receiving very little emphasis (5 points).

3.3. Data Collection Procedure

At first, the proficiency test (PET) was administered and out of 150 volunteered students, 108 with the upper-intermediate level of proficiency were selected. Then, the participants were randomly assigned to thefour groups:pre-task, extended pre-task, freewriting, and control group each containing 27 participants. The situation and condition for each group were explained separately to ensure that thelearners knew what they were supposed to do in their writings. In pre-task condition, the participants were told to spend 10 minutes of their 30-minute time on planning and to write for 20 minutes on either of the two topics one of which was expository and the other was argumentative (The expository topic was: Explain why it is important for many teenagers to get a driver's license., and the argumentative topic was: Should nuclear weapons be destroyed all over the world?).Inpre-task planning, planning is done before performing the task (Ellis, 2005).

In the extended pre-task condition, the timing condition was reversed and the participants were instructed to plan for 20 minutes and to write for 10 minutes. The

participants in these two groups were shown a corresponding sample plan for each condition, and they were offered no other instruction on planning. In the freewriting condition, the participants were told not to plan and to write immediately for 30 minutes after choosing either one of the expository or argumentative topics which were the same for all groups. In the control group, the participants were free to spend their 30-minute time on planning and transcribing in whatever way they liked and as such no instruction was given to them regarding their planning time (See Table 1). This situation was considered the control condition because this is what happens in normal essay writing tests in the classroom situation. This study did not include the revising stage and only considered the planning time and the transcribing or writing time. Therefore, all the participants were instructed not to edit, revise, or make corrections during the writing (transcribing) stage. To prevent any kind of misunderstanding, the items were explained in their native language (Persian).

Table 1.

Planning Time

	Ti	me Conditions		
Groups	Pre-task	Extended Task	Free Writing	Control
Planning Time	10 minutes	20 minutes	0	Free
Transcribing	20 minutes	10 minutes	30 minutes	Free
Total time	30 minutes	30 minutes	30 minutes	30 minutes
Type of Writing	Arg&Exp	Arg&Exp	Arg&Exp	Arg&Exp

3.4. Data Analysis Procedure

The writing samples collected from the participants were rated by the researchers using the ESL Composition Profile(see Appendix)developed by Jacobs et al. (1981). There was a high consistency between the raters in applying the scale as the inter-rater reliability calculated using the Pearson correlation turned out to be significant (r = .85). The overall writing quality score for each participant was calculated based on the average of the scores of the two raters.

The researchers used SPSS Software Version 16.0 to analyze the collected data. To compare the performance of the four study groups on the given writing tasks (the first

research question), analysis of variance (ANOVA) was run, and to answer the second research question, the Pearson Chi-square test was utilized.

4. Results and Discussions

Table 2.

The present study attempted to investigate the effects of planning time(an environmental task condition) and writing mode(a task condition) on the text quality of essays written by Iranian EFL learners. The following results were obtained based on the relevant statistical procedures.

Addressing the first research question, whether there existed differences between the four groups of the planning time in the present study regarding their writing quality, analysis of variance was conducted among the groups. At p-value<0.05, there was a significant difference between the free writing group (3) and the other three groups, namely, group 1 (pre-task), group 2 (extended pre-task), and group 4 (control). Table 2 shows the results of the comparisons of the four groups in terms of the writing quality. The pairwise comparison of the groups indicates that there were nosignificant differencesbetween the other three groups in terms of their writing quality.

	Mean			95% Confidence Interval		
(I)	(J)	Difference	Std.			
group	group	(<i>I-J</i>)	Error	Sig.	Lower	Upper
1	2	4.025	3.091	.639	-4.762	12.810
	3	-23.176*	3.158	.000	-32.153	-14.200
	4	-4.158	3.032	.599	-12.777	4.459
2	3	-27.201*	3.239	.000	-36.410	-17.993
	4	-8.184	3.117	.082	-17.043	.675
3	4	19.017*	3.183	.000	9.968	28.066

Multiple Comparisons of the Groups in Writing Quality

*. The mean difference is significant at the .05 level.

