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The Effects of Planning Time Conditions and Writing Type on the Metacognitive Strategies of Iranian EFL Learners

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Abstract

The present study attempted to probe into the effects of four planning time conditions (pre-task, extended task, free writing, and control) over the frequency of employing metacognitive strategies in argumentative and expository writings of 108 participants. Employing an experimental writing task design under four planning time conditions and implementing a retrospective questionnaire, the study adopted both qualitative and quantitative approaches. Through implementing the retrospective questionnaire, an 8-point Likert-type scale was used and the associated statistical procedures were employed. The results showed that the frequency of the use of Generation of Ideas strategy was significantly higher in the argumentative writings than in the expository writings. The use of Elaboration of Ideas strategy was significantly different from Thinking about Language Aspects strategy and Thinking about the Essay Structure strategy and it was the lowest. The highest strategy use belonged to 'Thinking about Language Aspects strategy', followed by Thinking about the Essay Structure, Generation of Ideas, Organization of Ideas and Elaboration of Ideas strategies respectively. The use of 'Thinking about Language Aspects strategy' in the extended task condition was different from the other groups, and it was the lowest. In 'Thinking about Language Aspects strategy' use no significant differences were observed among argumentative and expository writings. The study can help broaden the understanding of EFL writers' metacognitive writing processes involving planning and, the results may have pedagogical implications for EFL writing instructors and theoretical implications for EFL writing researchers.

***Keywords*:** Argumentative writing, expository writing, metacognition strategies, planning time situations, writing mode

Introduction

Writing is a cognitive activity whose production as asserted by Ong (2014) necessitates both the coordination and synchronization of planning, transcribing and revising with their related subcomponent processes such as evaluating and monitoring (Olive & Kellogg, 2002). Planning is essential for the macro-level aspects of a writing task, and also for its logistic and contextual aspects which include paragraph development, connectors, contextual understanding and word choice (Ong & Zhang, 2013). According to Ellis (2005), speakers and writers have to decide both over the content of what they want to say or to write and how to express them. Consequently, linguistic performance both in its spoken and written form, rests on planning as one of its inseparable and crucial parts. A writer's performance is under the influence of planning, sub planning, and revising processes which are themselves involved in the processes of loading and reloading of his/her limited working memory whose failure can lead to the deterioration of the text produced by the writer (McCutchen, 1996; Ong & Zhang, 2013). Ellis (1987) asserted that through planning the learner obtains those linguistic forms which are expected to be automated. According to Skehan (1996), planning makes the learner's attentional resources free and

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paves the way for the realization of linguistic outputs through its interactions with the working memory.

In EFL writing planning has come under a number of types, classifications and divisions. It has also been investigated under various conditions, situations and different contexts in writing task studies. Planning time variations and the procedural conditions of EFL writing have attracted the attentions of researchers in recent years(Fazilatfar, Kasiri, & Nowbakht,2020).Three types of planning: pragmatic, textual, and linguistic planning have been identified by Whalen and Menard (1995). Pragmatic planning encompasses contextual aspects of writing including the tone, the addressee, the topic development and the intentionality which lies behind the act of writing. Textual planning, is concerned with maintaining coherence among the sequences of ideas within a text and the linguistic planning which addresses the writers' challenges in solving a linguistic problem mostly centers on the writer's decisions over the grammaticality of sentences. Based upon the centrality of the writer or the text, Hayes and Nash (1996) have classified planning into process planning and text planning, the former dealing with the strategies employed by the writer to achieve his goals in writing and the latter dealing with the text and its form and content.

Conflicting orientations and approaches in both L1 and L2 studies have been adopted by researchers towards planning. Elbow (1973, 1981) proposed two trends on planning which advocate free writing and enumerate its benefits; while, Flower and Hayes (1981) commend planning and assert that planning is a strategy of proficient writers. According to Elbow (1981), free writing causes less pressure on the writers' cognitive faculty and permits the discovery of new and original ideas and leads to greater coherence in the writing task. Flower and Hayes (1981), investigating the writings of proficient and less proficient writers by employing think-aloud protocol, contended that planning strategy is employed by skilled writers while unskilled writers do not use it. They also assert that writing quality is affected by planning and planning leads to the production of writings with higher quality. Moreover, Hayes (2006) claimed that empirical studies do not support free writing strategy.

