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The Combined Effects of Pre-task and Careful Online Planning on EFL Learners' Written Discourse

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Abstract

The present study aimed at examining the combined effects of pre-task and online planning time on complexity, accuracy, and fluency in narrative-based texts produced by Iranian intermediate EFL learners. Overall, the implemented studies in this regard point to the facilitative impacts for both pre-task and careful online planning on complexity, accuracy, and fluency with some recorded trade-off effects. Using a between-groups design, sixty homogeneous participants were randomly assigned to four performance conditions: no planning (NP), careful online planning (OLP), pre-task planning (PTP), and both pre-task and careful online planning (POLP). The findings revealed that pre-task and careful online planning don't have any significant effects on the level of complexity. The results also suggested that whereas the provision of abundant online planning time increases the accuracy level, the opportunity to plan prior to performance leads them to generate more fluent written discourse. In addition, compared with the NP condition, pre-task in tandem with careful online planning time enable the participants to produce more accurate, and fluent written discourse that lend support to the Dual-Mode system and Limited Attentional Capacity Model. The findings are of pedagogical significance in that they speak of the efficacy of planning as an important metacognitive learning strategy capable of helping teachers achieve the desirable pedagogical objective of enhanced complexity, accuracy, and fluency of learners' task-based production. Theoretically, the results underscore the effectiveness of planning time in helping language learners overcome the limitation of their attentional capacity and direct them towards aspects of form and meaning.

Keywords: accuracy, complexity, fluency, on-line planning, pre-task planning, written discourse

1. Introduction

Richards and Renandya (2002) claim that writing is considered to be the most challenging L2 skill to develop and it involves a complex process of planning, generating, and organizing ideas. This skill is especially difficult to master when L2 learners' proficiency level is low (Richards & Renandya, 2002). According to Belcher and Hirvela's (2001) view, writing is a cognitively demanding process and comparable with a problem-solving task or decision-making task in a chess game. As proposed by Collins and Gentner (1980), the writers cope with the synchronized processes of transcribing thoughts into words, revising, and sub processes of planning.

In spite of the mentioned processes, the writers apply a great deal of efforts to deal with the problems of spelling, punctuations, selection of appropriate words as well as the peculiarities of syntax and paragraph development (Bereiter & Scardamalia, 1987). Allocated cognitive demands to handle all of the required processes in writing are in harmony with the writers' linguistic and genre knowledge to write perfect texts. These concurrent operations of processes required and engaged in writing (Torrance & Galbraith, 2006) overburden restricted attentional storage of the working memory that results in failure in writing (Butterfield, Hacker, & Albertson, 1996).

Based on *limited attentional capacity* model, depending on their proficiency level, the writers prioritize a restricted amount of information to be processed (Anderson, 1995; Skehan, 1996) at the particular point in time. In fact, it is not easy for the participants to strike a balanced equilibrium of attention simultaneously to all dimensions and requirements of the task completion (Anderson, 1995). In other words, allotting attention to one facet of language, in the same condition, may lead to imperil other aspects (Skehan, 2009). To diminish the problems that the learners encounter, based on Skehan (1996), they can resort to changing procedural options (e.g. the amount of time given to the learners to plan before or within their performance). Providing the participants with opportunities to orchestrate upcoming task - ahead and/or within - task can compensate for some difficulties some writers confront and can enhance and enrich the quality of their linguistic output. Skehan (1996) has distinguished Complexity, Accuracy, and Fluency (CAF) as three characteristics of the participants' linguistic performance.

A number of studies have explored the effects of planning time on the language performance in terms of complexity, accuracy, and fluency (Ellis & Yuan, 2004; Skehan, 1996; Wendel, 1997; Yuan & Ellis, 2003). Overall, regarding the effects of planning on the language production, the investigations have yielded various results that have promoted the understanding of the task performers' cognitive processes. However, few studies have examined the synergistic impacts of two types of planning on written narratives. This study was, therefore, conducted to explore the simultaneous use of strategic planning and un-pressured (careful) online planning on English as a Foreign Language (EFL) narrative discourse to realize how to put the planning stage on the right track and identify when and what amount of time and what type of planning to use, depending on the situation, to promote the quality of written discourse.

