The Effects of Task Complexity, Strategic Planning and No Planning on EFL Students` Narrative Writing Performance

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Abstract

This study examined the effects of task complexity and strategic planning and no planning on written narrative production under different task complexity conditions by 120 second-year English major students from AL-Ma'aref High Institute for Languages and Translation. Task complexity was manipulated along Robinson's (2001b) proposed task complexity dimension of Here-and-Now (simple) vs. There-and-Then (complex) in. Accordingly, three specific measures of the written narratives were targeted, i.e. complexity, accuracy and fluency (CAF). Planning was operationalized at two levels: pretask planning (PTP) and no planning (NP). Participants of this study were four groups, the pre-task planning (PTP) and Here-and-Now (HN), pre-task planning (PTP) and There-and-Then (TT), no planning (NP) and Here-and-Now (HN), or no planning (NP) and There-and-Then (TT) groups. The findings of the study indicated that with respect to complexity, accuracy and fluency, the effects of both task complexity and planning conditions were found significant. More complexity, accuracy, and fluency were found in the complex task with the participants under planned condition. Also, the findings revealed that giving students time to plan before commencing the task, leading them to better performance. The pedagogical implications are discussed with reference to the influence of task complexity and planning conditions on text quality.

Introduction

Among the four skills, writing is the most difficult for foreign language (FL) learners to learn as it requires paying attention to both higher and lower level skills at the same time during the writing process. One of the test methods for assessing writing performance is a "task" (Bae & Bachman, 2010) which has been considered as a key and indispensable instructional tool in FL learning classrooms. The paramount importance of task has directed many researchers' attention towards task-based language learning, teaching, and research (e.g. Kuiken & Vedder, 2008; Ong & Zhang, 2010; and Kormos, 2011).

A central issue in task-based language learning concerns the influence of task complexity on linguistic performance. Several studies have investigated the effect of task complexity and task types on different aspects of linguistic performance at different levels of L2 proficiency (e.g., Skehan & Foster, 1999; Robinson, 2001a; Yuan & Ellis, 2003; and Gilabert, 2005). Most of these studies have focused, however, on oral proficiency. There have only been few studies that have considered the question of how the complexity of a writing task might influence the quality of the text resulting from this task. In the literature on both L1 and L2 writing, it has been suggested that some task types result in lower test scores than others; however, the relationship between task complexity, task types and writing performance is

by no means clear. Task complexity "is the result of the attentional, memory, reasoning, and other information processing demands imposed by the structure of the task on the language learner" (Robinson, 2001a: 28).

Task-based research has concentrated mainly on learners' (mental) involvement in task completion process. "Proposals for task-based approach to pedagogy have conceded that valid criteria for determining the difficulty level of tasks have yet to be established" (Robinson, Chi-chien Ting, & Urwin, 1995, p. 62). Regarding theoretical perspectives, there are different writing models (e.g. Kellog, 1996), but none of these models predicts the nature of processes involved in learners' mind during completing writing tasks. What processes and how these processes take place inside learners' mind can be determined through completing a task and they are of utmost importance in defining, selecting, and sequencing the tasks which are appropriate for learners' levels in both second and FL learning settings. One of these processes which can play an important role in written language production is "information processing". From the information processing approach to task-based research, task complexity can be defined through intrinsic complexity (cognitive factors), perceived difficulty (learner factors), and task completion condition (interactional factors). The framework for defining cognitive task complexity adopted in this paper:

distinguishes between dimensions of task complexity which can be manipulated to increase the conceptual and linguistic demands tasks make on communication, so creating the conditions for L2 "development", and the dimensions of task complexity which can be manipulated to increase the demands made on accessing a current interlanguage repertoire during real-time L2 "performance". (Robinson, 2005, p. 5)

These two dimensions are discussed under "resource-directing" and "resource-dispersing" dimensions below.