ESL writing researchers have also been fascinated by the duration of time the writers spend on planning and by other issues related to planning. Mancho´n and Roca de Larios (2007) investigated the effects of EFL writers' proficiency levels, the language (L1 vs. L2) of their compositions, and the processes of their writing on their planning time. Their study showed that in both L1 and L2 writings the EFL writers' proficiency levels influenced their planning. Nevertheless, the language of composition (Spanish or English) did not display any significant effect. Kellogg (1987) contends in both L1 and L2 writings in the first stage of writing activity planning takes a major amount of the writing time, but the planning time gradually begins to decrease over time. While in the middle stage of the writing act transcribing takes up a considerable time, it becomes to a certain degree constant over time, independent of the writer's writing in their L1 or L2 (Roca de Larios, Mancho´n, Murphy, & Marı´n, 2008). In the final stage of the writing process, revising becomes dominant (Van den Bergh & Rijlaarsdam, 2007).

EFL writers' general language proficiency, their language of writing (L1 vs. L2), the text quality, and their perception of the writing task have been investigated in relation to the writers' metacognitive processes and the amount of time spent over various stages of writing activity (Mancho´n & Roca de Larios, 2007; Ong & Zhang, 2013; Roca de Larios et al., 2008; Roca de Larios, Mancho´n, & Murphy, 2006). Writers with different L2 proficiency levels allocate a major amount of their writing time to the formulation of the content of their writing and they do not distribute their time equally over the initial, middle and final stages of their composition process (Roca de Larios et al., 2008).

According to Van den Bergh and Rijlaarsdam (2007), the writer's perceptions of the writing task and both the external and internal task environment affect the writers' distribution of their cognitive processes. The external task environment includes the social and physical milieu of the writer. It encompasses external factors to the cognition of the writer. Whereas, the internal component comprises the writer's cognitive factors such as his affective situation, his motivations and above all his memory systems. Among task environment factors, planning time and task conditions have been probed in relation with their effects on metacognitive processes of writers (Ong, 2014). Addressing working memory and cognitive processes involved in writing activity, Kellogg (1990) proposed two contrasting hypotheses: The Overload Hypothesis and the Interaction Hypothesis. According to Kellogg, based upon the Overload Hypothesis preplanning creates opportunities for the writer to free some spaces in his limited working memory thus reducing the pressures on his cognitive capacity to focus better on the transcribing stage thereby producing better quality-texts. The transcribing stage is of great importance for EFL writers because concentrating on this stage would boost EFL writers' problem-solving ability (Kormos, 2011).

Kellogg (1988) probed into the effects of outlining versus no outlining and also investigated the effects of polished versus rough drafts on L1 writers' text quality and attempted to see if these strategies could lead to the reduction of the cognitive attentional overload of L1 writers. His study showed that outlining and rough draft reduced the cognitive attentional overload, but the improvement of text quality was caused by the outlining strategy. However, the Interaction Hypothesis postulates that text quality would decrease by planning. The Interaction Hypothesis mostly is based upon Elbow's (1981) study which favors free-writing. The rationale behind this hypothesis is that writing is generally a holistic, recursive and non-linear activity whose on-going and natural process may be impeded by strategies such as pre-planning, outlining and draft writing. According to this hypothesis these strategies may prevent the writers from employing opportunities which come up naturally in the process of interactions existing among the processes and stages of writing activity such as immediate planning, transcribing, and revising. Galbraith's (1999; 2007) Knowledge Constituting model which contends that the generation of ideas occurs better when the writer is not under the pressure of planning conditions and that the transcribing stage mostly provides the opportunity for the generation of ideas, has great affinities with The Interaction Hypothesis of Kellogg (1990).

A number of planning time studies have concerned themselves with the writers' limited attentional resources, the functions of the working memory, and what the writers focus on during their writing activity and also the effects of the writers' attentions on their employment of language in writing (Elbow, 1973, 1981; Kellogg, 1990; Roca de Larios et al., 2008; Roca de Larios et al., 2006). For Hayes and Nash (1996), planning is associated with reflective procedures such as inferencing strategies and decision making. The conditions and limitations of the working memory have been investigated by a host of studies adopting a performance-centered approach although it is possible to compare their contributions with the findings of other writing task studies. Skehan (1998)contended that in their oral task performance, the learners' fluency, complexity and accuracy are actualized through the trade-off between their limited attentional resources and their oral performance outputs. The learners priotorize the allocation of their limited attentional resources in their oral performance. For instance, the learners might exchange complexity with accuracy in their oral language performance because both accuracy and complexity demand their share from the learners' limited attentional resources. The hypotheses of Skehan (2003) address only the performance centered oral aspects of language and do not encompass the cognitive processes and strategies which lead to the actualization of these oral outputs. Moreover, in a writing task when the main purpose of the writer is to complete the task by getting most from his limited attentional and cognitive resources and capabilities, the manner of this executing and applying these cognitive resources must be very significant although as stated by Ong (2014), how L2 writers divide and share their limited attentional resources between their cognitive capacities and processes is a mystery. The afore-mentioned hypotheses and models might account for one aspect but leave another aspect of writing activity untouched. For instance, the Cognition Hypothesis of Robinson (2007), investigating performance-related issues, only addresses the targets and purposes of learners' attentional resources and leaves the underlying processes leading to the goals untouched.