1.1 Statement of the Problem

Previously published works have mostly focused on the effects of different types of planning on complexity, accuracy, and fluency in isolation (Ahmadian & Tavakoli, 2014; Kawauchi, 2005). A number of studies explored the effects of planning time on the language performance in terms of complexity, accuracy, and fluency (Ellis & Yuan, 2004; Skehan, 1996; Wendel, 1997; Yuan & Ellis, 2003) and a number of studies have devoted the impacts of planning on oral tasks (Yuan, 2001; Yuan & Ellis, 2004). The findings of some studies revealed positive impact of within-task planning on accuracy (Rostamian et al., 2017; Sharafi-Nejad, Raftari, Ismail, & Eng, 2016) and the findings of some studies represented positive influences of planning in advance of the task completion on fluency (Rahimi & Zhang, 2018; Rostamian et al., 2017).

Although in this regarding the previous investigations came to valuable results that promote the understanding of the task performers' cognitive processes, there are some potential problems such as the synergistic effects of two types of planning on written narratives that have to be resolved. The present study will hopefully contribute to the available literature by simultaneously investigating the combined effects of both strategic and un-pressured (careful) online planning on EFL learners' written discourse in order to come to insights into how to put the planning stage on the right track and distinguish when and what amount of time and what type of planning to use, depending on the situation, to promote the quality of written discourse. The findings will shed more light on the issue of task implementation and its effects on the complexity, fluency, and accuracy and consequently enable us to arrive at a more comprehensive theory of planning as one of self-regulatory strategies to resolve Iranian EFL learners' problems.

1.2 Research Questions

The research employed a between - groups design and sought to examine the combined effects of two different planning on the written discourse quality through measuring complexity, accuracy, and fluency. According to theoretical and empirical rationales, the present study attempts to answer the following research questions:

- What are the combined effects of pre-task and careful online planning on the complexity of Iranian intermediate EFL learners' written discourse?
- What are the combined effects of pre-task and careful online planning on the accuracy of Iranian intermediate EFL learners' written discourse?
- What are the combined effects of pre-task and careful online planning on the fluency of Iranian intermediate EFL learners' written discourse?

1.3 Research Hypotheses

To attain the purpose of the study, the following research hypotheses were formulated.

- The combined pre-task and online planning don't lead to complex written discourse.
- The combined pre-task and online planning don't lead to accurate written discourse.
- The combined pre-task and online planning don't lead to fluent written discourse.

2. Review of the Literature

2.1 Definition of Task Planning

Building on Ellis's (2003) frame of mind, a task is a goal-oriented and meaning-focused activity that is the result of the application of the performers' four language skills as well as their cognitive processes to real language context. Drawing on Ellis' (2005) view point, pre-task (that take places prior to the participants' performance) and online planning (that occurs within their task operations) are two main types of task planning. Pre-task planning can be further classified into strategic planning which allows task performers to map the content and language without repetition and rehearsal type in which the learners are allocated the opportunity to rehearse before the main task. Ellis has also distinguished between pressured and un-pressured online planning, the former points to within-task planning that occurs during pressured operations and the latter to the type of planning the learners engage in during the task implementation without the time constraint. To explore planning time effects on the writing process, Kellogg's (1996) model of working memory in L1 writing seeks to tie predictions of Skehan's (1998) restricted attentional space model.

