

The Journal of Language Teaching and Learning, 2013–1, 20-36

The Influence of Strategic Planning and Storyline Complexity on EFL Learners' Narrative Retellings

Masoud Saeedi¹

Abstract

This research study is primarily an attempt to examine the effects of engaging in strategic planning before retelling narratives with different degrees of storyline complexity on complexity, accuracy, and fluency in the oral production of learners of English as a foreign language (EFL). To this aim, the effects of four task performance conditions (i.e., strategic planning with a single storyline narrative task, no strategic planning with a single storyline narrative task, strategic planning with a dual storyline narrative task, on learners' complexity, accuracy, and fluency in producing English language were examined. Sixty Iranian intermediate-level EFL learners participated in this study. The results of one-way ANOVAs revealed that though giving learners the opportunity to engage in strategic planning before retelling a narrative with two storylines exponentially advantages complexity, it impairs accuracy. The outcomes have certain theoretical and pedagogical implications for researchers and practitioners in EFL context.

Key words: Strategic planning; Narrative storyline complexity; Complexity; Accuracy; Fluency; EFL context

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1. Introduction

Over the past two decades or so, a growing body of research has examined the impact of design features and performance conditions of second language (L2) oral tasks on language performance and language learning (e.g., Crookes, 1989; Foster & Skehan, 1996; Ellis, 2005; Tavakoli & Foster, 2011). This host of research has addressed, inter alia, questions concerning the way manipulating such task design features and implementation options impact on learners' attentional resources and, as a result, complexity, accuracy, and fluency of language production (Robinson, 2001; Skehan, 1998). Meanwhile, as human attentional capacity is limited and selective (Anderson, 1995; Schmidt, 2001), committing limited attentional resources to one dimension of performance (e.g., complexity) may have detrimental effects on other components (e.g., accuracy) (Wendel, 1997; Skehan, 1998). Consequently, increasing complexity, accuracy, and fluency is not easy to achieve. This trade-off between form and meaning together with the desirability of achieving a balanced performance in terms of all aspects of production has caused second language acquisition (SLA) researchers to study the way manipulating different task designs and procedural options could lead to improved language production.

¹ Payam-e-Noor University, Najafabad, Isfahan. Email: saeedi.edu@gmail.com

Among the various task performance conditions investigated so far, the issue of planning, be it pretask or online, has attracted growing attention from researchers. Up till now, several studies have explored the effect of pre-task, strategic planning on the quality of language learners'. In general, these studies point to fairly consistent positive effects on fluency and complexity of production. The results for accuracy, however, are quite mixed (Ellis, 2005). According to Ellis (2009), such mixed results could be attributed to certain design features of tasks. Among such features, narrative storyline complexity has been recently studied by researchers. Overall, empirical evidence reported so far has confirmed that the presence of a more complex narrative storyline enhances complexity of L2 learners' oral performance (Tavakoli, 2009a, Tavakoli & Foster, 2011). Given the available empirical support for the advantageous effects of strategic planning and narrative storyline complexity on the quality of L2 learners' performance, a pedagogically motivated question may arise as to whether engaging in strategic planning before retelling narratives with different number of storylines makes a difference to the effects on EFL learners' oral L2 performance. Up till now, no study has investigated this issue. The research reported in this article, therefore, was developed to cover this lacuna.

2. Theoretical framework

2.1 Strategic planning

Different types of planning can be distinguished in terms of when the planning occurs (Ellis, 2005, 2009). As a type of pre-task planning, *strategic* planning takes place before the task is performed. This type of planning is distinguished from *rehearsal* which entails task repetition with the first performance of the task regarded as a preparation for a subsequent performance. Strategic planning engages learners in preparing to perform the task by considering what content to encode and how to express this content. This type of planning can be categorized further in ways which, according to Ellis (2005), are of theoretical and practical importance. As pointed out by Ellis (2005), in *unguided* strategic planning learners are left to their own devices when planning a task. In *guided* planning, on the other hand, students are given specific advice about what and how to plan. In this case, they can be directed to focus on linguistic form, meaning, or both. As an important variable in this study, unguided strategic planning was operationally defined as a kind of pre-task planning time during which EFL learners were allowed to plan what content to encode and how to express this content. However, they were not given any advice on what to say and how to put it.