Planning time and task conditions have also been studied in relation to other language related issues. Rahimi and Zhang (2019) found that task complexity negatively affects writing accuracy. A study conducted by Boggas (2019) revealed that metalinguistic reflections did not necessarily lead to increasing accuracy in grammatical output. According to Behyar and Nabilou (2019), planning time can serve teachers as a significant metacognitive strategy to boost accuracy in EFL learners' task –based writing production. Based on a study conducted by Ebrahimi, Nazemi and Kargozari (2019), neither pre-task planning time nor on-line planning had any significant effect upon EFl writers' writing accuracy.

The afore-mentioned studies have mostly ignored the procedural conditions of the cognitive processes and the way EFL writers distribute their metacognitive strategies during the completion of a writing task, which is of paramount significance regarding the functions of the working memory. Therefore, the present study, attempts to address these gaps following text-reflecting studies such as (Ong, 2014; Ong & Zhang, 2013), more specifically the present study deals retrospectively with metacognitive strategies adopted by EFL learners under different planning time conditions for their writing task.

Another gap in the studies conducted so far regarding the two contrasting hypotheses of Kellogg (1990) is the impact of the writing prompt modes, such as descriptive, argumentative, expository, etc. in synchronic studies probing into the metacognitive strategies of writers attesting to these two hypotheses. Locating this gap, the present study intends to see if variations in the prompt mode of writings of EFL learners with similar writing proficiency would lead to

changes in the temporal distribution of metacognitive strategies adopted by these learners. This study intends to observe if changes in the mode of the writing task from expository to argumentative would lead to variations in the frequencies of the metacognitive strategies employed by these EFL writers under pre-task, extended pre-task and free writing condition. More specifically, the present study attempted to address the following questions:

1- What are the effects of planning time (pre-task, extended pre-task, free writing and control condition) on the metacognitive processes of Iranian EFL learners writing expository versus argumentative essays?

2- Which metacognitive strategies are more frequently used by these EFL writers and why?

Method

A cross-sectional experimental writing task design is used in the present study. Through a retrospective questionnaire, data are elicited from the participants to report how frequently they think about the metacognitive strategies. Four planning time conditions are studied and the last one which is normally observed in classroom situations is considered as the control condition.

Participants

The original pool of the participants in the present study comprised 165 volunteered university students (*M* age = 21.5; age range: 20-25) majoring in English Literature at Ershad Damavand University in Tehran, Iran. The participants had passed all their writing courses and had complete acquaintance with different writing modes such as descriptive, argumentative, expository and narrative writing. The participants were informed about the general objectives of this study. Since as asserted by Mancho´n and Roca de Larios (2007) the writers' general proficiency affects their writing performance, the participants' general proficiency was measured by the administration of a Preliminary English Test (PET). The results identified 108 homogeneous students. They comprised (56 females and 52 males). Their proficiency level was identified as upper-intermediate and they scored between (41 to 47) on the (PET).

Instruments

The first instrument was the afore-mentioned Preliminary English Test (PET) which was a sample of the (PET) adopted from *Objective PET* by Hashemi and Thomas (2010), Cambridge University Press. The test covers the four main skills: Writing (7 items), listening (25 items), Reading (35 items), and speaking section containing (an interview including four parts) which was excluded in the present study due to logistic limitations. Since we had to exclude the interview section and also to become certain of the reliability of our modified version, we administered the test on a representative sample of the participants and the Cronbach alpha coefficient yielded the high index of .83.

The second instrument used in the present study was the metacognitive strategy questionnaire used by Ong (2014) which was modified for the purposes of this study. The original questionnaire contained 12 questions dealing with the metacognitive strategies both during the planning stage and the writing stage. The present study only dealt with the During-Writing-Time Phase thus leading to only five questions (See Appendix). The targeted metacognitive strategies considered through this questionnaire were as follows: Generation of Ideas (GI) strategy, Elaboration of new Ideas (EI) strategy, thinking about Language Aspects (THA) strategy, Organization of new Ideas (OI) strategy, and Thinking about the Essay Structure (THS) strategy. Due to the modifications of the questionnaire and to assess its reliability, we administered it on a representative sample of the participants and the Cronbach's alpha coefficient turned to be .85. As for the validity of the instruments it should be noted that the PET used in this study is a well- established test administered extensively both for research and educational purposes and the questionnaire is taken from Ong (2014) well-known in the field.