Robinson's Cognition Hypothesis: Triadic Componential Framework

Robinson's Cognition Hypothesis (2005) and Skehan's Limited Attentional Capacity Model (Skehan & Foster, 1999, 2001) are two theoretical frameworks on which this study was based. Robinson's Cognition Hypothesis (2005), also known as Multiple Attentional Resources Model, states that human beings have unlimited attentional and memory resources which can be accessible whenever there is a need. The cognition hypothesis advocates the prediction that increasing cognitive task complexity which requires more attentional resources does improve language production qualities such as accuracy and complexity but not fluency. Robinson's Triadic Componential Framework embraces two dimensions dealing with cognitive loading, "resource-directing dimensions", and "resource-dispersing dimensions". The former can be operationalized by whether the task requires learners to refer to events in the past or in the present, whether the task requires learners to refer to few or many elements, and whether the task requires learners to use spatial reasoning in completing writing task. On the other hand, the resource-dispersing dimensions deal with whether or not planning time or prior knowledge is given to learners and whether learners are required to complete one or multiple tasks simultaneously.

Skehan and Foster's (2001) Limited Attentional Capacity Model

Another theoretical framework is Skehan and Foster's (2001) Limited Attentional Capacity Model. Unlike Robinson's model, Skehan and Foster's (2001) model proposes that all human beings have limited memory and attentional resources and when they are required to complete a cognitively demanding task, there will be some trade-off effects on different

writing qualities (complexity, fluency, and accuracy). Its assumptions can be summarized as:

• Human beings have a limited information processing capacity; therefore, they prioritize some aspect(s) of language production over other ones.

• If a task demands a lot of attention to its content (more complex task), there will be less attention available to its language forms and vice versa.

• Learners prioritize the meaning and conveyance of it over its form during completing task if they are allowed to allocate attention freely (Van Patten, 1990).

Difference(s) between Robinson's Cognition Hypothesis and Skehan and Fosters' Limited Attentional Capacity Model

The first and foremost difference between Robinson's hypothesis and Skehan and Foster's model is that the former argues that learners can have access to multiple, unlimited, and non-competitional attentional and memory resources in completing a writing task, while Skehan and Foster reject it and focus on limited attentional resources. Cognition Hypothesis proposes that increasing cognitive demand of a task leads to less fluent, but more accurate and more complex language production because of humans" unlimited and non-competitional attentional resources. It means that if a task requires more attention to the content (meaning), it does not distract learners' attention from the form of language because there are enough memory resources available, but it has a negative effect on fluency of language production. The other area on which these two models diverge from each other is the prediction of the effect of increasing task complexity through resource-directing dimensions on language production quality. Whereas Skehan and Foster (2001) predict that increasing task complexity with respect to these factors leads to less fluent, less complex, and less accurate language production, Robinson (2005) argues that increasing task complexity with respect to these dimensions improves complexity and accuracy but reduces fluency.

It is widely acknowledged that tasks have to be taken into consideration both in theoretical accounts of SLA and in practical pedagogic situations. There are large numbers of publications related to task-based language learning, teaching, and testing (Bygate, Skehan, & Swain, 2001; Ellis, 2003; and Skehan, 2003). It is hypothesized that task features have some positive or negative impact on learners` performance in terms of accuracy, fluency, and complexity. Therefore, because of the importance of tasks and their aspects, this study attempted to investigate the effects of task complexity and planning conditions on EFL students` narrative writing performance through presenting an overview of research into task complexity and planning conditions and to connect the findings to task sequencing decisions, language production and acquisition and to show how these variables impact on the fluency, accuracy, and complexity of L2 written performance.