Researchers have mostly studied the impact of planning on task performance with reference to Levelt's (1989, 1993) model of speech production. In essence, Levelt's serial model of language processing attempts to show how a speaker moves from intending to say something to articulating this message in a stream of speech. There are three processing components in this model: The Conceptualizer works prelinguistically to generate the intended message, the Formulator encodes the intended message into the requisite grammatical and phonological forms, and the Articulator uses the phonological encodings to execute the speech plan. With native speakers of a language these operations proceed smoothly and to a considerable extent in parallel because the necessary grammatical and phonological encoding draws on automatized linguistic knowledge, which can be accessed and executed very fast (Pawley & Syder, 1983). Yet, as such automatized knowledge and lexical processing shortcuts are beyond the scope of second language speakers, their Conceptualizer, Formulator, and Articulator compete for limited attentional resources resulting in slow speech or even silence. Though it might be inferred that in any competition for attentional resources the Conceptualizer will win (VanPatten, 1990, as cited in Tavakoli & Foster, 2011), some of the researchers (Bygate, 2001; Foster & Skehan, 1996; Lynch & Maclean, 2001; Mehnert, 1998) have demonstrated that because providing learners with planning time before performing a task

takes care of the Conceptualizer's attentional needs and, in consequence, there is more capacity for linguistic encoding and articulation, it increases attentional resources for the Formulator and Articulator. In turn, this should provide the speaker with greater capacity for attention to L2 forms.

The effect of strategic planning on L2 learners' complexity, accuracy, and fluency of language production has been the subject of several studies. On the whole, the results have suggested that giving learners pre-task planning time has significant effects upon these measures of performance. Among the components of performance, fluency effects seem to be "the clearest and most consistent" (Tavakoli & Skehan, 2005, p. 247). Foster (1996) and Foster and Skehan (1996) reported that planners paused less frequently and spent less time in total silence than non-planners in all three tasks they investigated. However, the effect on fluency was stronger on the more difficult narrative and decision making tasks than on the easier personal task. Skehan and Foster (1997), using similar tasks, replicated the result for total pauses. Elsewhere, Wendel (1997) found that the planners in his study produced more syllables per minute and showed a lower mean length of pause in two narrative tasks. Similarly, Ortega (1999) reported a faster speech rate in learners of L2 Spanish on a story-telling task when they had an opportunity to plan strategically. Foster (2001) demonstrated that planning induced learners to produce a greater amount of speech whereas it led to native speakers producing less. Yuan and Ellis (2003) also found a clear effect for strategic planning on fluency. In yet another study, Gilabert (2007) crossed pretask planning with the implementation variable of immediacy. The results of his study indicated that both simple Here-and-Now and complex There-and-Then narrative tasks generated significantly higher speech rate when performed under planned conditions.

With complexity, most studies have reported gains. In his pioneering study, Crookes (1989) found that giving learners a ten-minute planning time led to learners producing more complex sentences. Elsewhere, Foster and Skehan (1996) demonstrated that detailed planners used significantly more subordination than undetailed planners who, in turn, produced significantly more subordination than the non-planners. Similarly, Wendel (1997) found that planners used more complex grammatical structures. Mehnert (1998) also reported a positive effect but only for the ten-minute planners. Ortega (1999) demonstrated that the complexity measure (mean number of words per utterance) was significantly higher in the planning condition. Likewise, Yuan and Ellis' (2003) study pointed to the positive effect of engaging in strategic planning on complexity. In a more recent study, Gilabert (2007) illustrated that pretask planning assisted L2 learners' lexical complexity of oral production. The effects on syntactic complexity, however, were not significant. Even so, some studies have reported different findings. Skehan and Foster (1997) showed that planning could be associated with greater fluency and accuracy in the narrative task, while they did not find greater complexity associated with increased planning. Wigglesworth (2001) also did not find significant gains. He attributed the mixed results to the testing context in which his study was conducted. All in all, it could be concluded that the outcomes of these studies point to the advantageous effect of engaging in pre-task planning on the complexity of L2 learners' task-based production.

Regarding accuracy, the effects of pre-task planning are quite mixed. A number of studies have reported that strategic planning results in enhanced accuracy. For instance, in his early study, Ellis (1987) reported that increased planning time led to higher accuracy of rule-based language, while unplanned discourse was more lexical in nature. Mehnert (1998) found a significant difference in the accuracy of one-minute planners over non-planners. Nevertheless, there was no significant accuracy difference between the five-minute and ten-minute planners and the one-minute planners. A number of studies have demonstrated that strategic planning assists accuracy only on some structures, some tasks, and in some conditions (Ortega, 1999; Foster & Skehan, 1996, 1999; Skehan & Foster, 1997). On the contrary, other studies (e.g., Crookes, 1989; Wendel, 1997; Gilabert, 2007) have found different outcomes. As an example, Yuan and Ellis (2003) found that strategic planning had no effect on accuracy of task-based performance.

Given the empirical evidence reviewed above, it seems logical to posit that giving learners the opportunity to engage in pre-task, strategic planning assists syntactic complexity and fluency but not accuracy of their oral production.