In spite of the inefficiency of the retrospective questionnaire, we used it in the present study for the reasons which follow. First, it permits us to collect data from a large number of participants. Second, it is among the least intrusive instruments. Third, the complexity of an experimental design such as ours makes it difficult to use think-aloud protocols.

Procedure

First of all, the researchers administered the proficiency test (PET), excluding the speaking section, and out of 165 participants 108 students whose general proficiency was confirmed as the upper-intermediate were selected. Then, the 108 participants were randomly assigned to the four groups of the study; that is, pre-task, extended pre-task, free writing, and control group each one containing 27 students. The situation and condition of the study were explained separately for each group. In the pre-task condition,

the writers were instructed to spend 10 minutes of their total 30-minute time on planning and to spend their remaining 20 minutes on writing about only one of the two topics which were presented. The expository topic was: Explain the likely consequences of abolishing capital punishment in Iran, and the argumentative topic was: *Has Education become commercialized in Iran?*

In the second group, the extended pre-task condition, the writers were told to plan for 20 minutes and to write for 10 minutes. In the third group, the free-writing condition, the participants were instructed not to plan, and to write immediately for 30 minutes. All the participants in the four groups were free to choose either one of the expository or argumentative topics. In the fourth group, the control group, the writers were free to spend their 30-minute time on planning and writing as they liked. Consequently, they received no instruction regarding their planning time. This condition was considered as the control condition because this is the normal situation for essay writing tests in the classroom condition. Since the present study did not include the revising stage and only the planning time and the writing time were at stake, all the writers were told not to edit, revise, during the writing (transcribing) stage. After finishing the writings, the participants were asked to answer the metacognitive strategy questionnaire in a retrospective way because the researchers did not intend to force the participants to do two jobs at the same time similar to think-aloud protocols which suffer from reactivity and overloading working memory (Rostamian, Fazilatfar, & Jabbari, 2018). All explanations were made in their native language (Persian) to avoid any misunderstanding of the procedure.

Findings

This study intended to probe into the effects of planning time and writing mode on the metacognitive strategies employed by Iranian EFL learners. Based on the relevant statistical procedures, the following results were obtained.

As Table 1 shows being in any one of the four groups of the study did not have any significant relationship with choosing any one of the two writing types (Arg. Or Exp.).

Table 1.
Arg & ExpWritings in the Four Groups

	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval	
						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

As Table 1 shows at p. value .05, the four groups of the study are the same with regard to the choice of argumentative and expository writings because the significance level for all the four groups is smaller than .05.

In the following tables, we report the possible relationships between metacognitive strategies and adopting any one of the two writing modes and at the same time, we report the conditions of the most frequently used strategies in any one of the four planning time groups. We will also deal with the four planning time conditions and the frequency of metacognitive strategies used by the students and also if the planning time conditions and the metacognitive strategies were the predictors of argumentative and expository writings.

Concerning the first question of the study regarding the effects of the planning time conditions over metacognitive strategy use under differences in writing mode from expository to argumentative, as Table 2 reveals, in all the four groups, there exists significant differences between expository and argumentative writings with regard to the exploitation of Generation of Ideas (GI) strategy. This strategy was employed more significantly in argumentative writings. The p-value inside all the four planning time conditions with regard to the use of GI strategy in argumentative and expository writings is smaller than .05 which shows that the expository and argumentative writings are different with regard to using this strategy.

Table 2.
Expository and Argumentative Writings Regarding GI Strategy in the Four Groups

	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval	
						Lower	Upper
Group 1	2.758	25	.010	1.100	.398	.281	1.918
Group 2	4.256	25	.000	1.923	.421	.990	2.855
Group 3	4.330	25	.000	1.833	.423	.955	2.711
Group 4	2.696	25	.012	1.142	.423	.271	2.014