2.2 Kellogg's Model of Writing

Kellogg's model (1996) conceptualizes the writing process in terms of three stages (1) *formulation*, (2) *execution*, and (3) *monitoring*. Within every one of these stages, various cognitive demands are loaded on the working memory capacity. The first stage is *formulation* during which the greatest load, depending on the writer's proficiency level, is imposed on the working memory resources that consist of (1) *planning*: through which organizing ideas and opinions pertinent to the already-originated goal are accomplished, and (2) *translating*: in which lexical devices and grammatical structures are used to encode abstract ideas and impressions into linguistic forms .The second stage, *execution*, is characterized in two steps: (1) *programming*, in which the outcomes of *translation* stage are transformed into motor directions to the relevant muscles and (2) *Executing*, that is a system for accomplishing instructions of the previous systems. The third process is *monitoring* that accommodates some demands on the working memory. This system comprises two sub-processes: (1) *reading* for reconsidering correctness of the composed text and (2) *editing* within which more proficient writers review and revise the text form. Through *editing*, writers reconsider and reweigh the decisions made in the *formulation* process. Within *monitoring* system, the writer's attention is captured toward reconsidering the conveyed contents in the aspect of correctness, coherency, and cohesiveness. In this stage, the writers rethink about appropriateness of the composed text.

2.3 Limited Attentional Capacity

Drawing on Anderson (1995) and Skehan's (1996) perspective, concentrating on both formal and conceptual dimensions of the task completion cannot be easy for the learners. Building on the proposed assumption of *limited attentional capacity*, Skehan (1998) posited that the rule-based system that requires more time and attention to make

complex sentences coexists with the exemplar-based system that predisposes language users to attain ready-made chunks of language. The exemplar-based system is used to make fluent and fast language. In this regard, Skehan proposed that learners, depending on the imposed demand on their resource, go back and force between these systems (as a dual-mode system) naturally. Based on this model, compared with lexical store, it is more difficult for the learners to reach grammatical repertoire. In fact, the availability of abundant time inclines the participants to devote the required attentional resources to achieve the rule-based system.

2.4 Measurement of the CAF Triad

Drawing on Wolfe-Quintero, Inagaki, and Kim (1998), in the current study, C-units were selected to measure complexity, accuracy, and fluency of written discourse. In the current research, to estimate the complexity of written discourse, based on Lu (2010), the Mean Length of Clauses (the percentage of words to the amount of clauses) were considered. Regarding accuracy based on Ellis and Yuan (2004), accurate clauses were taken into account. Clauses contained all lexical, morphological, and syntactic errors were considered as erroneous clauses. To calculate fluency, the ratio of the amount of syllables divided by the amount of minutes taken to produce the written text were considered (Skehan & Foster, 1997). In order to ensure the consistency of the complexity, accuracy, and fluency measures, the written production of the participants were calculated by two MA English teaching students. The inter-rater reliability coefficient was greater than 0.88 between the two raters for all measures. Then the obtained results were entered into SPSS and the descriptive statistics were checked for normality of distribution.

2.5 Previous Findings

Previous studies have generally shown that provision of different types of planning, be it pre-task, or careful online planning significantly influence learners' task-based production. Empirical evidence confirms the generally beneficial effects for giving language learners planning time to prepare their massage before performing a task on fluency and complexity of discourse, with the findings for accuracy being mixed. Besides, researchers have demonstrated the overall favorable effects allowing learners to engage in careful online planning while carrying out a task causes the accuracy and complexity of the resultant production. The effects on fluency, however, have been negative (Ellis, 2009).

Looking at the previous studies conducted in the field of the effects of both pre-task and on-line planning on written production, it could be observed that planning has a positive effect on language performance considering fluency, complexity, and accuracy (Ellis &Yuan, 2004; Sangarun, 2001; Skehan, 1996; Skehan & Foster, 1997; Wendel, 1997; Yuan, 2001; Yuan & Ellis, 2003). The results of some studies suggest that accuracy is raised when pre-task planning is allowed (Ellis, 1987; Kawauchi, 2005; Mehnert, 1998), this claim is not supported by some other scholars (Ellis &Yuan, 2004; Kawauchi, 2005; Wendel, 1997; Yuan, 2001; Yuan & Ellis, 2003) and on the other hand, they support the influence of planning on complexity and fluency.