Background

For decades, many researchers and teachers have been interested in task-based language teaching (TBLT) (e.g. Bygate, 2001; Ellis, 2003; Gilabert, 2005, 2007; Robinson, 2007a, 2007b, 2011; and Skehan, 2003, 2009). Tasks have played a central role in FLA research and have brought FLA and language pedagogy together. Since 1980s FLA researchers suggested particular task types that have created strong theoretical foundations to classroom practitioners. Tasks appear to be an ideal construct to link the fields of FLA and language pedagogy (Ellis, 2003; Slimani – Rolls, 2005). Ellis (2005) has asserted that preparing students for understanding and performing pragmatic meaning need "a task

based (or, at least, a task-supported) approach to language teaching" (pp. 209). Tavakoli and Foster (2011) outlined three overlapping reasons why task based research has been so widespread in the field of empirical research for more than two decades. First, research attempts to clarify the proposition that doing a task can cause interlanguage change by having learners to engage to and maintain information about the L2 when using it (Swain, 1995). Second, if research identifies the characteristics of tasks that influence learner's language processing, it helps to provide sound principles for syllabus design empirically (Bygate, 1999a) rather than the more intuition-based reasoning. Finally, research sheds light into the claim that task design and the conditions of performing a task can be selected deliberately by teachers to help learners to focus attention on aspects of the language being learned (Samuda, 2001).

There are many factors such as anxiety of the L2 learners, planning time, familiarity with the topic, genre of the tasks, learner's proficiency level, task type, task structure, task condition, and the degree of cognitive complexity of the tasks which affect the performance of second language learners; for example, their speed of production and complexity of their utterances (Rahimpour, 2008). As Rahimpour (2007) claims, the L2 learner`s performance differs from task to task. So, L2 learner`s production will be different when they perform different task types, and consequently these different types of tasks will result in variation, called "task-induced variation". Foster and Skehan (1996), Franken and Haslett (2002), claim that task type can be an important factor in determining if writers are able to automatize certain features of writing tasks or deal with additional load to process those aspects. It has been argued that different kinds of tasks are all useful components of a school-wide assessment system.

Reviewing previous research makes it clear that there are only a few studies which examined the effects of resource-dispersing factors (e.g. planning time, number of tasks, and prior knowledge) on written language production. The role of strategic planning has attracted considerable attention from researchers. The effects of this kind of planning on all three dimensions of production – fluency, accuracy, and complexity – have been studied (Skehan& Foster, 1997; Ellis, 2005; Ahmadi, 2008). In their recent study, Ong and Zhang (2010) applied resource-dispersing dimensions of task complexity to detect the effects of task complexity on the fluency and lexical complexity of learners' argumentative writing. They manipulated task complexity using two factors: availability of planning time and provision of ideas and macrostructure. They found that increasing task complexity, with respect to the planning time continuum, resulted in significantly more fluency when it was measured by mean number of words produced per minute of the total time spent on the task and lexical complexity. Following Larsen-Freeman (2006) states that most of the measures that have been used in developmental studies consist of intuitive operationalizations of complexity, accuracy and fluency. The underlying assumption is that these indices develop in tandem, i.e. as learners become more proficient, they write more fluently, more accurately and the texts they produce are more grammatically and lexically complex.

Much of FL/L2 class time, particularly in school and university settings, is devoted to learning, teaching, and assessing writing skill (Benevento & Storch, 2011). Accordingly, research on writing tasks has attracted the attention of several scholars recently. There are several studies exploring the effects of manipulating task complexity by the resource-directing factors on first and second language writing performance. Based on Robinson's

(2005) Cognition Hypothesis and Skehan and Foster's (2001) Limited Attentional Capacity Model, Kuiken and Vedder (2008) conducted a study to explore the relationship between cognitive task complexity and linguistic performance in L2 writing. In their experiment, 91 Dutch university students of Italian and 76 students of French were required to complete two writing tasks with prompts of different cognitive complexity level. The measures of syntactic complexity, lexical variation, and syntactic accuracy provided support for the Cognition Hypothesis insofar as the written products of the more complex task came to be more accurate. Investigating a different resource-directing factor, Ishikawa (2006) examined the effects of manipulating task complexity with respect to the immediacy of time and place on 54 Japanese L2 learners' narrative writing. He reported that increasing task complexity with respect to the Here-and-Now dimension led to high level of accuracy, complexity, and fluency in learners' written language production.

