

Task Condition and L2 oral Performance: Investigating the Combined Effects of Online Planning and Immediacy

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Abstract

Research evidence reported to date demonstrates the differential effects of manipulating second language (L2) task conditions on the resultant production as measured in terms of complexity, accuracy, and fluency. The present study was aimed at adding to the available body of findings by exploring the synergistic effects of two task condition variables, namely online planning and immediacy (\pm Here/Now) on L2 oral discourse. For this purpose, 60 Iranian intermediate learners of English as a foreign language (EFL) were asked to perform the task of narrating a story based on a sequenced set of pictures under four conditions (i.e., Here/Now and pressed online planning, Here/Now and careful online planning, There/Then and pressed online planning, There/Then and careful online planning). The results of statistical analyses revealed that carefully planning speech while performing the task consistently assists complexity and accuracy, but negatively affects fluency of speech. Besides, it was observed that carrying out the same task using the past tense without contextual support (i.e., There/Then), if coupled with careful online planning, simultaneously enhances complexity and accuracy. Performing a task in Then/There also reduces fluency. Interestingly, it was also found out that the opportunity to carefully plan online while performing the task in There/Then exponentially increases complexity and accuracy with strong negative effects on fluency. Lastly, pedagogical implications of the findings are discussed regarding the contribution of task condition to directing learners' attention and their L2 speech quality.

Keywords: Task, online planning, immediacy, complexity, accuracy, fluency

Introduction

There has been considerable research in examining the effects of tasks and task conditions on second language (L2) performance. The extensive literature on tasks has focused, inter alia, on task type, and task characteristics. This strand of research has shown that there is a linkage between the existence of a clear structure in a task, the organization of information it contains, its familiarity and personal relevance and resultant L2 production in terms of its complexity, accuracy and fluency (see Wang & Skehan, 2014; Skehan & Shum, 2014; Tavakoli & Foster, 2008; Bui, 2014). The literature also abounds with research exploring the conditions under which tasks are carried out. In general terms, this line of research has been concerned with examining the effects of manipulating pre task, during task, and post task implementation conditions such as strategic planning, online planning, repetition, immediacy, and post task activities on the linguistic quality of resultant L2 output (see Ellis, 2009; Wang, 2014; Robinson, 1995; Foster & Skehan, 2013; Li, 2014; Bui, Ahmadian, & Hunter, 2019; Stroud, 2019).

In his comprehensive review of the literature on tasks and task conditions, Skehan (2016) comes to the conclusion that on the whole, the effects reported to date regarding task conditions have been more robust and significant than task characteristics. In the light of this evidence, an interesting question arises concerning whether and how task condition variables interact to

influence the performance variables of complexity, accuracy, and fluency of L2 output. In order to address this issue, the present research sought to explore the combined effects of two during task conditions, namely, availability of careful online planning and contextual support while performing a narrative task. It needs to be acknowledged at the outset that though Gilabert (2007) examined planning and contextual support, his study included only pre-task planning and left the effects of careful online planning out of consideration. Thus, the present research aimed at adding to the available research findings on task condition by exploring the synergistic effects of online planning and immediacy (\pm Here/Now) on EFL learners' oral performance as measured by its complexity, accuracy, and fluency. Given the centrality of complexity, accuracy, and fluency in developing 'functional proficiency' in L2 (Skehan & Foster, 1999, p. 116), it is essential to know how task conditions can be manipulated as pedagogical intervention tools to create optimum conditions for fostering gains in these performance areas.

Literature Review

Online planning

As an example of a during task condition, an increasing number of studies have focused on online planning. According to Ellis (2005), the distinction between careful online planning and pre-task planning is that whereas in the former learners are given enough time to plan their speech while carrying out a task, the latter allows language learners to plan what to say and how to put it prior to task performance (i.e., strategic planning). Alternatively, learners may be allowed to perform the same or slightly different task twice. In the case of task repetition then, learners' first performance is regarded as a kind of preparation for the subsequent performance. The study of planning has yielded a considerable sub-literature within task based research. In general terms, pre-task planning has been consistently associated with gains in complexity and accuracy. The results for accuracy, by contrast, have been less consistent (see Ellis, 2009 for a review). To account for the mixed results for accuracy, Ellis (2005) pointed to the need for investigating online planning.

The study of planning, be it pre-task or online, has been mostly premised on Levelt's (1989) model which captures speech production from a psycholinguistic perspective. In Leveltian terms, speech production is a process comprising three underlying stages, namely, the conceptualizer, the formulator, and the articulator. In brief, the conceptualizer generates the speaker's intentions in the form of 'pre-verbal' message, the formulator retrieves the required lexical items and corresponding syntactic structures, and finally the articulator transforms these into overt speech. Levelt's model also incorporates a 'self-monitoring' processing component which observes and monitors speaker's internal speech. Based on this model, it has been hypothesized that whereas pre-task planning assists the conceptualization process, the opportunity to carefully plan speech online planning supports the formulator stage, resulting in greater accuracy.