However, the overall generalization of the effects of on-line planning on language production is that it promotes the accuracy of learners' production as learners are given time to plan on-line and to monitor their output, although other studies give support to the positive effect of complexity and fluency (Ahmadian & Tavakoli, 2011; Yuan, 2001; Yuan & Ellis, 2003) on on-line planning, too. Generally, mixed results have been found regarding the impact of planning on language production. Therefore, studies on the effects of planning on second language production seem to further our understanding of the cognitive processes involved in second language (L2) production (Piri, Barati, & Ketabi, 2012).

Regarding complexity, some investigations revealed the facilitative effects of preplanning on the complexity level (Ellis & Yuan, 2004; Foster & Skehan, 1996; Mehnert, 1998; Rahimi & Zhang, 2018; Rostamian et al., 2017; Wendel, 1997; Yuan & Ellis, 2003). Elsewhere, some investigations indicated that online planning affects complexity positively (Yuan & Ellis, 2003) while some studies proved negative effect of preplanning on lexical complexity (Ong & Zhangs, 2010).

Concerning accuracy, the findings of some studies displayed positive influence of within-task planning on accuracy (Rostamian et al., 2017; Sharafi-Nejad, Raftari, Ismail, & Eng, 2016; Yuan & Ellis, 2003). The Findings of other investigations came to the conclusion that pre-task and careful within-task planning enhances accuracy (Ellis, 1987). Overall, concerning the effects of planning on the language production, the investigations came to varying conclusions. The research was, therefore, implemented to provide new insights into how to distinguish when and what amount of time and what type of planning time to advance the quality of written text.

With regard to fluency, the findings of some studies represented favorable effects of planning in advance of the task completion on fluency (Ellis & Yuan, 2004; Foster & Skehan, 1996; Kellogg, 1990; Mehnert, 1998; Ong & Zhang, 2010; Rahimi & Zhang, 2018; Rostamian et al., 2017; Skehan & Foster, 1997; Yuan & Ellis, 2003) while other studies proved detrimental effects of preplanning time on fluency (Ong & Zhang, 2010). Some investigations revealed that online planning affects fluency negatively (Rostamian et al., 2017).

3. Methodology

3.1 Design of the Study

The present experimental research employed a between-groups design and sought to examine the combined effects of two different planning on the written discourse quality through quantitative analysis of complexity, accuracy, and fluency measurement. To this aim, all data gathered were numerical and objective from participants that administered a narrative task in four groups, each of which performing the task under one of the following conditions: no planning, careful online planning, pre-task planning, and both pre-task and careful online planning: In the first condition, with no time to plan, the learners had limited amount of time (30seconds) to be prepared to administer the task, and 3 minutes to perform the tasks. In the case of second condition, without pre-task planning and with online planning, learners were not allocated opportunity to plan, so they will be required to utilize just 30 seconds before the task completion. The third one, with pre-task planning without online planning under which task performers were given 10 minutes time to plan prior to performing the task and 3 minutes within executing the task. Mehnert (1998) found that equipping performers with 10 minutes time to be prepared makes it probable to measure complexity, accuracy, and fluency. The last condition, with both pre-task and online planning, under which learners will be allowed to benefit from10 minutes time to program the task in advance and ample time to do the task.

3.2 Participants

A total of 60 Iranian intermediate EFL students in one of the language institutes of Isfahan, Iran were recruited from among 105 EFL learners, as participants of this study. They were 33 males and 27 females, aged between 16-21 years old. They had studied English for nine months under the same material and instructional context, 6 hours a week: 2.5 hours listening and speaking, 3.5 hours reading and writing. The participants had little chance to learn English out of the classroom. Since writing expertise influences L2 writing (Cumming, 1989), to be ensured of the consistency of the task executers' L1 ability, all 105 learners were prompted to narrate a picture story from Hill (1960) in Persian at the outset of the study. The narrative task consisted of a series of related pictures in a chronological order that were about a man whose house was near a railway. One day, he found a tree fallen on the railway. He thought that it would be dangerous; therefore, he climbed over the tunnel, stood on the railway and shouted to call the attention of the train conductor to himself and the danger on the way ahead. Finally, he succeeded to stop the train and rescued many lives. Several days later, he was awarded by those people. The participants' narrations were assessed by an MA literature-major student, and were given numerical scores. Seventy five participants who had gained above 16 out of 20 were taken to remain in the study and their homogeneity regarding their proficiency was tested and was found to be certified by their obtained scores from an Oxford Placement Test (OPT) (Allen, 2004). Sixty learners who obtained equal or above the intermediate OPT scores, were selected from among 75 learners. The selected participants were randomly assigned to perform the task in four groups. Regarding OPT results, one-way Analysis of Variance (ANOVA) indicated no significant differences between the groups.