Kuiken, Mos and Vedder (2005) manipulated task complexity by varying the number of elements to be considered in a writing task. Specifically, they asked Dutch learners of Italian with high and low proficiency levels to write a recommendation letter to a friend about where to visit for a holiday. They examined three categories of L2 production measures: syntactic complexity; lexical variation; accuracy. Their results showed that there were no task complexity effects on lexical and syntactic complexity. In contrast, analyses on accuracy data yielded significant interactions between task complexity and proficiency; namely, greater written accuracy was observed when task complexity and proficiency were both high. Similarly, Kuiken & Vedder (2007) conducted a study on L2 proficiency in writing among 84 Dutch university students of Italian and 75 students of French. In their study, task complexity was manipulated along two variables of Robinson's Triadic Componential Framework, the number of elements which have to be taken into account and the reasoning demands posed by the task. Accuracy, syntactic complexity and lexical variation measures were used to analyze linguistic performance. They found a main effect for task complexity on lexical errors, i.e. both students of Italian and French produced fewer lexical errors in the complex task. This means that the overall increase of accuracy in the complex condition is mainly due to a decrease of lexical errors.

Rezazadeh, Tavakoli, and Eslami-Rasekh (2011), investigated the role of task type in foreign language written production in terms of accuracy, fluency, and complexity. Two types of tasks (instruction task and an argumentative task) used in the study. Participants in the instruction-task group performed significantly better than those in argumentative-task group in terms of accuracy, fluency, and complexity. Fluency was higher in instruction essays, and in terms of accuracy, instruction-task group performed better than those in argumentative-task group, but argumentative essays were more accurate than instruction essays. Moreover, Kawauchi (2005) investigated the effect of strategic planning and language proficiency on L2 oral narrative production by Japanese college students. Using a within-subject experimental design, she compared L2 oral narrative production under unplanned and planned conditions. Analyses were conducted using four categories of production measures: accuracy; structural complexity; lexical variation; fluency. The main findings of her study were that regarding structural complexity and lexical variation, High EFL learners received the greatest benefits, whereas Low EFL learners gained the most in accuracy terms.

In a similar attempt, Ojima (2006) examined the effect of concept planning (as a resource-dispersing factor and as a form of pre-task planning) on three English as a Second

Language (ESL) Japanese students' writing performance. He reported that pre-task planning produced greater fluency and complexity, but did not improve grammatical accuracy. In a similar vein, Wigglesworth and Storch (2009) conducted a study in order to determine whether there were any identifiable differences in the essays written by the learners working in pairs and those composed by the learners working individually. The essays were analyzed for fluency, complexity, and accuracy. Their findings revealed that collaboration had a positive effect on accuracy, but did not affect fluency and complexity of language production. In a recent study, Kormos (2011) investigated the effect of task complexity on linguistic and discourse features of narrative writing performance. He reported that FL participants produced more lexically complex texts. In addition, the findings indicated significant differences between L1 and FL narratives in terms of lexical variety, complexity, and syntactic complexity.

It is evident from the above studies that the type of task presented to learners can lead to great variability in the results. The research to date indicates that task type is a rich area for further research. Consequently, more attention needs to be paid to the relationships between task types on the performance of a written text. It was therefore decided to undertake further exploration and to collect additional evidence about the role of task type in fluency, complexity, and accuracy of EFL students' written products. As the literature lacked studies on written tasks and the effect of participant factor on learners' performance, the present study set out to investigate the effect of task complexity and planning conditions (strategic planning and no planning) on EFL students' narrative writing performance.

Statement of the problem

The problem of the study could be stated in the low level of the second year students at high institutes for languages and translation in narrative writing performance. Thus, this study specifically seeks answers to the following questions:

What are the effects of task complexity and planning conditions (strategic planning and no planning) on EFL students' narrative writing performance in terms of complexity?

What are the effects of task complexity and planning conditions (strategic planning and no planning) on EFL students' narrative writing performance in terms of accuracy?

What are the effects of task complexity and planning conditions (strategic planning and no planning) on EFL students' narrative writing performance in terms of fluency?