2.2 Narrative storyline complexity

When addressing the issue of narrative storyline complexity, in the previous research a distinction is made between *amount of information* and *information grounding*. The former refers to *how much* information and the latter to *where* this information is presented in a picture story (Tavakoli, 2009b). Put differently, grounding has to do with the number of storylines in a narrative while amount of information refers to how much information is presented. The current study, however, is concerned with the number of storylines in a narrative; that is, the way information is grounded in the narrative.

Though recently explored, the consideration of foreground and background information as a significant design feature of narrative tasks is not new (Tavakoli, 2009a). It is argued that foreground material supplies the main points of a narrative, while background, on the other hand, is the part that simply assists, amplifies, or comments on it (see Polanyi-Bowditch, 1976; Hooper & Thompson, 1980). In this connection, Tomlin (1984) maintains that whereas background information is used to describe ideas that elaborate or explicate the foreground information, foreground information describes those propositions in the story that are more important or central to the development of the overall theme. Bardovi-Halig (1998) also reasons that foreground events in a narrative generally move time forward, whereas background elements elaborate on, explain, or evaluate what happens in the foreground.

The effect of narrative storyline complexity on quality of L2 learners' oral production has not been sufficiently researched. In a post hoc analysis of their L2 narrative task data, Tavakoli and Skehan (2005) used this task design feature to account for unexpected complexity scores in two of the tasks they used. Unlike the other tasks, these had two storylines and a reconsideration of the transcripts revealed enhanced syntactic complexity at moments where the participants attempted to connect the two. In another study, Tavakoli (2009a) investigated the impact of storyline complexity on quality of learners' oral production in assessment context. She reported that syntactic complexity of L2 performance and narrative storyline complexity were related. This researcher found that enhanced syntactic complexity was associated with narratives that had both foreground and background storylines. However, the results were not as clear for the effect of storyline complexity on lexical diversity. In a subsequent study, Tavakoli and Foster (2011) examined the impact of storyline complexity on quality of learners' language production in both ESL and EFL contexts. In sum, their findings suggested strong support for syntactic complexity being affected by narrative storyline complexity and ambiguous evidence for lexical diversity being influenced by this task design feature. The learning environment was also shown to have a clear effect on syntactic complexity and lexical diversity.

Generally, it might be inferred, previous research lends support to the positive impact of performing a narrative with both foreground and background information on syntactic complexity of L2 learners' oral production. Hence, by drawing upon the empirical evidence reviewed above, it might be reasonable to predict that performing the task of recounting a narrative with two storylines enhances syntactic complexity of EFL learners' oral performance.

2.3 Complexity, accuracy, and fluency (CAF)

Currently, the majority of SLA researchers share the conviction that L2 proficiency and L2 performance are multi-componential constructs, which could be conceived of as having three principal dimensions: complexity, accuracy, and fluency (Ellis, 2009; Ellis & Barkhuizen, 2005; Housen & Kuiken,

2009; Pallotti, 2009; Skehan, 2009; Skehan & Foster, 2001). In this respect, Skehan (2003, p. 8) argues that "the complexity-accuracy-fluency dimensions of task performance have been justified both theoretically and empirically." He goes on to argue that theoretically, the sequence corresponds to the three stages of change in the underlying system (i.e., greater complexity), acquisition of greater mastery over the emerging system (i.e., greater accuracy), and development of performance control, as elements are routinized and lexicalized (i.e., fluency) (Skehan, 1998, as cited in Skehan, 2003). He also cites Skehan and Foster (1997, 2001) to provide empirical evidence illustrating how these different performance areas compete with one another for limited attentional resources. These findings, Skehan (2003) contends, imply that each of the components of task-based performance needs to be included in a study if any wide-ranging claims about performance are to be made.

Skehan (1996) defines complexity as "the stage and elaboration of the underlying interlanguage system" (p. 46). According to Ellis and Barkhuizen (2005), elaborated language could be thought of in two different senses: First, cutting edge development of the learner language, which is not yet fully automatic; and, second, learners' readiness to use a wide range of linguistic structures. These researchers also suppose that complexity depends on learners' willingness to try out new linguistic knowledge in their speech. As with accuracy, Skehan (1996,) states that it pertains to "a learner's capacity to handle whatever level of interlanguage complexity she has currently attained" (p.46). In other words, when a learner tries to produce more accurate language, he is actually seeking control over the linguistic elements that he has already learned. Encouraging learners to produce language more accurately entails the use of controlled rather than automatic processes. Since automatic processes develop out of controlled processes, accuracy is considered to be essential for the way language develops and becomes automatic (McLaughlin & Heredia, 1996, as cited in Ahmadian & Tavakoli, 2011). Fluency, Skehan (1996) states, "concerns the learner's capacity to mobilize an interlanguage system to communicate meaning in real time" (p.46). In fact, when learners are producing more fluent language they are prioritizing meaning over form (Ellis & Barkhuizen, 2005).