3.3 Materials and Instruments

3.3.1 Narrative Writing

In the current study, to elicit the participants' performance, following Tavakoli and Foster (2008), a picture story adopted from Heaton (1966) was selected to be used as the base to assess the participants' narration skills (Figure1). The figure reflects a story about a group of players playing football, but suddenly, someone hit the ball and it fell in a hole near the place they were playing. They really wanted to get back to their game, so they decided to somehow get their ball back. Their first attempt to stretch arms to take the ball out resulted in pulling out other stuff earlier fallen or dumped in the hole or even some stones. This idea having failed was discarded. After a while, one of them brought a washtub full of water. Actually, he decided to fill the hole with water and after a while the ball was floating on the surface. Finally, they got their ball back.

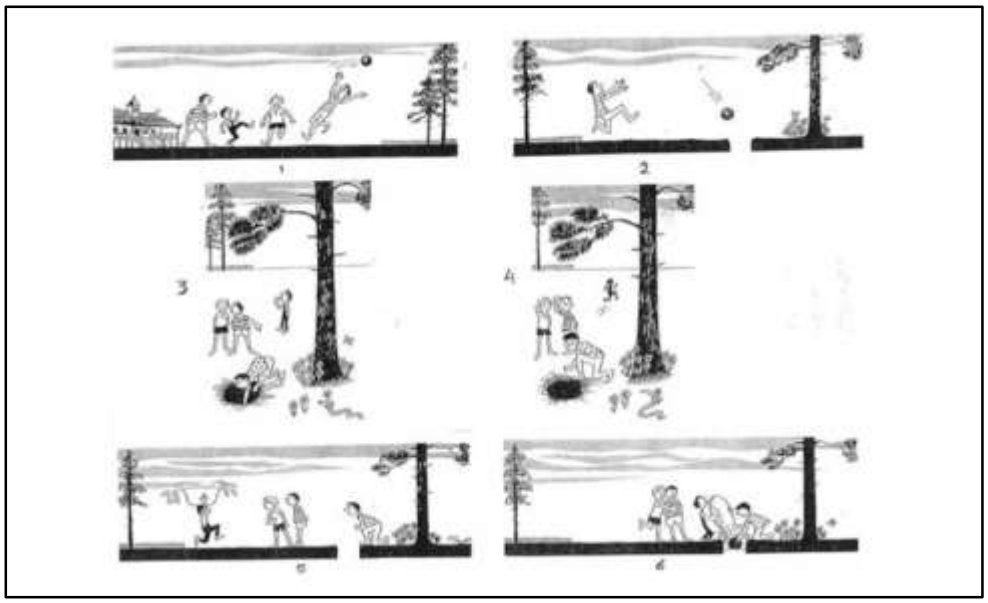

Figure 1**.** Football task adopted from Heaton (1966)

3.4 Procedure

3.4.1 Operationalizing of Planning Conditions

The current study aimed to investigate the impact of two types of planning opportunity, pre-task and online planning as independent variables of the study, on the quality of the learners' written discourse complexity, accuracy, and fluency as dependent variables of the study. To pursue this goal, 60 participants were selected and assigned and persuaded to perform the task in four groups, every one under one specific condition:

1. No Planning condition (NP): without pre-task and careful online planning time,
2. Online Planning condition (OLP): without pre-task and with careful online planning time,
3. Pre-task Planning condition (PTP): with pre-task and without online planning time, and
4. Pre-task and Online Planning condition (POLP): with both pre-task and careful online planning time.