Purpose of the Study

This study is an attempt to examine the role that variation in task types and task complexity may play in the characteristics of EFL students' narrative writing performance. The variables that are examined in conjunction with task type are fluency, complexity, and accuracy. That is, this study is to investigate the variation that may exist in the fluency, complexity, and accuracy of narrative discourses. More interestingly, for present purposes are the effects of planning, where learners receive no detailed instructions about how to plan before they start writing (Ellis, 2003). Writing is a significant way of expressing thought and ideas; however, it is still believed to be difficult for the majority of EFL students as they have to go through difficult processes of learning how to write in their foreign language.

Hypotheses of the Study

The following four hypotheses have been formulated:

Task complexity and planning conditions have a statistically significant effect on EFL students' complexity of narrative writing performance.
Task complexity and planning conditions have a statistically significant effect on EFL students' accuracy of narrative writing performance.
Task complexity and planning conditions have a statistically significant effect on EFL students' fluency of narrative writing performance in terms of.

Definition of terms

- Task Complexity

As Gilabert (2004) asserts, the need for sequencing tasks from simple to complex in a reasoned way that will foster interlanguage development was the impetus to the emergence of the concept of task complexity. As cited by Salimi, Dadashpour, and Asadollahfam (2011), task difficulty provides the teacher or syllabus designer with information about the level of challenge that a task is likely to contain, a level which the teacher will then have to match with his or her knowledge of the students who will do the task. There are different but similar definitions of task complexity. Ellis (2003, p.351) defines task complexity as "the extent to which a particular task is inherently easy or difficult."According to Robinson (2001a, p.29), task complexity is defined as "the result of intentional, memory, reasoning, and other information processing demands imposed by the structure of the task on language learner." Skehan (1998) uses the term interconnectedness to refer to complexity: more elements or characters make for greater task difficulty.

- Planning Condition

Ellis (2003, p.226) defines strategic planning or pre-task planning as "the process by which learners plan what they are going to say or write before commencing a task". Strategic planning can be guided or unguided. In guided planning learners receive (more or less) detailed instructions about how to plan, for example by being advised to focus on syntax, lexis, content, or organization. 'Strategic planning' contrasts with 'No planning' that can occur during the performance of the task. It can be distinguished from other pre-task options in that it does not involve students in a trial performance of the task or in observing a model (Philp, Oliver, & Mackey, 2006).

- Narrative Writing

Narrative writing relates a clear sequence of events that occurs over time. Both what happens and the order in which the events occur are communicated to the reader. Effective narration requires a writer to give a clear sequence of events (fictional or non-fictional) and to provide elaboration (Ellis & Yuan, 2004). Kormos (2011) defines a narrative essay as an essay that tells a story about a specific event or experience. Narratives have a point, and the narrative (story) is used to convey the point. A narrative includes all the key events of the story, presented in time order. The narrative essay is more than just a listing of events; it often uses descriptive and sensory information to make the narrator's point and to make the story real for the reader. Consequently, narratives are often subjective rather than objective.

Significance of and justification for the Study

To this end, planning in task types and task complexity can make a significant main effect on what our students should achieve. Therefore, the present study gains significance as the results can shed more light on the effects of task complexity and task types on narrative writing performance.

Method

Participants

The participants of this study were 120 second-year English major students chosen at random from AL-Ma'aref High Institute for Languages and Translation during the 2014 – 2015 academic year, whose age ranged from 20 to 23. The students were divided into four equal groups of 30 which were labeled as the pre-task planning (PTP) and Here-and-Now (HN), pre-task planning (PTP) and There-and-Then (TT), no planning (NP) and Here-and-Now (HN), or no planning (NP) and There-and-Then (TT) groups.