Up till now, several studies have examined the influence of careful online planning on the quality of resultant L2 discourse. In their pioneering study, Yuan and Ellis (2003) compared the effects of pre-task strategic planning and careful online planning. Their findings revealed that whereas allocating L2 learners abundant time to plan their speech online made for enhanced complexity and accuracy, the opportunity to plan strategically made for enhanced fluency. The researchers also found that online planning did not inhibit fluency. Elsewhere, Ahmadian and Tavakoli (2011) investigated the combined effects of careful online planning and task repetition on the CAF of Iranian EFL learners. Regarding online planning, it was observed that this task

implementation variable has positive effects on accuracy and complexity. These gains, however, compromised fluency.

Ahmadian, Tavakoli, and Vahid Dastjerdi (2015) explored the way task design, operationally defined in terms of the existence of a tight storyline in a narrative, interacted with careful online planning to affect the CAF triad. It was found that narrative type significantly mediates the effect of planning on different dimension of L2 speech. More specifically, they reported that the tightly structured narrative performed under careful online planning condition led to gains in all performance areas. It was also discovered that performing a loosely structured narrative under time pressure resulted in the lowest complexity, accuracy, and fluency scores. Ahmadian and Tavakoli (2014) studied the impact of careful online planning on quality of L2 oral output in terms of the CAF and also different types of self-repairs as indicators of the psychological mechanisms underlying planning. On the whole, the findings replicated the results of previous studies speaking to the positive impacts on complexity and accuracy. The qualitative analyses of participants' retrospective verbal reports also confirmed these findings as careful online planning condition was found to significantly affect the number and types of self-repairs EFL learners effectuated. More precisely, the results disclosed that careful online planners effectuated more error repairs (as a measure of accuracy) and fewer appropriacy and different-information errors.

Wang (2014) investigated of the underlying mechanisms of L2 speaking from a processing perspective. The experiment contained five types of planning and repetition conditions, each corresponding to different speech production stages. The participants were asked to perform a video-based narrative task under the following conditions: two forms of strategic planning, two forms of on-line planning, and task repetition. Having transcribed and coded the participants' speech samples, the researcher found that strategic planning enhanced complexity and fluency, suggesting that facilitating the conceptualization stage raised complexity and fluency. The researcher also reported that while online planning merely supporting the formulation stage did not increase speech complexity and accuracy, online planning together with pre-task planning did. More recently, Baleghizadeh and Nasrollahi (2017) conducted a research on the influence of strategic planning, online planning, and rehearsal on the CAF of low and intermediate EFL learners. The participants performed narrative tasks in three different conditions: the online planning only condition, combined strategic planning with online planning and combined rehearsal with online planning. The outcomes indicated that rehearsal and strategic planning, when used in tandem, significantly affected fluency but not accuracy and complexity. Regarding the impact of proficiency, the researchers found out that the interaction between proficiency and the measure of complexity was significant.

In the most recent experiment, Saeedi (2020) examined the effects of simultaneous use of pre-task and online planning on the frequency and type of self-corrections Iranian EFL learners effectuated. Building on Kormos' (2006) taxonomy of self-repairs, the errors were conceptualized in terms of appropriacy (A), different information (D), and error (E) repairs. To this aim, the participants were asked to narrate a story developing in a sequenced set of picture prompts under four conditions: no planning, careful online planning only, pre-task planning only, and both careful online and pre-task planning. The results revealed that strategic planning yielded more instances of A- and D- repairs. Online planning was also associated with more cases of e-repairs as the psycholinguistic correlate of linguistic accuracy. Interestingly, it was also found that online planning, when coupled with pre-task planning, led to more frequent use of all three types of errors as the psycholinguistic mechanisms underlying speech.

Immediacy (\pm Here/Now)

The second during task condition option considered in the present research is immediacy. This variable is a component within Robinson's (2011) Cognition Hypothesis (CH) which was proposed to guide research into tasks and provide a rationale for sequencing them in L2 programs based on task complexity. In doing so, Robinson makes task complexity the core construct, conceptualizing it in terms of three factors: complexity, condition, and difficulty. In effect, these factors constitute the components of his triadic componential framework (TCF) (Robinson, 2001). As such, research associated with this framework has investigated how the performance dimensions of complexity, accuracy, and fluency are developed, what interactional results performing collaborative tasks generate, and how individual differences mediate task-based L2 learning (Jackson, & Suethanapornkul, 2013). It needs to be pointed out that in the present study we only address the first group of the above-mentioned factors, i.e., complexity factors. In the TCF, these factors pertain to the intrinsic cognitive load of tasks (Robinson, 2011) and are classified into resource directing (e.g., \pm Here/Now) and resource dispersing (e.g., planning) factors. It is hypothesized that manipulating task complexity along each of these categories leads to predictable effects on performance. As stated by Jackson and Suethanapornkul (2013), the essence of Robinson's argument is that increasing the cognitive load along the first group of variables directs language learners' attention to particular form-meaning mappings which in turn influences specific dimensions of performance. By contrast, manipulating the cognitive demands of tasks along the second group would guide attention to different dimensions of performance and deplete language learners' cognitive resources. By way of illustration, performing a task involving reference to objects and events dislocated in time and space (i.e., There/Then), is supposed to induce learners to access relevant L2 knowledge. Accordingly, research conducted in the light of the CH has manipulated the complexity of communicative tasks along such the resource-directing variables as \pm reasoning demands and \pm Here/Now to explore their impact on learners' performance.