The CAF triad has been extensively investigated in SLA studies. In task-based research, these aspects of performance have been most frequently used as dependent variables to assess variation with respect to independent variables such as task design features and procedural options.

3. The current study

This study was a between-groups design. Its overarching aim was to investigate the combined effects of strategic planning and narrative storyline complexity on the quality of EFL learners' oral production. The independent variables were pre-task, strategic planning and narrative storyline complexity with four levels which are displayed in the following Table 1:

Table 1. Operational Definitions of Independent Variables

Independent variables		Levels			
	1	2	3	4	
Dual storyline narrative	-	-	+	+	
Strategic planning	+	-	+	-	

To be able to compare the results of this study with those of the previous ones, three dimensions of oral production were examined: complexity, accuracy, and fluency. By drawing upon the theoretical and empirical rationales expounded so far, the following research questions and corresponding predictions were posed:

- 1. What effect does engaging in strategic planning have on the fluency of EFL learners' production in an oral narrative task? In accordance with the theoretical and empirical rationale discussed, it was hypothesized that engaging in strategic planning assists fluency of EFL learner's oral production.
- 2. What effect does engaging in strategic planning have on the complexity of EFL learners' production in an oral narrative task? On the basis of the results reported in the literature, it was hypothesized that engaging in strategic planning will have positive effects on the syntactic complexity of EFL learners' oral production.
- 3. What effects does engaging in strategic planning have on the accuracy of EFL learners' production in an oral narrative task? Since previous studies have reported mixed results for the impact of strategic planning on accuracy, it was predicted that no effect will be found in this study.
- 4. What effects does performing a narrative with two storylines have on the complexity of EFL learners' oral production? Building on the theoretical and empirical rationale delineated, it was hypothesized that performing a narrative in which both foreground and background information need to be described will assist the syntactic complexity of EFL learners' oral performance.
- 5. What effect does engaging in strategic planning before performing a narrative with two storylines have on EFL learners' oral production? As no previous study has investigated this issue, no hypothesis was suggested.

4. Method

4.1 Participants

Sixty EFL learners in an English language institute in Iran participated in this study on a voluntary basis. The participants were adult male learners aged between 18-24 who attended the classes twice a week during a three-month term. They were selected using random number tables from among 124 intermediate-level EFL learners. None had ever been to an English-speaking country and they had virtually no opportunity to use English for communicative purposes outside the classroom context. These EFL learners were studying English for a number of reasons including improving their future employment prospects or furthering their careers. They were assigned to intermediate-level classes based on their performance on Oxford Placement Test (i.e., band 4 on a scale of 0-9). All participants signed written informed consent forms. Using a table of random numbers, they were assigned to four groups of fifteen each.

4.2 Tasks

In order to have conformity with previous research in this area (Yuan & Ellis, 2003; Tavakoli, 2009a; Tavakoli & Foster, 2011) and, consequently, to enhance the comparability of results, oral narrative tasks were employed in this study. Narrative tasks- retelling of stories based on sequenced sets of picture prompts- have been widely used in task-based research for a variety of objectives. Because such tasks are non-interactive and fairly open to control, they have been popular among researchers (Skehan, 2001). Two sets of picture stories that differed in terms of storyline complexity were chosen. In the first narrative, information in the picture story was presented only in foreground (see Appendix A). In the second, on the other hand, the picture story developed as a result of the information provided in both

foreground and background (see Appendix B). Following Tavakoli (2009a), during the selection process experienced EFL teachers and researchers who had previously employed narrative tasks in their teaching and research were consulted so as to make sure the tasks were suitable for EFL learners and appropriate for the aim of the study. The tasks were then piloted with EFL learners.

4.3. Procedures

All participants were required to recount the picture stories in a one-to-one setting by the author who met them individually in a quiet room and explained the purpose of the task to them. Participants were told that they would be recorded while narrating stories in English. As this study was not conducted in assessment context, the researcher stressed that this was not a test and the tasks were for purposes of research. However, they were not told what the purpose of the study was. In the current study, four task design and performance conditions with particular characteristics were defined. Since a between-groups design was employed, participants in each of the four groups were required to perform one task under one of the following conditions:

Engaging in strategic planning before recounting the picture story with one storyline (+SP/OS): For this condition the participants were told that they had 10 minutes to look at the picture story in which information was presented in only the foreground and plan what to say as this seems to have become the standard pre-task planning time (see Ellis, 2009). As in this study unguided pre-task planning was investigated, in keeping with Yuan and Ellis (2003), Skehan and Foster (1997), and Wendel (1997), no detailed guidance was provided but the participants were encouraged to organize their message in terms of content, organization, and language. In addition, they were reminded that they would eventually have 3 to 4 minutes to tell the story so as to control for the effects of engaging in careful online planning. This again followed Yuan and Ellis (2003) and Ellis and Yuan (2005). The participants were also given some paper to take notes if they wished. However, they were reminded that they would not be allowed to use their notes while they were telling the stories. After the ten minutes, each participant told the story to the researcher who tape-recorded his performance on the task.