Instruments

Among pedagogic tasks, narrative tasks are the most frequent ones employed in the literature (Skehan & Foster, 1999; and Tavakoli & Foster, 2011). Narrative tasks refer to stories based on a sequenced set of picture prompts which are given to participants to elicit language performance (Tavakoli & Skehan, 2005). To meet the objectives of the study, a kind of cartoon picture was needed. The task employed in the present study is a story-narration based on a series of six frame cartoons adapted from Tavakoli and Foster (2011) was selected as a suitable one for the participants of the study, in which these tasks were administered orally (see Appendix A). This narrative-writing task was chosen for a number of reasons. First, various narrative tasks, particularly with regard to the use of cartoon pictures, have been used in other similar studies of task complexity (e.g., Ellis & Yuan, 2004; and Ishikawa, 2006) and thus comparison with the results of these studies would be easier. Second, because written narratives are monologic rather than dialogic, they afford a basis for deriving measures of learner performance that are not influenced by interactional variables. Third, as previous studies indicate (e.g., Skehan & Foster, 1999) a way of ensuring that the task is reasonably demanding on the participants is to select a picture story that requires interpretation on the part of participants.

The participants were required to write a narrative account for the cartoon picture. In this study, considering the possibility of various interpretations on the part of the participants, two sample prompts, different in their tenses (present vs. past), were provided as a guide for writing the narratives (see Appendix B). The reason for using HN and TT tasks could be traced in Robinson (2005): Tasks which differ along the Here-and-Now/There-and-Then dimension clearly require the participants to distinguish between the temporality of reference (present versus past), and to use distinct deictic expressions (this, that, here, there) to indicate immediately present, versus absent objects. This sequence of conceptual and linguistic development takes place in L1 acquisition of English. Children first make reference to the Here-and-Now [simple] and at a later point to the There-and-Then [complex], and a similar sequence of linguistic development has been observed in L2 acquisition (Robinson, 2005: 5). Through writing the narrative task, one of the proposed task complexity dimensions "Here-and-Now (HN) (simple)" versus "There-and-Then (TT) (complex)" was operationalized. The participants of the two groups of PTP-HN and NP-HN were presented with a prompt in present tense and the participants of the two groups of PTP-TT and NP-TT were presented with a prompt in past tense.

Procedure

The cartoon picture was piloted with a group of 20 EFL students similar to the participants of the study. Based on the results of piloting (a) words and phrases which were difficult for learners were identified; (b) the minimum number of words was found to be 170, so it was set as the acceptable minimum number of words; and finally (c) the minimum and the

maximum time needed for writing the narrative were found to be between 25 to 35 minutes, therefore, an average time of 30 minutes was set for the actual writing session. The data were collected from each of the four groups, during normal class time. The task was carried out under four conditions. The students in their assigned classes were randomly divided into pre-task planning (PTP) and Here-and-Now (HN), pre-task planning (PTP) and There-and-Then (TT), no planning (NP) and Here-and-Now (HN), or no planned (NP) and There-and-Then (TT) groups, each group consisting of 30 participants. Each participant in four groups performed the task over a period of three weeks. The writing stage of the study was conducted at two separate sessions: one session for the HN condition and the other one for TT condition.

The participants from both HN and TT groups in the PTP condition, participants were requested to finish writing the tasks within 30 minutes and to produce at least 250 words. In this condition, they were given 10 minutes to plan their performance of the task. The condition of planning time was based on Foster and Skehan (1996) and Ellis and Yuan (2004). No detailed guidance was provided. The participants were given a sheet of paper to write notes but told not to write out the whole story. The notes were taken away before starting the task. According to Yuan and Ellis (2004), the removal of written notes serves dual purposes: first, it ensures that language generated during task completion is produced within the specific time limit. Second, the notes can be used as evidence regarding how individual students undertook the planning. The participants from both HN and TT groups in the NP condition, participants were required to finish the task within 30 minutes and were asked to write at least 250 words. This was intended to limit the amount of time, while ensuring that it was possible for the participants to complete the task. (see Appendix B).

In the current study, the participants' narrative accounts were rated in terms of their CAF. Following Wolfe-Quintero et.al (1998) guidelines, CAF was operationalized as follows:

Complexity (Ratio of Clauses to T- units)

Regarding Syntactic complexity a measure of the ratio of clauses to T- units was adopted (Yuan and Ellis, 2003; Ellis and Yuan, 2004). T- units rather than C- units are used because the task performance is monologic and contained few elided utterances (Foster, Tonkyn, & Wigglesworth, 2000).