Investigating the effects of increasing task complexity in terms of spatial or temporal displacement (\pm Here/Now) has been of interest to some researchers. In seminal study which prompted the development of Cognition Hypothesis, Robinson (1995) operationalized the \pm Here/Now dimension by asking the participants to carry out a narrative task under two conditions. Under the first condition (i.e., +Here/Now) learners were asked to look at the pictures and narrate the story in present tense. By contrast, in the -Here/Now condition they were required to recount the story based on the pictures in past tense without looking at them. He found that language produced under -Here/Now condition was significantly more accurate and complex but less fluent. In an Iranian EFL context, Rahimpour (1997) found that task performance in displaced, past time reference was less fluent but more accurate. The effects on complexity, however, failed to reach statistical significance. The results of Skehan and Foster (1999) showed that spatial and temporal displacement influenced the complexity of oral production. In that study, a group of participants were asked to simultaneously watch and recount a video (i.e., Here/Now and +contextual support). The second group was instructed to narrate the story after watching the video (i.e., There/Then and -contextual support). Results showed that narrating after watching enhanced complexity. By contrast, the results for accuracy were not significant.

Iwashita, Elder, and McNamara (2001) used a series of narrative tasks to see whether and how different task variables and performance conditions contributing to task difficulty influenced the CAF in participants' responses. The results for the implementation variable of immediacy showed that performing the more demanding task of narrating the stories in the past tense without contextual support led to increase in the accuracy of learners' output. Contrary to most of the

studies which have analyzed oral production, Ishikawa (2007) studied the impact of immediacy on participants' written performance. The results displayed that L2 writing produced in Then/there condition was syntactically more complex and also more accurate in terms of English article use. Interestingly, results pointed to the positive impact of increasing tasks demands along the immediacy dimension (-Here/Now) on fluency.

Revez (2009) addressed the impact of \pm contextual support combined with of recasting on L2 morpho-syntactic development. The study involved comparison groups that differed in terms of (a) the availability of teacher's recasts while describing photos and (b) availability of contextual support (i.e., whether learners could see the photos while describing them or not). The control group only participated in the testing sessions. Results demonstrated that receiving recasts without viewing photos resulted in higher levels of performance compared with receiving recasts while viewing photos. It was also confirmed that those who viewed photos but did not receive recasts performed better than the ones who could not view photos and received no recasts. Finally, in a particularly relevant study, which motivated the present research, Gilabert (2007) crossed the variable of immediacy with pre-task, strategic planning. The researcher hypothesized that narrating picture stories in Then/There would reduce fluency but would have a beneficial effect on the complexity and accuracy of L2 speech. The results showed that narrating tasks in the Here/Now generated in more fluent speech in comparison with doing the same task in the There/Then under planned conditions. The same effect was observed when planning time was allowed which caused learners to produce more fluent discourse when producing narratives in Here/Now than when generating the same type of discourse in There/Then. The results for complexity failed to reach statistical significance. As for accuracy, it was shown that whereas providing pre-task planning time did not significantly influence learners' accuracy, narrating stories in Then/There had a considerable, positive effect on this measure.

As the above review reveals, despite a number of studies analyzing the effects of careful online planning and immediacy on the CAF, fundamental issues, such as the interaction between these two task condition variables still remain. In fact, though an earlier research (i.e., Gilabert, 2007) simultaneously investigated strategic planning and immediacy, no experimentation to date has concerned itself specifically with the combined effects of careful online planning and immediacy on EFL learners' oral output. Therefore, on the basis of the theoretical and empirical issues discussed earlier, the present study sought to examine the impact of careful online planning on L2 speech produced in Here/Now and There/Then. Thus, the following question guided the investigation:

Q. What are the combined effects of online planning and immediacy on the complexity, accuracy, and fluency in EFL learners' oral output?

Methodology

Design

The study was conducted using a between-groups design. As such, each participant was asked to perform the task under only one of the performance conditions explained below. The independent variables were immediacy and online planning and the dependent variables were complexity, accuracy, and fluency of speech.

Participants

The study involved sixty participants (n=60) who were selected from among 93 Iranian EFL learners in a language institute in Isfahan, Iran. Based on the results of a placement test they

had taken at the institute, the learners had been assigned to the intermediate level. Even so, to make sure of their homogeneity, they were asked to take Oxford Placement Test (OPT). The scoring of the test was based on a scale of 100 points and the obtained scores ranged from 44 to 57 ($M=53$) which confirms the participants' homogeneity in terms of proficiency. To control for the effects of testing context on accuracy results, they were reassured that their performance on the task would be used only for research purposes and would not be used as a basis for their final achievement testing. It should be noted that to take into account ethical considerations in research, the learners were asked to sign written consent forms prior to data collection.