This finding is in agreement with Elbow's (1973, 1981) view that planning time negatively affects writing qualityand freewriting improves the students' writing quality, which might be justified by the holistic, non-linear, and recursive nature of almost any writing task (Elbow 1973). Freewritersare in constant interaction with the writing task and as Kellog's(1990) Interaction Hypothesis also suggests, pre-planning and outlining can

deprive writers from the emergent opportunities which arise out of the interaction among planning, transcribing, and revising which is offered to freewriters who write immediately after receiving the prompt. Since the freewriter is told to transcribe immediately after receiving the prompt, s/he naturally benefits from the opportunities that arise from planning and revising as well as transcribing. Thoughs/he is told not to revise or plan, the free writer does these two activities while transcribing. These opportunities, then, might lead to the production of texts of better quality in the free writing condition. Ong's (2014) findings showed that the writers in the planning time conditions had written texts of lower quality compared with writers in the control group who were free to allocate their time in any way they decided. In the control group of the present study, the participants were allowed to distribute their thirty-minute time on planning and writing as they wished. The difference between the present study and that of Ong (2014) is that in Ong's study, L2 writers in the free writing group were outperformed by those in the control group. The implication of Ong (2014) might be that when writers are left to decide for themselves how to allocate their time to different stages of the writing task, their performance is improved and they produce texts of better quality. Our study suggests that the free writing condition's boost of writing quality might be due to the fact that in this type of writing the writers can benefit from the interactions of planning, transcribing, and revising which happen simultaneously.Ong's (2014) explanation for the lower performance of the L2 writers in the freewriting is that the writers in the free writing wrote without really considerable planning. Whereas, L2 writers in the control group had planned in a way which led to better writing quality. We cautiously attribute the better wring quality in the freewriting conditionto the facilitative stress created by this writing situation. Elbow (1981) asserts that free writing appeases the difficulty of writing because its pressure on the writer's cognition is less than the planning strategy and it intensifies the writing coherence. Exerting less pressure on the cognitive capacity leads to better content retrieval and thus better writing quality (Ong& Zhang, 2013). At the same time, the differences in the results of the writing quality between the present study and that of Ong (2014) might be accounted for on cultural groundsas Iraniansare more prone to perform better understressful and extemporaneous conditionsthan their Chinesecounterpartsin Ong's study.

The contradictory findings regarding planning time studies are not surprising as Ongand Zhang (2013) also attest, several experimental studies examining the effects of planning time, and freewriting on text quality of EFL writing have come up with controversial results. For instance, in two runs of experiments, Rau and Sebrechts (1996) investigated the impact of immediate writing, prewriting, silent outline planning, thinkingaloud planning, silent nonwritten planning, and thinking-aloud outline planning on the text quality of EFL writers. In the first run, they dealt with narrative writings of 40 undergraduate university students writing under immediate writing versus pre-writing conditions and examined the effects of these writing conditions on the creativity of ideas. The students had 5 minutes to plan in the prewriting and they had no time for planning in the immediate writing condition. They found that the prewriting condition led to the production of texts with greater creativity in ideas. Their second experiment involved 93 undergraduate psychology majored university students whose compositions were compared on the basis of their writing quality under pre-writing and immediate writing condition. Their findings revealed that in terms of the quality of compositions, the differences among the groups were not very outstanding. Two experiments by Kellogg (1988) produced different results concerning planning time and writing quality. In his first experiment, he examined the effects of planning and composing a rough draft on the fluency and quality of texts produced by 18 college learners. The fluency of the learners' writings was measured by dividing the total number of words over the total writing time. The quality was measured on the basis of each of the components of language such as idea development, organizational coherence, mechanics, effectiveness, and also the overall quality by applying a 7-point scale. His findings revealed that planning led to the improvement of quality in terms of the development of ideas and boosting of communication effectiveness, but it didn't improve fluency significantly. Mechanics, language usage, and coherence didn't improve either. In his second experiment, Kellog (1988) investigated the impact of planning, no planning, and mental outlining on the persuasive prompt writings of 20 university students. His findings revealed that planning improved organizational coherence, idea development, the effectiveness of communication of the text, and language use, but it had no significant effect on mechanics or fluency. As cited before, in his second experiment, planning improved organizational coherence while in his first experiment, it didn't. Ong (2014) also admits the contradictory views and