Accuracy (Error- free T-units)

To code accuracy, following the studies of Errasti (2003), Larsen- Freeman (2006); and Rahimpour (2008), it was operationalized as the number of Error- free T-units i.e., the percentage of T-units that do not contain errors. All errors in syntax, morphology, lexical choice, and spelling errors were considered. Lexical errors are defined as errors in lexical form or collocation. These measures were used for analysis because these indices have been determined to be the best measures of second language development in writing (Larsen-Freeman, 2006).

Fluency (Words per T-units)

Fluency was measured by words per T- units, the term T- unit it is defined as "a main clause plus any subordinating clauses" (Ishikawa, 2006; and Kuiken & Vedder, 2007). In addition, sentence fragments were not counted as T- units following Ishikawa (2006), and Foster and Skehan (1996) who argued that the definition of the T- unit excludes ellipsis.

Thus, in this study the ratio of clauses to T- units was used as a measure of complexity, the number of error- free T- units per t-units was used as a measure of accuracy, and the number of words per T- unit was used as a measure of fluency. These measures were used

for analysis because these indices have been determined to be best measures of second language development in writing (Larsen- Freeman, 2006).

Results and Discussion

To answer the raised question of the study and find out the way the independent variables of pre-task planning time affect the dependent variables, the raw scores of the participants were fed into the Statistical Package for the Social Sciences (SPSS), for further data analysis. Then, the independent samples t-test was adopted to find out the effect of planning condition.

The first hypothesis

The results for the first research hypothesis of the study (whether task complexity and planning conditions (pre-task planning and no-planning) have any significant effect on the measure of complexity of EFL students' narrative writing performance) are presented in Table (1).

Table (1): Descriptive Statistics on the Complexity Scores across Task Type and planning conditions

Dependent Variable	Task Type	Planning condition	N	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Complexity	Simple (HN)	Pre-task planning PTP	30	1.366	0.1962	0.0419	1.432	0.199
		No planning NP	30	1.197	0.1941	0.0416		
	Complex (TT)	Pre-task planning PTP	30	1.593	0.1657	0.0368	-0.872	0.394
		No planning NP	30	1.468	0.1389	0.0324		

Regarding the effect of task complexity on written complexity, the participants of the complex task outperformed the participants of the simple task, as the former produced more complex narrative texts through writing more clauses per T-unit. With respect to the effect of planning conditions on complexity, it was observed that the pre-task planning group produced more complex narrative texts.

The second hypothesis

The results for the second research hypothesis of the study (whether task complexity and planning conditions (pre-task planning and no-planning) have any significant effect on the measure of accuracy of EFL students' narrative writing performance) are presented in Table (2).

Table (2): Descriptive Statistics on the Accuracy Scores across Task Type and planning conditions

Dependent	Task	Planning	N	Mean	Std.	Std. Error	t	Sig.

Variable	Type	condition			Deviation	Mean		(2-tailed)
Accuracy	Simple (HN)	Pre-task planning PTP	30	0.5833	0.1993	0.0419	-0.421	0.695
		No planning NP	30	0.3695	0.1883	0.0423		
	Complex (TT)	Pre-task planning PTP	30	0.7599	0.1965	0.0368	0.997	0.339
		No planning NP	30	0.6944	0.1496	0.0324		

A comparison of the performances in terms of accuracy showed that the ratio of error-free T-units per total T-unit (accuracy) was significantly higher in the simple task than in the complex one. Further, the effect of planning conditions on written accuracy was significant, i.e. the pre-task planning group outperformed the no planning group in a statistically significant manner. Furthermore, the findings of the study discovered that planning does not lead to more accurate performance in complex task. In contrast, planning leads to the production of more accurate performance in simple task. As stated before, planning time makes a difference where the task is more difficult. In more difficult tasks, it is possible that planning time plays an essential role in reducing the cognitive recourses to manageable levels.

The third hypothesis

The results for the third research hypothesis of the study (whether task complexity and planning conditions (pre-task planning and no-planning) have any significant effect on the measure of fluency of EFL students' narrative writing performance) are presented in Table (3).