Instrument

In order to collect samples of participants' speech a narrative task was used. The task involved retelling a story delineated through a set of sequenced pictures. The story the learners were presented with revolved around a train passenger and a pickpocket. The passenger gets on the train while the pickpocket tails him into a cabin where he hangs his coat on a peg, takes a seat and starts reading a newspaper. The pickpocket takes a seat facing the passenger, lights a cigarette, and closely watches him. In a little while, the passenger falls asleep and the pickpocket takes the chance to slip a wallet from the passenger's hanging coat and dashes off. The major reason for using a narrative task was that it has been extensively used in previous task-based studies and therefore was more likely to yield comparable results. Thus using a picture-story task in the present experimentation facilitates comparison. Besides, given that narratives are monologic tasks, the output they elicit is not affected by interactional variables. A pilot study involving intermediate learners confirmed that they had no difficulty performing the narrative task.

Procedures

Since the study was based on a between-groups design, each participant completed the above task under only one of the following performance conditions:

Here/Now under pressed online planning condition (HN/POP)

The operationalization of immediacy followed Robinson (1995) who defines Here/Now in terms of context supported speech produced in the present tense. Thus, under this performance condition, each participant was given only thirty seconds to view the pictures and recount the story in the present tense within 3 minutes while looking at the pictures. Following Yuan and Ellis (2003), the researcher took the latter measures to control for the effects for pre-task strategic and careful online planning, respectively.

Here/Now under careful online planning condition (HN/COP)

Participants who performed under this condition were allowed ample time to effectuate careful online planning while looking at the pictures and recounting the story in the present tense. As with the previous condition, it was decided to provide them with only thirty seconds before task performance to prevent them from doing pre-task, strategic planning.

There/Then under pressed online planning condition (TT/POP)

Based on Robinson's (1995) operationalization of There/Then, performance under this condition involved participants retelling the story developing in the pictures in the past tense without looking at them, while having thirty seconds to look at the pictures and three minutes to complete the task.

There/Then under careful online planning condition (TT/COP)

Under this performance condition, each participant was asked to use the past tense to narrate the story without being allowed to look at the pictures. As with all conditions, the effect of pre-task planning was controlled for by allotting only thirty seconds to see the pictures. Unlike the previous condition, however, learners were given enough time to carefully plan their speech online.

Having recorded the data collected under the above conditions, the researcher transcribed and analyzed them. It should be mentioned that to ensure reliability of coding, an experienced colleague was asked to analyze ten percent of the transcript, yielding an interrater reliability coefficient of 0.86 which confirmed reliable data analysis.

Performance measures

To be able to capture the multicomponential nature of L2 proficiency, most of the related task-based studies have attempted to develop theoretical and methodological frameworks which make possible analyzing learners' performance in terms of complexity, accuracy, and fluency (see Suzuki & Kormos, 2019, for an updated review). Consequently, using such measures makes possible comparisons with the outcomes of the present literature. The following measures were used to tap participants' performance:

Complexity

This aspect of performance was defined in terms of syntactic complexity and syntactic variety. Syntactic complexity was calculated as the ratio of clauses to AS units in each participant's speech. AS unit is defined as "a single speaker's utterance consisting of an independent clause, or sub-clausal unit, together with any subordinate clause(s) associated with either." (Foster, Tonkyn, & Wigglesworth, 2000, p.365).

The following examples, cited from Foster et al. (p. 366), exemplify AS units and associated clauses:

- [I have no opportunity to visit] (one clause, one AS unit)
- [It is my hope / to study crop protection] (two clauses, one AS unit)

Syntactic variety pertains to the total number of different grammatical verb forms spotted in each participant's speech. It should be mentioned that the analysis of syntactic variety also included tense and modality.

Accuracy

This dimension of production was measured through error-free clauses and correct verb forms. The first measure was calculated in terms of the percentage of error-free clauses to the whole number of clauses. Syntactic, morphological, and lexical errors were taken into consideration.

Correct verb forms was calculated in terms of the percentage of all verbs that were used correctly in terms of tense, aspect, modality, and subject verb agreement.

Fluency

Rate A and Rate B were used to tap participants' fluency of speech. Rate A refers to the number of syllables within each narrative divided by the total number of seconds taken to complete the task and multiplied by 60.

Rate B was the same as rate A excluding all syllables, words, and phrases that were repeated, reformulated, or replaced.

It needs to be pointed out that all measures were calculated manually and no software was run.

Data analysis

After data collection and segmentation, the researcher ran ANOVAs and subsequent Scheffe post-hoc analysis to establish the significance and locations of mean accuracy, complexity, and fluency differences across the four performance conditions elaborated above. Prior to running ANOVAs, assumption testing was carried out to check the suitability of the data for this statistical analysis. It should be pointed out that given the number of groups and dependent variables, MANOVA might be deemed a more appropriate statistical tool; however, it was decided to use ANOVA because MANOVA is more difficult to interpret and less powerful than ANOVA (Tabachnik & Fidell, 1996). Besides, convincing empirical evidence for MANOVA is limited (Ellis & Yuan, 2005).