findings of planning time studies. In the present study, the ANOVA test also revealed there was a significant difference between the third group (freewriting) and the other groups in writing quality. Meanwhile, there was no significant difference between the quality of argumentative writings of the students in the first group (pre-task) and those of the second group (extended task) and the fourth group (control) since as Table 3 reveals at p-value<0.05, the results are as follows:

Table 3.

(I)	(J)	Mean			95% Confidence Interval		
group	group	Difference	Std.				
		(<i>I-J</i>)	Error	Sig.	Lower	Upper	
1	2	4.912	3.832	.652	-6.174	16.000	
	3	-21.600*	3.916	.000	-32.932	-10.267	
	4	-2.861	3.758	.900	-13.735	8.011	
2	3	-26.512*	4.048	.000	-38.226	-14.799	
	4	-7.774	3.895	.276	-19.044	3.495	
3	4	18.738*	3.978	.000	7.227	30.248	

Multiple Comparisons of Argumentative Writings in the Four Groups

*. The mean difference is significant at the .05 level.

As the above table indicates, it was the third group (free writing) which was significantly different in terms of the quality of argumentative writings. As the findings in Table 4 reveal, the same results exist for the expository writings. That is, the students in the freewriting group outperformed the other groups in terms of the quality of their expository writings.

Table 4.

Mean				95% Confide	ence Interval	
(I)	(J)	Difference	Std.		Lower	Upper
group	group	(<i>I-J</i>)	Error	Sig.		
1	2	2.664	3.796	.920	-8.325	13.655
	3	-25.226*	3.877	.000	-36.451	-14.000
	4	-5.928	3.725	.476	-16.713	4.856
2	3	-27.891*	3.945	.000	-39.313	-16.468
	4	-8.593	3.796	.178	-19.583	2.396
3	4	19.297*	3.877	.000	8.072	30.522

Multiple Comparisons of Expository Writings in the Four Groups

To terminate the response to the first question concerning the possible differences in writing quality due to the changes in writing mode, the findings in Tables 3 and 4 indicate that planning time conditionswere more decisive than task conditions, here the writing mode, on the writing quality of EFL writers. This finding is in contrast with Ong (2014), who found the task conditions are more decisive than planning time variations. Although in her study, Ong only compared the effects of planning time and writing task conditions on the frequency of metacognitive strategies and did not consider the writing quality, she asserted that as suggested by researchers (Breetvelt et al., 1994; Ellis & Yuan, 2004; Kellogg, 1988, 1990; Mancho'n&Roca de Larios, 2007; van den Bergh & Rijlaarsdam, 2007), metacognitive strategies might have effects upon writing quality. This idea was her impetus for considering the effects of planning time and writing task conditions on the metacognitive strategies. Our study revealed that being placed in the free writing group was more decisive in the writing quality than writing either expository or argumentative writing. The fact that in both argumentative and expository writings the writing quality of the students in the free writing condition was better than those in the other three groups displays the significant effect of planning time conditions compared with task conditions on the writing quality.

The findings in Tables 3 and 4indicate that in both argumentative and expository writings, the free writing task was significantly higher in quality than the other three planning time groups. In other words, the writing mode, at least as far as argumentations or expositions are concerned, was not decisive in the quality of the writing task among the four planning time conditions, and it was the free writing condition that determined the writing quality. However, in all the four groups, there existed significant differences between the argumentative and expository writings, with argumentative writings being significantly higher in quality than expository writings (Table 5).