They did not receive any instruction regarding how to plan prior or within their composition. To implement the task under the NP condition, the learners were required to design the task in thirty seconds and jot down their notes in three minutes. In the pilot study, ten students at intermediate level were assigned to write the story immediately after receiving the picture story - in order to prevent preplanning, and without any pause during their writing - in order to avoid online planning. The fastest students narrated the story in three minutes. Thus, this time was established to be the time limit. They also were prompted to write at least sixty words in order not to waste time. The task executers were prompted to look at the series of pictures in thirty seconds under the OLP condition, but they were allowed to record the story without time limitation. In the PTP condition, learners were allocated ten minutes to consider the events in the set of pictures since Mehnert (1998) had found that equipping performers with a ten-minute time to be prepared would be enough to measure complexity, accuracy, and fluency. In order to do the task, they were devoted three minutes time to write at least sixty words during the time at their disposal. Under the PTOLP condition, task executers were given ten minutes to look at the series of pictures and plan before beginning their performances and also they were allowed to narrate the story without time limitation. They were not urged to write at least sixty words during their opportunity.

3.5 Data Collection

To elicit the task executers' performance and collect the data, the participants were prompted to narrate the picture story consists of a set of related pictures in a chronological order. The informed consent was gained from 60 attendants

that were assigned randomly to administer a narrative task in four groups, each of which performing the task under one of the following conditions: no planning, careful online planning, pre-task planning, and both pre-task and careful online planning. To compare the result of attendants' outcome on four types of conditions, the recorded narrations were segmented, coded, and scored according to the measures selected for assessing complexity, accuracy, and fluency of every performance and the numerical and objective data were collected.

3.6 Data Analysis

In order to explore the effects of pre-task and online planning on the learners' writing quality, the obtained scores were entered into Statistical Package for the Social Sciences (SPSS) and the descriptive statistics were checked for normality of distribution. One-way ANOVAs were run to establish statistical significance of mean differences in terms of complexity, accuracy, and fluency across the groups. However, to determine the exact location of significant mean differences, a post-hoc Scheffe analysis was used.

4. Results

The first research question pertaining to the combined effects of pre-task and careful online planning on the complexity of Iranian intermediate EFL learners' written discourse. Descriptive statistics set out in Table 1and Table 2 suggested that the participants in the POLP (M = 8.64, SD = 0.43) groups gained the highest mean scores and the participants in the PTP group get the lowest mean scores. As one-way ANOVA indicated, the difference between the conditions didn't reach the level of significance ($p > 0.005$). Hence, the first hypothesis is supported.

The second research question addressed the combined effects of pre-task and careful online planning on the accuracy of Iranian intermediate EFL learners' written discourse, the mean scores for accuracy (the error free clauses) of the four groups were calculated and compared. Regarding accuracy (as shown in Table 1), in comparison with the NP group, the participants of the POLP (M=.72, SD=.12) and OLP (M= 0.81, SD = 0.14) group obtained higher mean scores and as it is clear in Table 2, there were significant differences between the mean scores in the groups ($p = 0.00$). Hence, the second hypothesis is rejected.

Table 1. Descriptive statistics and results of ANOVA test for the complexity, accuracy, and fluency measures

	Mean(SD)				ANOVA	
Variables	NP	OLP	PTP	POLP	F	Sig
Complexity	8.06 (.60)	8.58 (.39)	7.85 (.93)	8.64 (.43)	5.76	.00
Accuracy	.49 (.16)	.81 (.14)	.45 (.24)	.72 (.12)	14.93	.00
Fluency	13.73 (.90)	14.94 (3.29)	19.62 (.60)	18.72 (.95)	37.81	.00

Note: NO = No Planning; PTP = Pre-task Planning; OLP = Online Planning; PTOLP = Pre-task Planning and Online Planning

Table 2. Results of post-hoc Scheffe test and location of significant mean difference for the complexity, accuracy, and fluency measures