Results

This research was aimed at studying the effects of engaging EFL learners in careful online planning while performing a narrative task in \pm Here/Now on the CAF of their oral discourse. In this section the results for complexity, accuracy, and fluency of participants' performance elicited under different performance conditions are presented.

Table 1. Descriptive Statistics for Complexity, Accuracy and Fluency

| | Mean (SD) | | | |
|-----------------|--------------|--------------|--------------|--------------|
| | HN/POP | HN/COP | TT/POP | TT/COP |
| C/AS | 1.038 (.020) | 1.102 (.028) | 1.050 (.021) | 1.165 (.106) |
| DGV | 6.62 (1.17) | 7.86 (1.11) | 7.39 (.874) | 9.19 (1.44) |
| Correct clauses | 20.06 (2.86) | 29.21 (1.07) | 29.05 (1.69) | 31.49 (2.01) |
| Correct verbs | 24.97 (2.88) | 27.29 (2.05) | 27.04 (1.71) | 29.67 (1.86) |
| Rate A | 49.73 (1.21) | 48.22 (1.2) | 48.19 (1.67) | 46.64 (1.47) |
| Rate B | 45.65 (1.28) | 43.72 (1.49) | 43.78 (2.35) | 41.84 (1.67) |

Notes: C/AS= Ratio of clauses to AS units; DGV= Different grammatical verbs used.

Table 2. Statistics for ANOVAs and Post-hoc Scheffe Tests

| Measure | F value | Sig. | Locations of Significant Mean Differences | | | | |
|-----------------|---------|------|---|--------|--------|--------|--------|
| | | | HN/POP | TT/POP | HN/POP | HN/COP | HN/POP |
| | | | HN/COP | TT/COP | TT/POP | TT/COP | TT/COP |
| C/AS | 15.278 | .000 | .036* | .000* | .961 | .036* | .000* |
| DGV | 12.771 | .000 | .047* | .001* | .364 | .029* | .000* |
| Correct clauses | 12.088 | .000 | .046* | .018* | .074 | .030* | .000* |
| Correct verbs | 11.742 | .000 | .045* | .018* | .090 | .038* | .000* |
| Rate A | 12.125 | .000 | .041* | .034* | .040* | .033* | .000* |
| Rate B | 11.822 | .000 | .037* | .035* | .046* | .044* | .000* |

*Mean difference is significant the .05 level

Complexity

With regard to the measures of complexity, the descriptive and inferential statistics reported in Table 1 and Table 2 indicate that in general, mean complexity differences across performance conditions were statistically significant ($p= 0.000$). To specify the exact locations of differences, post-hoc Scheffe test was run the results of which showed that those participants who narrated the picture story under planned condition produced more complex speech in comparison with their counterparts who carried out the same task without the opportunity to plan their speech online ($p < 0.05$). More precisely, planned speech in both Here/Now and There/Then was more complex in terms of ratio of clauses to AS units and different grammatical verbs used. With respect to the impact of immediacy on the measures of complexity, the outcomes reported in Table 2 suggest that, performing the task in Then/There produced more complex speech only when coupled with careful online planning. In other words, whereas participants in the TT/COP group produced more complex speech than their peers in the HN/COP group ($p= 0.036$; $p= 0.029$), the mean difference between the HN/POP and TT/POP groups failed to reach statistical significance ($p > 0.05$). Thus, whether immediacy affects complexity is dependent on the provision of planning time.

Accuracy

Results for the measures of accuracy were almost similar to the ones obtained for complexity. As displayed in Table 2, careful online planning induced language learners to generate higher levels of accuracy. Specifically, the results of Scheffe test confirmed that planners in both HN/COP and TT/COP groups produced more accurate speech than those who performed in HN/POP and TT/POP groups ($p < 0.05$). Therefore, online planning consistently results in more accurate L2 production. Concerning the influence of immediacy on the accuracy, the results of inferential statistics set out in Table 2 suggest that producing L2 speech in There/Then in tandem with the opportunity to carefully plan online brings about gains in accuracy. Thus, whereas there were significant mean accuracy differences between the HN/COP and TT/COP groups ($p= 0.30$; $p= 0.38$), the mean differences between the HN/POP and TT/POP groups was insignificant ($p= 0.74$; $p= 0.90$). Hence, it can be deduced that the impact of immediacy on accuracy of L2 speech is mediated through planning.

Fluency

The results pertaining to the measures of fluency displayed in Table 2 also point to differences across groups. Generally speaking, the findings show that carefully planned speech is less fluent than the unplanned discourse. To be more specific, statistical analyses revealed that the estimated means related to the rate of speech generated in HN/COP and TT/COP groups is significantly lower than the HN/POP and TT/POP groups, respectively ($p < 0.05$). So, it can be concluded that careful online planning while performing a task consistently exerts negative effects on fluency. As for the effects of immediacy on fluency, the comparison of mean fluency across groups indicated that participants in the HN/POP produced less fluent language than those in the TT/POP groups ($p= 0.40$; $p= 0.46$). Comparing the performances of the HN/COP and TT/COP groups yielded the same results ($p= 0.33$; $p= 0.44$). Hence, based on the findings, it can be posited that in both planned and unplanned conditions, displaced, past time reference without contextual support (i.e., There/Then condition) contributes to a significant decrease in fluency of L2 speech.