Table 5.

Comparing Writing Quality in Argumentative and Expository Essays

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.025ª	3	.999
Likelihood Ratio	.025	3	.999
Linear-by-Linear Association	.015	1	.901
N of Valid Cases	108		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.89.

In response to the second question of the study, the findings in table 6 show that there is no significant relationship between being in any one of the four groups of the study and adopting any one of the two writing modes (Arg. versus Exp.). In other words, being placed in any of the four groups did not affect the choice of expository or argumentative writing and, as previously mentioned, the planning time conditions were more important in boosting writing quality than the writing mode. Meanwhile, as previously stated, the writing group outperformed the other writers in the other groups both in argumentative and expository writings (See tables 3 and 4). The findings in table 5 suggest that argumentative writings were higher in quality compared with the expository writings; we might attribute this fact to the generation of more ideas in argumentative writings.

Table 6.

Chi-Square Tests Related to Arg & Exp Writings in the Groups

						95% Coi	nfidence
			Sig.	Mean	Std. Error	Inter	rval
	Т	Df	(2-tailed)	Difference	Difference	Lower	Upper
Group 1	3.840	25	.001	13.709	3.570	6.384	21.035
Group 2	3.292	25	.004	11.461	3.481	4.185	18.737
Group 3	2.297	25	.032	10.083	4.389	0.979	19.187
Group 4	3.720	25	.001	15.357	4.128	6.870	23.843

5. Conclusion and Implications

Considering the first question of the study, the results indicated that the writers in the free writing group outperformed their counterparts in the other three planning time groups. This finding is in agreement with the findings of (Elbow, 1973; Wason, 1980) who advocated free writing in favor of other planning time conditions. There are a number of studies that commend planning strategies in writing tasks (e.g., Ellis & Yuan, 2004; Flower & Hayes, 1980; Gould, 1980; Kellogg, 1990). However, the findings of Ong (2014) show that planning time conditions may lead to the production of texts of lower quality compared with the control condition in her study under which the students were free to allocate their 30 minutes as they decided over planning and transcribing. The contradictory findings of planning time conditions and writing task studies are not surprising(Ong&

Zhang, 2013). In terms of the quality of the essays and the writing mode, it must be noted that both argumentative essays and expository essays in the freewriting group were better in quality than those of the other groups. The better performance of the participants in the third group or freewriting may also be accounted for by the fact that the free writing condition exerts less pressure on the working memory because in this planning time condition, the working memory is not involved in various writing processes and thereby there is less interference among the resources of limited working memory (Tsiriotakis, Vassilaki, Spantidakis, &Stavrou, 2017). Less demand on limitedworking memory resources leads to better writing quality. However, the quality of the essays was not affected by the writing mode whether expository or argumentative. This shows that the writing mode was not very effective on the quality of essays but the planning time conditions were.

The study can have implications for instructors of EFL writing, at both undergraduate and graduate levels. According to Ong (2014), planning time conditions are important in EFL writing due to their direct and indirect effects upon writing quality which can reveal a great deal about the expertise and character of the writer. As such this study can have implications for ESL and EFL writers to appreciate the significance of writing quality.

The present study suffers from some limitations such as the sample size as in each group there were only 27 participants and as such the findings should be handled with care. Second, the study only considered two writing modes, expository and argumentative. It is suggested that the study be replicated using other writing modes. The reader should be cautious that the findings of this study must be interpreted with care as several factors such as cultural conditions and context, participant's age and gender, and more importantly, the researchers' inclinations and tendencies might have influenced the results.