No strategic planning before retelling the picture story with one storyline (-SP/OS): This condition served as the control condition; in that, the learners were told that they had just 30 seconds to look at the pictures (see Yuan & Ellis, 2003; Tavakoli & Skehan, 2005; Gilabert, 2007) before retelling the single storyline narrative to the researcher who tape-recorded their performances. As in the first condition, the participants were given only 3 to 4 minutes to recount the story so as to prevent them from engaging in careful online planning.

Strategic planning before narrating the picture story with two storylines (+SP/TS): As in the first condition, participants who took the narrative with a dual storyline under this condition were given 10 minutes to plan. Furthermore, they had just 3 to 4 minutes to tell the story so as to control for the effects of engaging in careful online planning. The participants were also given some paper to take notes if they wished. However, they were not allowed to use their notes while they were telling the stories. After the ten minutes, each participant recounted the story to the researcher who tape-recorded his performance on the task.

No strategic planning before retelling the picture story with two storylines (-SP/TS): As in the second condition, the participants had just 30 seconds to look at the dual storyline picture series before they started retelling what was happening. After the initial 30 seconds, each participant looked at the picture series and told the story to the researcher who tape-recorded his performance. As in the first three conditions, in order to preclude the participants from engaging in careful online planning, they were given only 3 to 4 minutes to tell the story.

Once the recorded performances were transcribed, they were segmented and scored based on the measures which were chosen for assessing accuracy, complexity, and fluency (see the following section). A sample of 10% of the total transcripts was checked by an independent expert so as to ensure that the segmentation of the transcripts into clauses and/or AS units (analysis of speech units) was conducted reliably (see Gilabert, 2007; Tavakoli & Foster, 2011; Ahmadian, 2012a). An inter-rater reliability coefficient of greater than .90 was obtained on each component measure of complexity, accuracy, and fluency.

Measurement of the dependent variables: Measures of complexity, accuracy, and fluency were adopted to evaluate learners' oral production. In the related literature, previous studies have used a variety of measures to tap the CAF triad (see Ellis, 2009, for a comprehensive list of such measures). To reach more comparable results, in the present study the following measures were deployed:

Complexity: Syntactic complexity (amount of subordination): the ratio of clauses to AS units in the participants' production. Since it allows analysis of speech units that are longer than a single clause; it takes pausing and intonation features of speech into consideration; and it allows the inclusion of independent sub-clausal units, AS unit has proved to be a more appropriate unit of analyzing the spoken data (Tavakoli, 2009a). Foster, Tonkyn, and Wigglesworth (2000) define an AS unit as "a single speaker's utterance consisting of an independent clause, or sub-clausal unit, together with any subordinate clause(s) associated with either" (p. 365).

Accuracy: The percentage of error-free clauses to the whole number of clauses was chosen to assess the accuracy of each participant's performance. All syntactic, morphological, and lexical errors were taken into consideration. Therefore, native-like use of the language in terms of grammar and lexis was generally considered as a criterion in determining error-free clauses.

Fluency: Among the wide variety of approaches to measuring fluency, in this study, the rate of pruned speech was used to measure participants' fluent production of language because it includes both the amount of speech and the length of pauses (Gilabert, 2007). Contrary to un-pruned speech rate, in pruned speech rate, repetitions, reformulations, false starts, and asides in the L1 are not considered in the calculation (Lennon, 1991). Pruned speech rate was calculated by dividing the number of syllables by the total number of seconds and multiplied by 60.

To be able to answer the research questions, the data were subjected to a series of one-way analyses of variance (ANOVA) ¹ followed by the Scheffe post hoc analysis. Prior to performing the ANOVAs, the suitability of the data for such analyses was tested.

5. Results

For clarity, the results are reported following questions 1 to 5 in turn. The means for dependent variables are displayed in Table 2. As reported in the table, the results of one-way ANOVAs confirmed the statistical significance of group mean differences in terms of complexity, accuracy, and fluency. In order to find the exact places of significant mean differences, the one-way ANOVAs were followed by Scheffe post hoc analysis.

The first research question pertained to the effects of engaging in strategic planning on the fluency of EFL learners' oral production. To this end, +SP groups were compared to –SP groups in terms of pruned speech rate. Scheffe post-hoc analysis, as presented in Table 3, point to the statistically significant mean differences between +SP groups and –SP groups (both OS and TS) in terms of the number of meaningful syllables produced per minute of speech. Thus, there is good evidence to suggest that engaging in strategic planning enhances fluency of EFL learners' oral performance.