The preference for this strategy in argumentative writings might be justified by the nature of argumentation in general and argumentative writings in particular. In arguments, ideas are chosen and generated. Arguments are the cognitive productions of individuals (Kuhn & Udell, 2003). As such, the participants' appeal to this strategy is not surprising. According to Anderson, Chinn, Waggoner, and Nguyen (1998) an important goal of argumentation is to activate the mind to adopt reasoned discourse so as to choose among competing ideas. In every argument, the participant has to decide between claims and counterclaims, and, in the process of decision making on these two competing views, ideas are generated. Reznitskaya et al. (2001) also believed that arguments strengthen the ability of the mind to choose between competing views and to generate new ideas and notions. It must be noted that writing argumentative essays must be considered in light of both product and process approaches although any writing task can be studied under process and product orientations (Zarei, Pourghasemian, & Jalali, 2016).Generating of ideas strategy is employed in the steps of constructing and developing knowledge in the act of argumentation, the process, which leads to the argument, the product. According to Kuhn and Udell (2003), the terms argumentation and argument encompass the applications of the term argument as process as well as product. In the present study, we are concerned with argument as product. However, as asserted by Billig (1987) and Kuhn (1991), in argument as product, there exists a framework of evidence and counterevidence which can also be found in argumentative discourse and therefore, argument as product and argument as process are intricately related. The fact that the participants of the present study used generation of ideas strategy in their argumentative writings might be justified by the prevalence of argumentation and its long-lasting roots since it has been with us since early childhood. The ability to produce and advance arguments are observed even in young children (Anderson, Chinn, Chang, Waggoner, & Yi, 1997; Clark & Delia, 1976; Orsolini, 1993; Stein & Miller, 1993). It must be noted that the ability of arguments to enhance conceptual understanding is observed in both school-age children and university students (Mason, 1998). The participants recalled using this strategy in argumentative writings because in this mode, ideas are produced compared with expository writings in which explanations, classifications or descriptions of already existent ideas, concepts or objects are provided. However, there were not significant differences between the four planning time groups with regard to using this strategy (Table 2). These results are in agreement with Ong (2014) which asserts that planning time conditions did not have significant effects upon the generation of new ideas.

Using this strategy is also compared with other strategies both in argumentative and expository writings. The data on the frequency of thinking of any of these five metacognitive strategies (thinking about the essay structure, generation of ideas strategy, elaboration of new ideas, organization of new ideas and thinking about the language aspects of the task) was collected from the retrospective questionnaire given to the participants immediately after the completion of the writing task. In this respect, the writing mode was more decisive in the GI strategy use because the students who had written argumentative essays had exploited more GI strategy in all the four groups as they themselves had asserted (Table 2).

The conditions of the metacognitive strategies inside the groups and their positions with regard to the writing mode variations were considered in this study. Investigating the use of THA strategy among the groups revealed that there were significant differences between the groups in the use of this strategy. It is shown that the use of THA in the Extended Task is significantly different from the other groups, and it is the lowest (Table 3). Moreover, there is no significant difference between argumentative and expository writings regarding the use of THA (Table 4). The mean of the use of THA in argumentative writings is 6.00 and in expository writings 5.75 (Table 5). The highest use of THA strategy was reported from the Free writing group and the lowest usage of this strategy was observed in the Extended task planning condition. This finding might suggest that increasing

the planning time to 20 minutes has not led to the increase in thinking about language aspects rather it has decreased the use of this strategy. The use of this strategy among the three other groups did not show significant differences. The fact that the students have used this strategy in Free writing planning condition more than the other groups and have used it the least in the Extended Task group might suggest that when the students are involved in the act of writing they think over the language aspects since in the Free writing group they spent 30 minutes on the act of writing and in the Extended Task group they spent only 10 minutes in writing. The fact that there were no significant differences between argumentative and expository writings regarding the use of this strategy reveals that the mode of writing was not decisive in the number of times the participants thought of the linguistic aspects such as grammar, or the vocabulary used in the essays. Perhaps, this strategy, THA, is used more frequently in the act of monitoring the performance which probably occurs simultaneously with the act of performing the task and less frequently during planning. Ong (2014) found that the lowest mean frequency among the five metacognitive strategies which she studied belonged to thinking about language aspects of the task (M = 4.00) while the students spent their time on planning. In her study, she separated the planning and transcribing stages from each other. She reported that during the planning stage the highest mean frequency belonged to the thinking about essay structure (M = 4.75). The findings of the present study in this respect are in agreement with those of Ong (2014) because as Table 7 reveals, the use of THS or thinking about essay structure was the highest in Extended Task planning time condition.

In cases where we intend to compare the means of two samples of the population, we use t-test and in cases where we deal with more than two samples and we intend to compare the means to pinpoint differences, we use ANOVA.