Table (3): Descriptive Statistics on the Fluency Scores across Task Type and planning conditions

Dependent Variable	Task Type	Planning condition	N	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Fluency	Simple (HN)	Pre-task planning PTP	30	9.268	1.846	0.2984	-0.372	0.731
		No planning NP	30	9.168	1.737	0.2822		
	Complex (TT)	Pre-task planning PTP	30	9.262	1.912	0.3279	0.691	0.512
		No planning NP	30	9.469	1.834	0.2982		

With respect to the effect of task complexity and planning conditions on written fluency, the participants of the complex task performed better trend in producing more words per T-unit. The results of this study revealed the significant difference between the planning and no-planning groups, showing that planning before performing the task helps the learners to achieve a better performance. This finding supports the claim made by many researchers (e.g., Foster &Skehan, 1996, 1997; Yuan & Ellis, 2004; and Tavakoli & Skehan, 2005). The findings on the two measures of complexity and accuracy confirm Robinson's (2001a) Triadic Componential Framework (Cognition Hypothesis) in the sense that an effect of increasing task complexity on complexity, and accuracy was found. This means that increasing task complexity along resource-directing variables leads learners to pay more attention to complexity and form in their written outputs. In other words, making a writing task more complex leads to a greater degree of complexity and higher accuracy of the written text.

Both the dependent variables of complexity and accuracy were affected positively by manipulating the complexity of the narrative-writing task. Accordingly, the participants performed in a significantly improved fashion in terms of complexity and accuracy on the There-and-Then (complex) task. Furthermore, the observed increase in the written complexity of narrative outputs in the There-and-Then condition may be ascribable to the increased conceptual activation during the output planning stage, or what Berman & Slobin (1994, cited in Ishikawa, 2006: 208) call "relating events in narrative." Thus, task demands in the TT condition may encourage deeper semantic processing than those in the HN condition, which may establish more elaborated output plans, out of which more complex language can emerge. As for the role of planning conditions, the results showed that the participants under planned condition received greater benefits in terms of higher accuracy and complexity indices in doing writing tasks than the participants under unplanned condition (Wolfe-Quintero et al. 1998; and Larsen-Freeman 2006). As a consequence, the participants under planned condition outperformed the participants under unplanned condition.

Finally, regarding fluency, Robinson (1995) claimed that during TT task performance, learners need to recall the events at the same time that they code the stories propositionally, and establish transitions between events. When narrating displaced events, in the past and without contextual support, learners need to build semantic schema about the whole narrative which is not present before them; therefore, attention is devoted to achieving inter-propositional coherence, which slows down fluency considerably. Moreover, with respect to fluency, the results confirm Ishikawa (2006) in that participants produced more words per T-unit in the complex (TT) task. The result of this study is in line with other studies in the literature (Foster & Skehan, 1996; Skehan & Foster, 1999; Tavakoli & Skehan, 2005; and Tavakoli & Foster, 2011). They reported that planning conditions led to the production of more fluent language. Therefore, strategic planning can assist and enhance fluency (Ellis, 2005). Consequently, if learners have the opportunity to plan their performance before performing planning conditions, they will be able to produce more fluent language.

Conclusion

The results showed significant effects of increasing task complexity and planning conditions on complexity, accuracy and fluency. The results of this study imply that the skills involved

in writing are highly complex, and therefore FL writers need to be proficient in a variety of skills in order to write effectively (Wolfe Quitero et al., 1998, and Richards, & Renandya, 2002). This study presents additional evidence for the view that task complexity manipulation is a useful form of pedagogical practice in motivating the learner to produce more advanced forms of their L2 (Robinson 2003, 2007a). Future studies need to take task-performer variables such as motivation, learner style, and other individual learner differences into account, which may constitute important indicators of task performance. The study of L2 task-based strategies and the choice of strategies when the learner faces various types of task demands should be a point of focus. Such studies would help develop a more comprehensive model of task complexity.

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