Table 2. Statistics for Dependent Variables: Complexity, Accuracy, and Fluency

Mean (SD)					F value	Sig.
	(+SP/OS)	(-SP/OS)	(+SP/TS)	(-SP/TS)		
Complexity	1.06 (.011)	1.02 (.016)	1.08 (.014)	1.05 (.010)	41.44	.000
Mean (SD)					F value	Sig.
	(+SP/OS)	(-SP/OS)	(+SP/TS)	(-SP/TS)		
Accuracy	30.14 (1.03)	29.93 (1.19)	28.91 (.75)	29.59 (.84)	4.64	.006
_	Mean (SD)					Sig.
	(+SP/OS)	(-SP/OS)	(+SP/TS)	(-SP/TS)		
Fluency	44.90 (.42)	42.98 (.43)	45.19 (.88)	42.87 (.84)	48.91	.000

The incentive behind posing the second research question was to see whether or not engaging in strategic planning has any impact on the syntactic complexity of EFL learners' production in an oral narrative task. As illustrated in Tables 2 and 3, planners in OS group have outperformed those in -SP/OS group (i.e., the control group) in terms of the measure of complexity. However, there is no statistically significant mean difference between +SP/OS and -SP/TS groups (p = .926), which could be attributed to the positive influence of both engaging in strategic planning and recounting a narrative with two storylines on syntactic complexity. Hence, in response to the second question it is plausible to suggest that engaging in pre-task, strategic planning positively affects syntactic complexity of EFL learners' oral production.

The third research question asked whether or not strategic planning has any significant effect on the accuracy of EFL learners' oral production. It was predicted that no significant effect would be found. To provide a plausible answer to this question, the ratio of clauses to AS units in the participants' production was used. Statistics reported in Table 2 and Table 3 show mixed results. As expected, though planners in OS group obtained slightly higher accuracy scores than –SP groups, the mean differences did not reach statistical significance. Surprisingly, however, planners who took the dual storyline narrative had a less accurate performance than those who were in -SP/OS group (i.e., the control group). In other words, although engaging in strategic planning before performance, planning before retelling a dual storyline narrative might even impair accuracy of EFL learners' oral production.

Table 3. Location of Significant Mean Differences

Variables	Location of significance						
Complexity	$\frac{+\frac{SP}{OS}}{-\frac{SP}{OS}}$		$\frac{+\frac{SP}{OS}}{-\frac{SP}{TS}}$	$\frac{-\frac{SP}{OS}}{+\frac{SP}{TS}}$	$-\frac{SP}{OS} \\ -\frac{SP}{TS}$	$\frac{+\frac{SP}{TS}}{-\frac{SP}{TS}}$	
	.000*	.002*	.926	.000*	.000*	.000*	
Accuracy	$ \frac{+\frac{SP}{OS}}{-\frac{SP}{OS}} $ -948	.011*	$ \frac{+\frac{SP}{OS}}{-\frac{SP}{TS}} $.499	$ \frac{-\frac{SP}{OS}}{+\frac{SP}{TS}} $ $.000^* $	$-\frac{SP}{OS}$ $-\frac{SP}{TS}$.826	$ \frac{+\frac{SP}{TS}}{-\frac{SP}{TS}} $.301	
Fluency	$ \frac{+\frac{SP}{OS}}{-\frac{SP}{OS}} $ $.000*$.713	$ \frac{+\frac{SP}{OS}}{-\frac{SP}{TS}} $ $.000*$	$ \frac{-\frac{SP}{OS}}{+\frac{SP}{TS}} $ $.000*$	-\frac{SP}{OS} -\frac{SP}{TS} -977	$ \frac{+\frac{SP}{TS}}{-\frac{SP}{TS}} $ $.000*$	

*p < .05

The fourth research question addressed the effect of performing a narrative task with two storylines on the syntactic complexity of EFL learners' oral production. To be able to answer this question, performances of –SP/OS and –SP/TS groups were compared. Table 3 demonstrates that participants in the latter group have produced a fairly more complex language than those who were in the former. This finding, thus, points to the advantageous effect of recounting a narrative with two storylines on the syntactic complexity of EFL learners' oral task performance.