Variables	Location of Significance					
	NP-OLP	NP-PTP	NP-POLP	OLP-PTP	OLP-POLP	PTP-POLP
Complexity	.17	0.84	.10	*.02	.99	*.01
Accuracy	*.00	.92	*.00	*.00	.58	*.00
Fluency	.34	*.00	*.00	*.00	*.00	.60

*$P<.0$

The incentive behind posing the third research question was to know the combined effects of pre-task and careful online planning on the fluency of Iranian intermediate EFL learners' written discourse. The four groups' fluency mean scores were calculated, compared with the NP group, the participants of the PTP (M = 19.62, SD = 0.6) and POLP (M=18.72, SD=.95) group could get the higher mean scores (Table1) and the differences of mean scores in the groups were significantly different (as indicated in Table 2) at the ($p < 0.05$) level. Hence, the third hypothesis is rejected.

5. Discussion

The current study attempted to consider the combined impacts of pre-task and online planning on complexity, accuracy, and fluency in Iranian intermediate EFL learners' written discourse.

With regard to the first question posed pertaining to the combined effects of pre-task and careful online planning on the complexity of Iranian intermediate EFL learners' written discourse, the findings of the study came to the conclusion that compared to the NP group (M = 8.06, SD = 0.60), the POLP (M = 8.64, SD = 0.43) and the OLP (M = 8.58, SD = 0.39) conditions boost the level of complexity, but the effects are so small as to be inconsequential. However, these results run counter to the previous studies that found favorable impacts of preplanning on syntactic complexity (Ellis & Yuan, 2004, 2005; Yuan & Ellis, 2003). The results lend support to the outcomes of previous examinations that revealed no effect of preplanning on complexity (Johnson et al., 2012; Ong & Zhang, 2010).

The findings of the current study provide further evidence in support to the restricted nature of the learners' working memory (Skehan, 1998) in that when demands are imposed on the working memory, they devote these restricted capabilities (1) to administrating tasks and focus on the aspect of fluency or (2) attending to the complexity and accuracy dimensions (Skehan & Foster, 2001). In other words, there is a trade-off between complexity and fluency in the PTP condition. In fact, the task performers produced more fluent outcomes at the expense of complexity. Based on Kellogg's model of writing (1996), it is interpreted that opportunity to plan prior to participants' performance, enables the participants to involve in preplanning activities such as brainstorming, goal setting, and outlining processes to write fluently and effectively; therefore, building on *Limited Attentional Capacity* model they cannot concentrate to produce more detailed and complex propositions. In other words, based on the findings of the current study, the task executers benefiting from preplanning time to create clear text, did not attempt to achieve more expanded grammatical structure.

Regarding the effects of other conditions on this dimension of language, the outcomes displayed no significant effects of online planning (M = 8.58, SD = 0.39) on complexity. This conclusion is consistent with the results that Ahmadian and Tavakoli (2014), Ellis and Yuan (2005), and Yuan and Ellis (2003) obtained. Based on Skehan's (1998) dual-mode system proposal, under the limitation of time, exemplar-based system can be attainable, in which a large number of ready-made chunks of language are accessible because it loads the lower amount of demand on the participants' cognitive resources while under online planning condition with an abundant time, due to have an ample time, the learners are more likely to use chance to access their rule- based system during the translation system that comprises generative linguistic rules of written text production. In other words, having an ample time enables the participants to

attain cutting edge knowledge of language to produce more accurate outcome. In the light of Foster and Skehan's (1996) perspective, there is a trade-off between accuracy and complexity. Performers under careful online planning condition produce more accurate outcomes at the expense of complexity.

Regarding the second research question concerning the combined effects of pre-task and careful online planning on the accuracy of Iranian intermediate EFL learners' written discourse, these results lend support to the previous studies that found significant impact of online planning time on the accuracy (Ahmadian & Tavakoli, 2014; Ellis & Yuan, 2004, 2005; Yuan & Ellis, 2003) and no impact of preplanning on accuracy (Ellis & Yuan, 2004 & 2005; Yuan & Ellis, 2003).