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References

- Breetvelt, I., Van den Bergh, H., &Rijlaarsdam, G. (1994). Relations between writing processes and text quality: When and how? *Cognition and Instruction*, 12(2), 103-123.
- Butterfield, E. C., Hacker, D. J., & Albertson, L. R. (1996). Environmental, cognitive, and metacognitive influences on text revision: Assessing the evidence. *Educational Psychology Review*, 8(3), 239-297.
- Collins, A., &Gentner, D. (1980). A framework for a cognitive theory of writing. In L. W.Gregg, & E. R. Steinberg (Eds.), *Cognitive processes in writing* (pp. 51-72).Hillsdale, New Jersey: Erlbaum.
- Elbow, P. (1973). Writing without teachers. London, UK: Oxford University Press.
- Elbow, P. (1981). *Writing with power: Techniques for mastering writing process.* New York, NY: Oxford University Press.
- Ellis, R. (1987). Interlanguage variability in narrative discourse: Styles shifting in the use of past tense. *Studies in Second Language Acquisition*, *9*(1), 1-19.
- Ellis, R. (2005). Planning and task-based performance: Theory and research. In R., Ellis (Ed.),*Planning and task performance in a second language* (pp. 3-34). Amsterdam, Netherlands: John Benjamins Publishing Company.
- Ellis, R., & Yuan, F. (2004). The effects of planning on fluency, complexity, and accuracy in second language narrative writing. *Studies in Second Language Acquisition*, 26(1), 59-84.
- Flower, L. S., & Hayes, J. R. (1980). The dynamic of composing: Making plans and juggling

constraints. In L. W. Gregg & E. R. Steinberg (Eds.), *Cognitive processes in writing*(pp. 31-50). Hillsdale, NJ: Lawrence Erlbaum Associates.

- Flower, L. S., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32(4), 365-387.
- Galbraith, D. (1999). Writing as a knowledge-constituting process. In M. Torrance & D.Galbraith (Eds.), *Studies in writing: Knowing what to write: Conceptual processes in text production* (pp.139-160). Amsterdam, Netherlands: Amsterdam University Press.
- Galbraith, D. (2009). Cognitive models of writing. *German-as-a-foreign language (GFL)* Journal,2(3), 6-22.

- Gould, J. D. (1980). Experiments on composing letters: Some facts, some myths, and some observations. In L. W. Gregg & E. R. Steinberg (Eds.), *Cognitive processes in writing* (pp. 97-128). Hillsdale, NJ: Erlbaum.
- Hashemi L., & Thomas, B. (2010). *Objective PET*. Cambridge: Cambridge University Press.
- Hayes, J. R. (2006). New directions in writing theory. In C. A. MacArthur, S. Graham, &J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 28-40). New York, NY: Guilford.
- Hayes, J. & J. Gradwohl Nash. (1996). On the nature of planning in writing. In C. Levy & S. Ransdell (Eds.), *The science of writing* (pp. 116-147). Mahwah, NJ: Lawrence Erlbaum.
- Jacobs, H. L., Zinkgraf, S. A., Wormuth, D. R., Hartfiel, V. F., &Hughey, J. B. (1981). *Testing ESL composition; A practical approach*. Rowley, MA: Newbury House.
- Kellogg, R. T. (1987). Effects of topic knowledge on the allocation of processing time and cognitive effort to writing processes. *Memory and Cognition*, 15(3), 256-266.
- Kellogg, R. T. (1988). Attentional overload and writing performance: Effects of rough draft and outline strategies. *Journal of Experimental Psychology: Learning, Memory* and Cognition, 14(2), 355-365.
- Kellogg, R. T. (1990). Effectiveness of prewriting strategies as a function of task demands. *American Journal of Psychology*, 103(3), 327-342.
- Kormos, J. (2011). Task complexity and linguistics and discourse features of narrative writing performance. *Journal of Second Language Writing*, 20(2), 148-161.
- Mancho'n, R. M., & Roca de Larios, J. (2007). On the temporal nature of planning in L1 and L2composing. *Language Learning*, *57*(4), 549-593.
- McCutchen, D. (1996). A capacity theory of writing: Working memory in composition. *Educational Psychology Review*, 8(3), 299-325.
- Newell, A., & Simon, H. (1972). *Human problem solving*. Englewood Cliffs, NJ: Prentice Hall.
- Olive, T., & Kellogg, R. T. (2002). Concurrent activation of high- and low-level writing processes. *Memory & Cognition*, *30*(4), 594-600.
- Ong, J. (2014). How do planning time and task conditions affect metacognitive processes of L2 writers? *Journal of Second Language Writing*, 23, 17-30.