The final research question addressed the combined effects of engaging in strategic planning before retelling a dual storyline narrative on complexity, accuracy, and fluency of EFL learners' oral production. The synergistic effects for these independent variables realized in +SP/TS group are fairly evident by looking at the tables which have been referred to so far. As displayed in Table 3, participants in +SP/TS group outperformed their counterparts in the control group (i.e.,-SP/OS) in terms of fluency and complexity. Nonetheless, they obtained significantly lower accuracy scores. There is one more interesting finding that relates to the combination of these variables. In fact, a reexamination of Table 3 reveals that participants in +SP/TS group have exceeded those in all other groups in terms of the measure of syntactic complexity. This suggests that the positive effect of engaging in strategic planning on complexity coupled with the advantageous effect for the presence of two storylines in the narrative on complexity have induced learners to produce more complex language than they could do if they were to perform under – SP/TS or +SP/OS conditions alone.

To sum up, in response to the last research question, there is sufficient evidence to suggest that engaging in strategic planning before recounting narratives with two storylines brings about gains in fluency and complexity but not accuracy of EFL learners' oral performance. Besides, this task design and performance condition is optimal for generating an exponential increase in EFL learners' complexity of performance.

6. Discussion

This study primarily sought to investigate the combined effects of strategic planning and narrative storyline complexity on complexity, accuracy, and fluency in intermediate EFL learners' oral production.

In this section, the findings of the study will be summarized and discussed each in turn.

As regards the effects of strategic planning on the quality of EFL learners' oral task performance, it was predicted that giving EFL learners pre-task planning time advantages fluency and syntactic complexity but not accuracy of their oral production. It was found that participants who had the opportunity to engage in strategic planning produced more fluent as well as structurally complex language. In terms of syntactic complexity, however, +SP/OS group did not exceed -SP/TS group, which is indicative of the positive impact for the presence of two narrative storylines on syntactic complexity. On the whole, the outcomes vis-a-vis fluency and complexity are consistent with the findings of previous studies pointing to the strong effect of engaging in pre-task, strategic planning on fluency and complexity but not accuracy of production.

These findings can be accounted for from a psycholinguistic point of view. Building on Levelt's (1989, 1993) model of speech production, Yuan and Ellis (2003, p.7) reason that pre-task planning is primarily aimed at the Conceptualizer during which learners plan propositional content and isolated chunks of language to encode it. They posit that even though L2 learners might attempt to make a more detailed formulation, they are unlikely to remember the pre-planned forms when they perform the task. That being so, planners will remember the propositional content rather than the linguistic encodings. Yuan and Ellis (2003) conclude that the linguistic correlate of effort put into conceptualizing what to say is enhanced complexity and fluency not accuracy. In the same way, Ellis (2005) aptly argues that when learners plan strategically they channel attention towards drawing up a conceptual plan of what they want to say rather than to formulating detailed linguistic plans. Further, Ellis (2005) maintains, given the selective nature of attentional capacity, when learners plan, they have to choose what aspect of production to focus on; focusing on fluency and complexity is to the detriment of accuracy and vice versa. Building on this argument, one could infer that giving EFL learners pre-task planning time assisted them with conceptualizing their message; however, pressed online planning demands caused by time limit (i.e., 3 to 4 minutes) taxed their limited attentional resources and, as a result, they could not monitor their message, hence more fluent as well as more complex oral production.

As for the effect of narrative storyline complexity on syntactic complexity, it was predicted that the presence of two storylines in a narrative elicits enhanced syntactic complexity. It was found that performing the narrative in which the story was presented through both foreground and background information results in gains in syntactic complexity of EFL learners' oral production. This finding is in line with Tavakoli and Skehan (2005), Tavakoli (2009a), and also Tavakoli and Foster (2011) who reported that the presence of two narrative storylines enhanced syntactic complexity. In this connection, Matthiessen and Thompson (1988) argue that the necessity in these narrative tasks to link foreground with background leads L2 learners to formulate subordinated clauses in order to express conditions, reasons, or purposes in the story. Similarly, Harris and Bates (2002) argue that in English narrative background is usually described through syntactic subordination. It follows that when doing a narrative task in which learners are expected to connect background events to the main storyline, they are induced to use syntactic subordination to achieve their purpose, hence enhanced syntactic complexity.

Lastly, regarding the combined effects of engaging in pre-task, strategic planning before recounting a narrative with two storylines, it was found that this condition results in a degree of syntactic complexity in EFL learners' oral production that is above and beyond the effects for each of these variables when used alone. Even so, it is essential to point out that this exponential increase in syntactic complexity was achieved to the detriment of accuracy. As was pointed out previously, planners who performed the TS

narrative gained significantly lower accuracy scores than those who were in -SP/OS (i.e., the control group). This finding can be explained with reference to different and, at times, contradictory proposals previously put forward regarding the impact of the limited nature of human attentional resources on the CAF triad and the nature of the trade-offs involved. While Foster and Skehan (1996) have argued that the trade-off is between accuracy and complexity, Wendel (1997) has proposed that it involves fluency and accuracy. The evidence reported in this study, however, lends support to Foster and Skehan's (1996) argument and runs contrary to Wendel's (1997) predictions. Thus, it seems logical to argue that whereas engaging in strategic planning before doing a narrative with two storylines brings about significant gains in complexity, it impairs accurate production of language.