The outcomes relating to the combined effects of immediacy and careful online planning on the CAF are particularly interesting. A careful examination of the statistics displayed in Table

2 reveals that, compared with the HN/POP group, participants in the TT/COP group produced significantly more complex as well as accurate speech ($p= 0.000$). By contrast, the effects on fluency were detrimental. Therefore, allowing language learners to carefully plan their speech while narrating the story in the past tense without contextual support gives rise to positive effects on both complexity and accuracy at the expense of fluency. This finding is of theoretical significance which will be discussed in the following section.

Discussion

In this study, the researcher investigated the way two task condition variables, namely, careful online planning and immediacy (\pm Here/Now) interact to influence EFL learners' complexity, accuracy, and fluency of speech. For this purpose, participants' performances elicited under four different conditions were compared and contrasted. Overall, the results pointed to significant mean differences across the four conditions. Below, the observed differences are discussed with reference to relevant theory and research evidence.

The findings regarding the measures of complexity pointed to consistent positive effects for careful online planning on syntactic complexity and syntactic variety of L2 speech. In other words, in both HN and TT conditions, the opportunity to carefully plan speech enhances complexity. The beneficial influence of online planning on complexity is consistent with the results previously reported by Ahmadian and Tavakoli (2011), Yuan and Ellis (2003), and Ellis and Yuan (2005). From of theoretical point of view, it seems plausible to argue that giving learners sufficient time to plan their speech online enables them to access their *rule-based* L2 knowledge (Skehan 1998, as cited in Ahmadian et al., 2015) which incorporates syntactic rules through which the learner manages to apply his cutting edge linguistic knowledge, hence more complex production. As for the influence of immediacy on the measures of complexity, the findings revealed that displaced, decontextualized performance condition (There/Then) enhances complexity. However, this increase in complexity was statistically significant only when the There/Then condition was coupled with the provision of careful online planning. This outcome upholds a principal claim made in the Cognition Hypothesis according to which increasing task complexity along the resource directing dimension (e.g., \pm Here/Now) simultaneously boosts complexity and accuracy if the task is kept simple along the resource dispersing dimension (e.g., online planning).

The findings relating to the accuracy show a pattern similar to that of complexity. As for the influence of online planning, the results suggested that under both Here/Now and There/Then conditions, online planning positively contributed to accuracy. This strong effect of online planning on accuracy replicates earlier research evidence (Ahmadian & Tavakoli, 2011, 2014; Yuan & Ellis, 2003) and accords with Wendel (1997) who argues that learners' accuracy of performance is a function of what they plan online. Building on Skehan's (1998) Dual-mode system Hypothesis, it might be reasoned that having abundant time to plan their speech while performing a task, enables learners to access their *rule-based* system of L2 which, contrary to *exemplar-based* system, needs more time and attention to access. An alternative explanation is that producing speech under no time pressure gives the learners enough processing time to resort to their explicit L2 knowledge and *formulate* their message more attentively, which in turn manifests itself in enhanced accuracy (Ahmadian et al., 2015). On the other hand, the influence of immediacy on accuracy of speech seems to be mediated through planning. Precisely, though speaking in There/There enhances accuracy, the difference is of statistical significance only when this performance condition is allied with careful online planning. The positive effect of displaced past time reference on the accuracy of task-based performance chimes with earlier results

presented by Rahimpour (1997), Gilabert (2007), and Iwashita et al. (2001). The observed effects for the measure of accuracy are in line with the prediction of Cognition Hypothesis according to which making a task more demanding in terms of resource directing dimension (e.g., ±Here/Now) makes for simultaneous gains in accuracy and complexity if it is made easier along the resource dispersing dimension (e.g., planning). Thus, whether speaking in the past tense without having access to contextual support leads to joint increase in accuracy and complexity depends on the provision of careful online planning.

With respect to fluency, a different picture emerged. As for the variable of online planning, it was observed that carefully planning speech while performing a task, causes strong negative effects on the fluency of output. The results were the same for both HN/COP and TT/COP. In other words, online planning consistently decreases fluency and its effects are not mediated through the availability of contextual support or time reference. The contribution of online planning to dysfluency of L2 speech accords with Ahmadian and Tavakoli (2011) and runs counter to Yuan and Ellis (2003). Though Yuan and Ellis (2003) observed a decrease in fluency caused by engaging in careful online planning, the amount was not of statistical significance. However, Ahmadian and Tavakoli (2011) reported a considerably significant degree of dysfluency. These researchers ascribed this outcome to the fact that online planning probably induces the learners to resort to their rule-based system of L2. Given that using rule-based system involves retrieving explicit linguistic knowledge from long-term memory, their attention is directed towards retrieving explicit knowledge. As a result, they cannot process meaning appropriately and fluency is negatively affected (Ahmadian & Tavakoli, 2011).