Table 3.
Multiple Comparisons of the Four Groups in THA Use

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig. (2-tailed)	95% Confidence Interval	
					Lower	Upper
1	2	2.367*	.338	.000	1.405	3.329
	3	-.433	.345	.666	-1.416	.548
	4	.482	.332	.551	-.460	1.426
2	3	-2.801*	.354	.000	-3.809	-1.793
	4	-1.884*	.341	.000	-2.854	-.914
3	4	.916	.348	.081	-.074	1.907

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

As Table 3 reveals, there is a significant difference between the second groups, that is the extended pre-task group with the other three groups in terms of thinking about language aspects strategy because as significance level reveals the degree of significance in the comparison of the second group with the other groups is less than .05

Table 4.
Comparing Argumentative versus Expository Writing in THA, EI, and THS Use

	t	df	Sig. (2-tailed)	Mean differences	Std. Error Difference	90% Confidence Interval	
						Lower	Upper
THA	.780	105	.347	.245	.314	-.378	.868
EI	.059	106	.953	.174	.295	-.566	.602
THS	.353	106	.725	.096	.273	-.445	.638

As the results reflected in Tables 4 and 5 reveal, there is no significant difference between argumentative and expository writings regarding the use of EI strategy since tables 4 and 5 both report the conditions of argumentative and expository writings regarding THA, EI, and THS**.**The mean of EI use in argumentative writings is 5.07 and in expository writings is 5.05. As shown in Table 4, p= 0.953 is higher than 0.05, so there is no significant difference between argumentative and expository writings with regard to EI strategy use. There is no significant difference between argumentative and expository writings with regard to the use of THS strategy. As shown in table 4, p-value =0.725 is greater than 0.05. The mean of the use of THS in argumentative writings is 5.89 and in expository writings is 5.79.

Table 5.
Group Statistics of Means of Argumentative and Expository Writings in THA, EI, and THS Use

	Writing mode	N	Mean	Std. Deviation	Std. Error Mean
THA	**Arg.**	54	6.000	1.636	.222
	Exp.	54	5.754	1.611	.221
EI	**Arg.**	54	5.074	1.552	.211
	Exp.	54	5.056	1.498	.205
THS	**Arg.**	54	5.888	1.525	.207
	Exp.	54	5.792	1.291	.177

As shown in Table 4, p= 0.953 is higher than 0.05, so there is no significant difference between argumentative and expository writings with regard to EI strategy use. There is no significant difference between argumentative and expository writings with regard to the use of THS strategy. As shown in table 5, p-value =0.725 which is greater than 0.05. The mean of the use of THS in argumentative writings is 5.89 and in expository writings is 5.79.

Investigating the use of THS strategy inside the groups revealed significant differences between the groups as reflected in Table 6. The highest use of this strategy belonged to the second group Extended Task (7.08) followed by Pre-task (5.76), free writing (5.62) and Control group (4.96) as displayed in Table7. It was also revealed that the second group Extended Task had significant differences with all other groups (Table 8). THS was employed the most in Extended Task group while THA was the most frequently employed in the free writing group. As for the exploitation of these two strategies by the students who wrote expository or argumentative essays, no significant difference was observed. Table 4 reveals that there is no significant difference between argumentative and expository essays in the use of THS. At the same time as Table 4 shows, there is no significant difference between argumentative and expository essays in THA use. The fact that writing mode is not effective in the use of either THS or THA strategy leads us to reconsider the role of the planning time conditions in this respect. Although the use of THA is the least in the extended task group, the use of THS is the highest in this group as shown in Table 7. In the extended task condition, the writers had 20 minutes to plan while only 10 minutes to write. In this respect, it becomes clear that when the students had more time to plan, they thought more about the structure of their essays and less about the language aspect of their essays. This proves that depicting grammar, diction, and vocabulary are matters of the writing act, and they occur simultaneously with the writing activity and that is why THA was used the most in the free writing group. These findings are in agreement with the implications of (Ellis & Yuan, 2004; Kellogg, 1988, 1990; Ong & Zhang, 2010) that task environment can be influential upon both the text quality and the metacognitive strategies. In the present study, the environmental conditions such as planning time show to be more effective than task conditions such as writing mode on the frequency of metacognitive strategies. As observed in the present study, writing mode had no significant effect upon the frequency of either THA or THS strategy use; however, being placed in the four groups of planning time did. At the same time, there seems to exist a kind of trade-off between the use of THA and THS in the second group, that is, extended task condition because, the highest use of THS and the lowest use of THA were both observed in this group. Moreover, as asserted by (Kellogg, 1988; Ong & Zhang, 2013); environmental conditions may affect the metacognitive processes, and then they in turn may affect the writing quality. In the free writing group of the present study, the highest use of THA was reported and the free writing participants produced the best quality essays.