The outcomes of this study bear pedagogical as well as theoretical significance. Pedagogically, the findings reported here can assist teachers in making empirically informed decisions in the classroom. Given that L2 learners' task performance is affected by its design features and performance options in predictable ways, EFL teachers can manipulate task design and implementation factors in such a way as to achieve certain pedagogical objectives. First, this study added further support to the consistent, positive effects of pre-task, strategic planning on the fluency and syntactic complexity of L2 learners' oral production. Second, as the syntactic complexity of learners' performance is associated with narrative storyline complexity, engaging EFL learners in the task of recounting simultaneous events may lead them to attempt more hypotactic language, such as subordinate clauses. Finally, and more importantly, EFL teachers can considerably develop students' complex language use by allowing them to engage in strategic planning before recounting narratives in which the story develops through information provided in both foreground and background.

Theoretically, the results presented in this study could help SLA researchers test hypotheses concerning the nature of interlanguages as well as the validity of Levelt's (1989) speech production model that is essential in discussing the role and psycholinguistic functioning of planning in L2 performance and L2 acquisition (Ellis, 2005, 2009). Besides, since the significant impact of planning on the CAF triad has been fully investigated from different perspectives and in various contexts, this avenue of research could help enrich task-based language pedagogy in English language teaching contexts (Ahmadian, 2012b).

7. Conclusion

This study was primarily an attempt to examine the combined effects of strategic planning and narrative storyline complexity on complexity, accuracy, and fluency in the oral production of Iranian EFL learners. The overall conclusion which can be drawn from the findings reported in this research is that the design features and implementation variables of a narrative task can manipulate EFL learners' oral performance in predictable ways. Yet, the major contribution that this study makes to the related literature is the discovery that though engaging in strategic planning before performing a narrative with two storylines exponentially advantages syntactic complexity, it impairs accuracy of production.

The issue of interaction between task design features, procedural options, and planning is certainly worth further exploration using other task types, planning conditions, performance options, and individual variables. This is in keeping with Ellis (2009) who argues that in order to arrive at a full theoretical account of the role of planning, researchers need to take into consideration how other variables interact with planning conditions to influence L2 production and SLA. Though every attempt was made to avoid some of the design, measurement, and analytical shortcomings, this research study has a number of limitations and these should be acknowledged. First, although the findings of this study supported Foster and Skehan's (1996) proposal concerning the nature of trade-offs among the CAF components, there is still a need for further research in this area to shed more light on "the precise ways

in which the performance areas come into competition, and what influences are there which mediate this competition." (Skehan, 2009, p.511). Second, since the present study was conducted in a laboratory setting, its ecological validity is questionable and thus caution must be taken in making any generalizations on the basis of the results obtained here. Finally, though cross-sectional investigations of tasks are potentially useful, they cannot prove long-term benefits to SLA. Indeed, a longitudinal study might enable the researchers to establish whether any benefit gained from performing narrative tasks with certain design features and performance conditions carries over to a later time.

Note

1. Given the range of dependent variables, it may be suggested that a MANOVA might be a more appropriate statistical tool; however, since MANOVA makes quite stringent assumptions about the data, it is difficult to interpret and in most cases is less powerful than ANOVA (Tabachnik & Fidell, 1996). Additionally, there is very limited convincing empirical evidence for this data analysis strategy (Ellis &Yuan, 2005).

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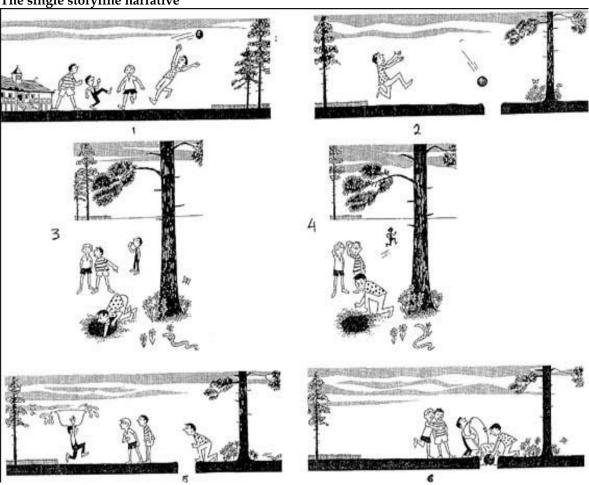
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Appendixes Appendix A

The single storyline narrative



Appendix B

The dual storyline narrative