- Ong, J., & Zhang, L. J. (2013). Effects of the manipulation of cognitive processes on EFL writers' text quality. *TESOL Quarterly*, 47(2), 375-398.
- Ortega, L. (2005). What do learners plan? Learner-driven attention to form during pre-task planning. In R. Ellis (Ed.). *Planning and task performance in a second language* (pp.77-109). Amsterdam, Netherlands: John Benjamins Publishing Co.
- Piolat, A., Kellogg, R. T., &Farioli, F. (2001). The triple task technique for studying writing processes: On which task is attention focused? *Current Psychology Letters: Brain, Behavior and Cognition*,4(1), 67-83.
- Rau, P. S., &Sebrechts, M. M. (1996). How initial plans mediate the expansion and resolution of options in writing. *Quarterly Journal of Experimental Psychology*, 49(3), 616-638.
- Robinson, P. (2007). Task complexity, theory of mind, and intentional reasoning: Effects on L2 speech production, interaction, uptake and perceptions of task difficulty. *IRAL*,45(3) 193-213.
- Roca de Larios, J., Marı'n, J., & Murphy, L. (2001). A temporal analysis of formulation processes in L1 and L2 writing. *Language Learning*, *51*(3), 497-538.
- Roca de Larios, J., Mancho'n, R., Murphy, L., &Mari'n, J. (2008). The foreign language writer's strategic behavior in the allocation of time to writing processes. *Journal of Second Language Writing*, *17*(1), 30-47.
- Roca de Larios, J., Mancho'n, R. M., & Murphy, L. (2006). Generating text in native and foreign language writing: A temporal analysis of problem-solving formulation processes. *The Modern Language Journal*, 90(1), 100-114.
- Silva, T. & Matsuda, P. K. (2002).Writing. In Schmitt, N. (Ed.), An introduction to applied linguistics (pp.251-266). New York, NY: Oxford University Press.
- Singer, B.D., & Bashir, A.S. (2004). Developmental variations in writing composition skills. In C.A. Stone, E.R. Silliman, B.J. Ehren & K. Apel (Eds.), *Handbook of language and literacy*. New York, NY: Guilford Press.
- Skehan, P. (1996). A framework for the implementation of task-based instruction. *Applied Linguistics*, 17(1), 38-62.
- Skehan, P. (1998). *A cognitive approach to language learning*. Oxford: Oxford University Press.
- Skehan, P. (2003). Task-based instruction. Language Teaching, 36(1), 1-14.

- Torrance, M., & Jeffery, G. (1999). Writing processes and cognitive demands. In M. Torrance & G. Jeffery (Eds.), *The cognitive demands of writing: processing capacity and working memory in text production* (pp. 1-11). Amsterdam, Netherlands: Amsterdam University Press.
- Tsiriotakis, I. K., Vassilaki, E., Spantidakis, I., &Stavrou, N. A. (2017). The examination of the effects of writing strategy-based procedural facilitative environments on students' English foreign language writing anxiety levels. *Frontiers in Psychology*, 7, 2074.
- Van den Bergh, H., &Rijlaarsdam, G. (2007). The dynamics of idea generation during writing: An online study. In G. Rijlaarsdam (Series Ed.), M. Torrance, L. van Waes, & D. Galbraith (Eds.), *Writing and cognition: Research and applications* (pp. 125-150). Amsterdam, Netherlands: Elsevier.
- Van der Hoeven, J. (1999). Differences in writing performance: Generating as indicator. In
 G. Rijlaarsdam& E. Espe´ret (Series Eds.), M. Torrance & D. Galbraith (Eds.), *Knowing whatto write: Conceptual processes in text production* (pp. 65-77).
 Amsterdam, Netherlands: Amsterdam University Press.
- Wason, P. C. (1980). Specific thoughts on the writing process. In L. W. Gregg, &E. R. Steinberg (Eds.), *Cognitive processes in writing* (pp. 129-137). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Whalen, J. & Menard, N. (1995). L1 and L2 writers' strategic and linguistic knowledge: A model of multiple-level discourse processing. *Language Learning*, 45(3), 381-418.