Table 6.
Tests of Between-Subjects Effects for THS

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	62.553a	3	20.851	14.536	.000
Intercept	3650.236	1	3650.236	2544.738	.000
Group	62.553	3	20.851	14.536	.000
Error	147.746	103	1.434		
Total	3861.000	107			
Corrected Total	210.299	106			

a. R Squared = .297 (Adjusted R Squared = .277)

Table 7.
Descriptive Statistics for THS Use

Group	Mean	Std. Deviation	N
1	5.758	1.430	27
2	7.076	1.055	27
3	5.625	1.172	27
4	4.964	1.070	27
Total	5.841	1.408	108

Table 8.
Multiple Comparisons of THS Use inside the Groups

					95% Confidence Interval	
(I) group	**(J) group**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**Lower**	**Upper**
1	2	-1.318*	.323	.001	-2.237	-.398
	3	.133	.330	.983	-.805	1.073
	4	.794	.317	.106	-.107	1.696
2	3	1.451*	.339	.001	.488	2.415
	4	2.112*	.326	.000	1.185	3.039
3	4	.660	.333	.275	-.286	1.607

The second research question addresses the frequencies of the metacognitive strategies. Regardless of the planning time and writing mode conditions, there found to be a general penchant for strategy use among the participants. As Table 9 indicates, there exists a significant difference between Elaboration of Ideas (EI) strategy and THA and THS. Seemingly, the participants were more concerned with language aspects of their writings which includes sentence structure, grammar and word choice, and also with their essay structures than with the organization or elaboration of their ideas. While the GI strategy use at least in argumentative writings was dominant, the low EI strategy use, indicates the students' incompetence with regard to higher aspects of the writing performance such as elaboration of ideas which probably demands having a good command of pragmatic, linguistic and stylistic aspects of the writing task. Most undergraduate EFL learners in Iran are more concerned with what to say than with how to say, which demands the elaboration of ideas strategy.

Moreover, the fact that EI strategy use is not significantly different from Organization of Ideas strategy indicates that having the ideas, or presenting them are important, and the students are not particularly concerned with the manner of presenting their ideas or working on their ideas to be polished and elaborated probably because these sophistications demand a higher command of the language which these EFL writers lack. Another explanation for this must be sought in the instructions which EFL writers receive. If learners are capable of producing grammatically flawless sentences, the instructors are satisfied because the EFL writers' problems with grammar, diction or vocabulary and their low linguistic proficiency dismiss the elaborate instruction

of higher aspects of writing task even if they are included in the syllabus. This is completely natural should the mean of THA strategy use exceed those of EI, and OI because these aspects are of secondary importance for EFL instructors. The essay structure at the formal level of the triple –part division of introduction, body, and conclusion is mostly what the students are taught. The participants not only reported that they had thought about the structure of their essays, they also had almost unanimously observed the afore-cited triple division in their writings. It might be inferred that this formal aspect was not very difficult to achieve because the content classification of these aspects was not observed as for instance their introduction somehow contained statements which could have been included in the discussion part and sometimes the three paragraphs which made up the body or the discussion part of the essays contained general notions which were suitable for the introduction. However, the essays had all an introduction, body and a conclusion.

Table 9.
Multiple Comparisons of Metacognitive Strategy Use

		Mean Difference			95% Confidence Interval	
(I) stra	**(J) stra**	**(I-J)**	**Std. Error**	**Sig.**	**Lower**	**Upper**
GI	**EI**	.607	.202	.063	-.019	1.234
	OI	.271	.202	.775	-.355	.897
	THS	-.168	.202	.953	-.794	.458
	THA	-.205	.202	.905	-.832	.421
EI	**OI**	-.336	.202	.600	-.963	.290
	THS	-.775*	.202	.006	-1.402	-.149
	THA	-.813*	.202	.003	-1.439	-.186
OI	**THS**	-.439	.202	.322	-1.066	.187
	THA	-.476	.202	.239	-1.103	.150
THS	**THA**	-.037	.202	1.000	-.664	.589

Discussion and Conclusion

Investigating the effects of the four planning time and the two writing modes over the metacognitive strategies used by the EFL learners in the present study showed that there were significant differences between argumentative and expository writings within the four groups of the study regarding the exploitation of Generation of Ideas strategy. This cognitive strategy was employed more significantly in argumentative writings. The highest mean for the GI strategy was observed in the free writing group in argumentative writings. This finding indicates that being placed in the free writing planning time meant the generation of more ideas, especially when the students wrote argumentative writings. Ong (2014) found no significant effect of the planning time conditions on any one of the five metacognitive strategies which she investigated. In the present study, EI strategy use was significantly different from THA and THS, and the lowest strategy use belonged to EI. This finding implies that our participants were more concerned with language aspects of their writings which includes sentence structure, grammar and word choice, and also with their essay structures than with the organization or elaboration of their ideas. The reason for this unanimous observation of the triple division of introduction, body and conclusion, at the formal level and not necessarily at the content level by our participants might be sought in the simplicity of it and the fact that it did not exert pressure upon their limited attention resources (Ong, 2014; Galbraith, 1999). At the same time, the fact that EI strategy use is not significantly different from OI strategy indicates that having the ideas, or presenting them are important and the students are not particularly concerned with the manner of presenting their ideas or working on their ideas to be polished and elaborated probably because these sophistications demand a higher command of the language which these EFL writers lack. The results also indicated that there was no significant difference between argumentative and expository writings regarding the use of EI.