Lastly, the results pertaining to the combined effects of immediacy and online planning on the CAF constitute the major contribution the current study makes to the available body of research findings. As was alluded to above, compared with the HN/POP group, participants in the TT/COP group produced significantly more complex as well as accurate speech ($p= 0.000$). The effects on fluency, however, were detrimental. In fact, allowing language learners to carefully plan their speech while narrating the story in the past tense without contextual support gives rise to positive effects on both complexity and accuracy at the expense of fluency. Interestingly, compared with the other task conditions, the TT/COP performance condition generated the highest amounts of complexity and accuracy and the lowest degree of fluency. This noteworthy finding can be explained in the light of Skehan's (1998) Trade-off Hypothesis based on which humans' attentional capacity is limited and, as a result, learners cannot simultaneously channel their attention to different aspects of their performance. As a consequence, a trade-off is involved, where focusing on aspects of form (i.e., complexity and accuracy) would lead to detrimental effects on aspect of meaning (i.e., fluency). Taking into account this assumption, one could argue that the synergistic effects of careful online planning and There/Then performance condition would provide an optimal focus *focus-on-form* context (Batstone, 2005), where learners engage in more controlled processing by primarily concentrating on carefully formulating and articulating their speech. This exponential increase in complexity and accuracy, however, is achieved to the detriment of fluency.

Conclusion

This research presented an investigation into the combined effects of two task condition variables, namely, online planning and immediacy on complexity, accuracy, and fluency in the oral performance of Iranian EFL learners. The results suggested strong positive effects of online planning on accuracy and complexity and a negative effect on fluency. The findings regarding the effects of immediacy showed that in comparison with the Here/Now condition,

performing a task in There/Then makes for gains in accuracy and complexity and lower degrees of fluency. However, these effects seem to be mediated through planning. Thus, whether performing the more demanding task of narrating the picture story in the past tense without contextual support results in simultaneous gains in complexity and accuracy depends upon the provision of planning time. The most significant finding of the study was that providing learners with the opportunity to carefully plan while performing the task in the past tense without being allowed to look at the pictures (i.e., the TT/COP condition) leads to exponential increases in complexity and accuracy and the lowest degree of fluency. The above findings are of pedagogical significance in that they point to the efficacy of planning and immediacy as two task condition options which language instructors can manipulate to foster a focus on formal aspects of language in the context of task-based meaningful language use. This allows them to address one of the most serious criticisms leveled against the use of tasks, i.e., focusing on meaning to the exclusion of form. It is hoped that future research will examine the effects of manipulating these task condition variables on different types of tasks and learners at different proficiency levels as it is not inconceivable that replicating this study might reveal different results.

References

- Ahmadian, M.J., & Tavakoli, M. (2011). The effects of simultaneous use of careful online planning and task repetition on accuracy, fluency, and complexity of EFL learners' oral production. *Language Teaching Research*, 15, 35-59.
- Ahmadian, M. J., & Tavakoli, M. (2014). Investigating what second language learners do and monitor under careful online planning conditions. *Canadian Modern Language Review*, 70, 50-75.
- Ahmadian, M.J., Tavakoli, M., & Vahid Dastjerdi, H. (2015). The combined effects of online planning and task structure on complexity, accuracy, and fluency of L2 speech. *The Language Learning Journal*, 43, 41-56.
- Baleghizadeh, S., & Shahri, M.N.N. (2017). The effect of online planning, strategic planning and rehearsal across two proficiency levels. *The Language Learning Journal*, 45, 171-184.
- Batstone, R. (2005). Planning as discourse activity: A sociocognitive view. In R. Ellis (Ed.), *Planning and task-performance in a second language* (pp. 277-295). Amsterdam, Netherlands: John Benjamins.
- Bui, H. Y. G. (2014). Task readiness: Theoretical framework and empirical evidence from topic familiarity, strategic planning, and proficiency levels. In P. Skehan (Ed.), *Processing perspectives on task performance* (pp. 63-94). Amsterdam, The Netherlands: John Benjamins.
- Ellis, R. (2005). Planning and task-based performance in a second language. In R. Ellis (Ed.), *Planning and task-Based performance* (pp. 3-34). Amsterdam: John Benjamins.
- Ellis, R. (2009). The differential effects of three types of task planning on fluency, complexity, and accuracy in L2 oral production. *Applied Linguistics*, 30, 474-509.
- Ellis, R., & Yuan, F. (2005). The effects of careful within-task planning on oral and written task performance. In R. Ellis (Ed.), *Planning and task performance in second language* (pp. 167-92). Amsterdam: John Benjamins.
- Foster, P., A. Tonkyn, & G. Wigglesworth. (2000). Measuring spoken language: A unit for all reasons. *Applied Linguistics*, 21, 354-375.
- Foster, P., & Skehan, P. (2013). The effects of post-task activities on the accuracy of language during task performance. *Canadian Modern Language Review*, 69, 249-273.