Based on the findings of the current study, compared to the control group (M = 0.49, SD = 0.16), task executers with the chance of on-line planning - consists of OLP (M = 0.81, SD = 0.14) and POLP (M=.72, SD=.12) - achieved a higher level of accuracy that can be explained with reference to Skehan's (1998) Dual-Processing model. Based on Skehan (1998), since accessibility to rule-base system is more difficult for the learners; therefore, more time and attention will be required to reach grammatical repertoire than lexical store. Availability of an ample time inclines the learners to devote much of their attentional resources to access the rule-base system. In fact, provision of time predisposes the participants to access their grammatical repertoire that enables them to convey their intended message through selecting appropriate and accurate structures.

In response to the third question regarding the combined effects of pre-task and careful online planning on the fluency of Iranian intermediate EFL learners' written production, the findings illustrated that in comparison with the NP group (M = 13.73, SD = .90), the groups with the chance of preplanning - consist of POLP (M = 18.72, SD = 0.95) and PTP (M = 19.62, SD = 0.60) groups - result in greater level of fluency but no significant effect on accuracy and complexity. On the whole, these findings are in line with the previous studies that found positive influences of preplanning opportunity on the fluency of the participants' outcomes (Ellis & Yuan, 2003, Johnson et al., 2012; Kellogg, 1990, Ong & Zhang, 2010) .In the light of Kellogg's model, provision of time meets the composers' need to opportunity in order to understand the task, plan their goals, organize their ideas, and think about how to write them in English in advance of performing the tasks. In other words, provision of the time lessens loaded demands on the working memory capacity; therefore, more attentional resources will be devoted to translation stage. As a result of planning upcoming task, they produce their written narrative faster than those without time to think in this regard. Pre-planning does have a facilitating role through providing time to meet the learners' needs to map the content, and organize them during the determined time they have at their disposal; therefore, the task performers create clearer and more effective written text, maybe because of enhancing confidence in them.

6. Pedagogical Implications

Since writing is one of the prominent skills in teaching and learning English language and EFL learners need to improve their quality in this skill, more attention should be focused on appropriate strategies to promote the students' potential to obtain better results. From a pedagogical point of view, meta-cognitive strategies possessing prominent functions, are applied in order to understand, control, evaluate, and monitor cognitive strategies. Employing planning as one of the metacognitive strategies and self-regulation processes does have a crucial role in the realm of pedagogy to achieve an advanced quality in writing. For the learners with the lower proficiency level, it is not easy to maintain an equilibrium of attention on both dimensions of language- content and form, so teachers and syllabus designers should manage to offer opportunities to the learners at their disposal to facilitate students' progressive trend towards prioritizing their intended aspects of language to achieve their goals. Overall, based on the present findings, resorting to some solutions, like manipulating planning time in different conditions, can compensate some of task performers' limitations.

7. Conclusion

The present study sought to examine the impact of pre-task planning, careful on-line planning, and the combined effects of these two types of planning on complexity, accuracy, and fluency in EFL learners' written discourse. The findings of this study contributed to existing literature by illuminating the role of planning that emphasized on some of the previous studies in this regard. In the PTP condition with determined time to plan, learners take advantages of preplanning in advance of performance, resulting in the enhanced self- steam, and also leads them to write clearly, effectively, and fluently. In fact, opportunity in advance of performance can lessen the attentional demand on working memory that enables the participants to devote more attention to translation and execution processes. The comparison

of the PTP condition vs. the OLP condition makes clear the effect of OLP to create more accurate outcome. To elicit accurate language, learners need to have enough opportunity and attention to concentrate on retrieving explicit knowledge from their long-term memory resulting in gains in accuracy. Equipping learners with the preparation time enables them to access their rule-based system to search in linguistic store that needs much time and attention. Regarding on-line planning, more amount of time will be allocated to better monitoring. In summary, it can be concluded that concerning the content, progressed by planning in advance, will reflect in more fluent and complex outcome while concerning the form, progressed by planning within a task accomplishment, will reflect in more accurate written discourse.

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