Concerning the use of THA strategy among the four groups, it was observed that there were significant differences between the groups in the use of this strategy. In the third group (Free writing), the highest use of this strategy was reported. The use of this metacognitive strategy might be justified by the fact

that depicting grammar, diction, and vocabulary are significant matters of the writing act, occurring simultaneously with the writing activity and that is why THA was employed the most in the free writing group. These findings endorse the implications of (Ellis & Yuan, 2004; Kellogg, 1988, 1990; Ong & Zhang, 2010). In the present study, the environmental conditions such as planning time show to be more effective than task conditions such as writing mode on the frequency of metacognitive strategies. Moreover, in the present study there was no significant difference between argumentative and expository writings regarding the use of THA. Considering the use of THS strategy inside the groups revealed significant differences between the groups. The highest use of this strategy belonged to the second group or Extended Task a finding in contrast with that of Ong (2014) which might be attributed to both the proficiency levels of the participants in the two studies and their cultural background. It was also revealed that the second group (Extended Task) had significant differences with all the other groups. THS was the second more frequently used strategy among the five strategies. The highest strategy use belonged to THA. THS was employed the most in Extended Task group; while, THA was the most frequently employed in the free writing group and it was the least employed strategy in the second group. As for the exploitation of these two strategies by the students who wrote expository or argumentative essays, no significant difference was observed.

The present study may serve instructors of EFL writing. Studying the use of metacognitive strategies according to Watkins (2019) will help EFL researchers see how learners become autonomous in their language learning activities. This study may raise consciousness among material developers and syllabus designers to have the learners' cognitive and metacognitive strategies in mind while preparing materials for EFL learners. Moreover, according to Arian and Mamaghani (2019) planning time studies can open up new arena in the production of texts and their inherent limitations and possibilities must be considered in the production of written texts in the second language.

The present study possesses a number of limitations. One of the main limitations of this study is its sample size because each group contained only 27 participants. Therefore, its findings should be handled with care. Second, the results of a retrospective questionnaire might be affected by the respondents' fatigue or carelessness when answering the questions due to already finishing another task. Moreover, there might be discrepancy between the real amount of using the strategies and the reports of the participants. Thirdly, this study only dealt with two writing modes, expository and argumentative writing and it did not deal with the other writing modes. The reader should be notified that the results of the present study must be interpreted with care as there is the possibility of the effects of a number of factors such as cultural conditions and context, participant's age and gender, and more importantly, the researchers' own inclinations and tendencies. Finally, it must be noted that planning time studies in general suffer from controversial findings as asserted by Ong and Zhang (2013) the contradictory findings of planning time conditions and writing task studies are not surprising.

Suggestions for Further Research

The present study can be replicated with greater number of participants to increase both its validity and reliability. This study can also be replicated under the other writing modes, such as descriptive or narrative modes. The relationships between metacognitive strategies, different writing modes and writing quality can also be studied building upon the findings of the present study. The interactions between writing tasks, metacognitive strategies and environmental conditions of writing tasks can also be an interesting topic to be followed in further studies. Changing the data collection instrument from a retrospective questionnaire to other instruments for eliciting data such as interviews and think aloud protocols can be fascinating for researchers. Extensive case studies can also be conducted on planning time issues and metacognitive strategies by highlighting the possible individual differences among the participants. Planning time conditions, writing task modes and metacognitive strategies can also be studies across various proficiency levels and their interactions can be investigated.

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Appendix Metacognitive Strategy Questionnaire
Name:
Index No.

Please circle the number which best indicates you. 1 represents "Not at all" to 8 represents "Very. "

1. **During writing**, how frequently did you find yourself thinking of **newly formed ideas** for the essay?
Never 1 2 3 45 67 8 All thetime

2. **During writing**, how frequently did you find yourself thinking of **elaborating newly formed ideas?**
Never 1 2 3 4 5 6 7 8 All the time

3. **During writing**, how frequently did you find yourself thinking of **organizing newly formed ideas**?
Never 1 2 3 4 5 6 7 8 All the time

4. **During writing**, how frequently did you find yourself thinking of how to **organize the essay structure**?
Never 1 2 3 4 5 6 7 8 All the time

5. **During writing**, how frequently did you find yourself thinking of **language aspects of essay**, e. g., word choice, sentence structure, grammar?
Never 1 2 3 4 5 6 7 8 All the time

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