Bui, G., Ahmadian, M.J., & Hunter, A. M. (2019). Spacing effects on repeated L2 task performance, *System*. doi: <https://doi.org/10.1016/j.system.2018.12.006>.

Gilbert, R. (2007). The simultaneous manipulation of task complexity along planning time and +/- Here-and-Now: Effects on L2 oral production. In M. P. Garcia Mayo (Ed.), *Investigating tasks in formal language learning* (pp. 136-156). Clevedon: Multilingual Matters.

Ishikawa, T. (2007). The effect of manipulating task complexity along the [±here-and-now] dimension on L2 written narrative discourse. In M. P. Garcia Mayo (Ed.), *Investigating tasks in formal language learning* (pp. 136-156). Clevedon, UK: Multilingual Matters.

Iwashita, N., McNamara, T., & Elder, C. (2001). Can we predict task difficulty in an oral proficiency test? Exploring the potential of an information processing approach to task design. *Language Learning*, 21, 401-436.

Jackson, D. O., & Suethanapornkul, S. (2013). The cognition hypothesis: A synthesis and meta-analysis of research on second language task complexity. *Language Learning*, 63(2), 330-367.

Kormos, J. (2006). *Speech production and second language acquisition*. London: Lawrence Erlbaum.

Levelt, W. (1989). *Speaking: From intention to articulation*. Cambridge, MA: MIT Press.

Li, Q. (2014). Get it right in the end: The effects of post-task transcribing on learners' oral performance. In P. Skehan (Ed.), *Processing perspectives on task performance*. Amsterdam, (pp. 129-154). The Netherlands: John Benjamins

Rahimpour, M. (1999). Task complexity and variation in interlanguage. In N. O. Jungheim & P. Robinson (Eds.), *Pragmatics and Pedagogy: Proceedings of the 3rd Pacific Second Language Research Forum* (pp. 115-134). Tokyo, Japan: The Pacific Second Language Research Forum.

Révész, A. (2009). Task complexity, focus on form, and second language development. *Studies in Second Language Acquisition*, 31, 437-470.

Robinson, P. (1995). Task complexity and second language narrative discourse. *Language Learning*, 45, 99-140.

Robinson, P. (2001). Task complexity, cognitive resources, and syllabus design: A triadic framework for examining task influences on SLA. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 287-318). Cambridge, UK: Cambridge University Press.

Robinson, P. (Ed.). (2011). *Second language task complexity: Researching the Cognition Hypothesis of language learning and performance*. Amsterdam: John Benjamins.

Saeedi, M. (2020). The effects of simultaneous use of task-based strategic and careful online planning on EFL learners' self-repairs. *RELP*, 8, 147-166.

Skehan, P., & Foster, P. (1999). The influence of task structure and processing conditions on narrative retellings. *Language Learning*, 49, 93-120.

Skehan, P. (1998). *A cognitive approach to language learning*. Oxford: Oxford University Press.

Skehan, P. (2016). Tasks versus conditions: Two perspectives on task research and their implications for pedagogy. *Annual Review of Applied Linguistics*, 36, 34-49.

Skehan, P., & Shum, S. (2014). Structure and processing condition in video-based narrative retelling. In P. Skehan (Ed.), *Processing perspectives on task performance* (pp. 197-210). Amsterdam, The Netherlands: John Benjamins.

Stroud, R. (2019). The effects of strategic planning and rehearsal on second language group discussion task performance, *The Language Learning Journal*, 1-14. <https://doi.org/10.1080/09571736.2019.1610475>.

Suzuki, S. & Kormos, J. (2019). Linguistic dimensions of comprehensibility and perceived fluency: an investigation of complexity, accuracy, and fluency in second language argumentative speech. *Studies in Second Language Acquisition*, 1-25. doi:10.1017/S 0272 2631 19000421.

Tabachnik, B.G., & Fidell, L. (1996). *Using multivariate statistics*. New York: Harper Collins.

Tavakoli, P., & Foster, P. (2011). Task design and second language performance: The effect of narrative type on learner output. *Language Learning*, 61, 37-72.

Wendel, J. (1997). *Planning and second language narrative production*. Doctoral dissertation, Temple University, USA.

Yuan, F., & Ellis, R. (2003). The effects of pre-task planning and online planning on fluency, complexity, and accuracy in L2 monologic oral production. *Applied Linguistics*, 24, 1-27.

Wang, Z. (2014). Online time pressure manipulations: L2 speaking performance under five types of planning and repetition conditions. In P. Skehan (Ed.), *Processing perspectives on task performance* (pp. 27-62). Amsterdam, The Netherlands: John Benjamins.

Wang, Z., & Skehan, P. (2014). Task structure, time perspective and lexical demands during video-based narrative retellings. In P. Skehan (Ed.), *Processing perspectives on task performance* (pp. 155-186). Amsterdam, The Netherlands: John Benjamins.