Appendix

Composition Rating Scale

ESL Composition Profile (Jacobs et al., 1981, p. 30), reprinted with the permission of the publisher.

	30-27	EXCELLENT TO VERY GOOD: knowledgeable • substantive •
		thorough • development of thesis • relevant to the assigned topic
_	26-22	GOOD TO AVERAGE: some knowledge of subject • adequate range •
ITENT		limited development of thesis • mostly relevant to the topic, but lacks
		detail
NO NO	21-17	FAIR TO POOR: limited knowledge of subject • little substance •
		inadequate development of the topic
	16-13	VERY POOR: does not show knowledge of subject • non-substantive •
		not pertinent • OR not enough to evaluate
	20-18	EXCELLENT TO VERY GOOD: fluent expression • ideas clearly
7		stated/supported • succinct • well-organized • logical sequence •
IOI		cohesive
AT	17-14	GOOD TO AVERAGE: somewhat choppy • loosely organized but main
ZIV		ideas stand out • limited support • logical but incomplete sequencing
JA I	13-10	FAIR TO POOR: non-fluent • ideas confused or disconnected • lacks
ORC		logical sequencing and development
	9-7	VERY POOR: does not communicate • no organization • OR not
-		enough to evaluate
	20-18	EXCELLENT TO VERY GOOD: sophisticated range • effective
۲۲		word/idiom choice and usage • word form mastery • appropriate register
AF	17-14	GOOD TO AVERAGE: adequate range • occasional errors of
3UI		word/idiom form, choice, usage but meaning not obscured
CAF	13-10	FAIR TO POOR: limited range • frequent errors of word/idiom form,
Ŭ,	0.7	choice, usage • meaning confused or obscured
	9-7	VERY POOR: essentially translation • little knowledge of English
	25.22	EXCELLENT TO VERY COOP offseting coupling or structure
	25-22	EXCELLENT TO VERY GOOD: effective complex constructions •
		rew errors of agreement, tense, number, word order/function, articles,
	21.10	COOD TO AVERAGE: affactive but simple constructions • minor
	21-10	problems in complex constructions • several errors of agreement tense
Щ		number word order/function articles pronouns prepositions but
AG		meaning seldom obscured
GU	17-11	FAIR TO POOR: major problems in simple/complex constructions •
AN	17 11	frequent errors of negation agreement tense number word
Γ		order/function, articles, pronouns, prepositions and/or fragments, run-
		ons. deletions • meaning confused or obscured
	10-5	VERY POOR: virtually no mastery of sentence construction rules •
		dominated by errors • does not communicate • OR not enough to
		evaluate

	5	EXCELLENT TO VERY GOOD: demonstrates mastery of conventions
	5	for among of molling mynotration conitalization managementing
		• lew errors of spening, punctuation, capitalization, paragraphing
	4	GOOD TO AVERAGE: errors of spelling, punctuation, capitalization,
\mathbf{S}		paragraphing but meaning not obscured
Ĭ	3	FAIR TO POOR: frequent errors of spelling, punctuation,
HA		capitalization, paragraphing • poor handwriting • meaning confused or
EC		obscured
	2	VERY POOR: no mastery of conventions • dominated by errors of
		spelling, punctuation, capitalization, paragraphing • handwriting
		illegible • OR not enough to evaluate
		inegione - OK not chough to evaluate