

The Effect of Task Structure on Second Language Learner's Narrative Writing Performance

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Abstract

Investigating how the narrative structure influence writing performance of second language learners is the main focus of this study. To provide an empirical support to the effect of structured and unstructured narrative tasks, 25 Malaysian English learners enrolled at Universiti Sains Malaysia (USM) Penang, were asked to write two stories from cartoon scripts that had different degrees of narrative structure (structured and unstructured). The learners' writing performance was measured for complexity, accuracy, and fluency (CAF). Paired samples t-test was employed to analyze the collected data. Results indicated that narrative structured task had significant effect on the accuracy and fluency of the learners' writing performances, but not on the complexity.

Keywords: Structured Task, Unstructured Task, Caf

Introduction

For decades, many researchers and teachers have been interested in task-based language teaching (TBLT) (e.g. Bygate, 1999, 2001; Ellis, 2005; Foster & Skehan, 1999; Gilabert, 2005, 2007; Robinson, 2007b, 2007c, 2011; Skehan, 1998, 2003, 2009).

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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, 1999) 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; Skehan, 1998).

As a researcher, the growing interest in TBLT motivated me to conduct research to find out the role of "task" in second language (L2) writing performance. As I went on with my studies, I realized that according to Skehan (2003) tasks can have different characteristics (e.g., +/- task structure; +/- familiar information). Among these characteristics, considerably less research has been conducted on how task structure influence written performance of L2 learners.

Consequently, this study attempted to fill the aforementioned gap related to writing and investigates how L2 learners' English narrative writing performance will be affected by +/- task structure. This can assist both English language teachers and testers in choosing proper tasks that have the potential to elicit the targeted features of writing competence.

Task Structure

The variable which was investigated in the present study was inherent task structure. Studies examining the effect of task structure include Skehan and Foster (1999), Tavakoli and Skehan (2005), Tavakoli and Foster (2011). In general, findings of these studies revealed that task structure resulted in more accurate and fluent performance while leaving complexity unaffected.

Task structure has been defined and operationalized in the literature by emphasizing characteristics such as clear time line, a script, a story with a beginning, middle, and end, and appeal to what is organized and familiar in the speaker's or writer's mind, and finally, the presence of a problem solution structure (Tavakoli & Skehan, 2005). In the present study, task structure was the one containing a problem solution structure in which the events could not be reordered without compromising the story, while unstructured task was the one without a problem solution structure and its events could be easily rearranged without losing coherence.

The Study

Based on the issues related to planning time and in order to investigate whether task structure as the independent variables has a considerable effect on L2 learners' narrative writing performance as the dependent variable, the researcher tried to answer the following question:

What is the effect of +/- task structure on CAF of L2 learners' narrative writing production?

Also, in the light of the above-mentioned purpose and based on the stated research question the following hypotheses were proposed:

1. Task structure will have a significant effect on accuracy of L2 learners' narrative writing performance in terms of error-free clauses.
2. Task structure will have a significant effect on fluency of L2 learners' narrative writing performance in terms of number of words per minute.
3. Task structure will have a significant effect on complexity of L2 learners' narrative writing performance in terms of lexical density.

Method

Participants

Fifty first-year undergraduate students, studying at Universiti Sains Malaysia (USM) in Penang, were the participants of this study. The students were divided into two equal groups of 25.

To ensure homogeneity of the groups studied in terms of general proficiency, the researcher attempted to choose participants who get band four from Malaysian University English Test (MUET). The participants had different first language (L1) backgrounds, including Malay, Chinese, and Indian, however all had taken classes in which activities were common and they were not allowed to use their L1. They also communicated with English inside and outside the class. At the time of this study, the participants were studying a general course of Academic English.

Research Instrument

Among pedagogic tasks, narrative tasks are the most frequent ones employed in the literature (Skehan & Foster, 1999; 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). 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), in which these tasks were administered orally (see Appendix).

Measures of Language Production

In this study, CAF measures were developed to assess the quality of the participants' written production.

1. Accuracy

To code accuracy for the participants' written production of the present study, error-free clauses - the percentage of clauses that do not contain any errors was utilized (Ellis & Yuan, 2004). All lexical, syntactical, and morphological errors were considered.

2. Fluency

In this study fluency was achieved by calculating the number of words per minute (Skehan & Foster, 1999).

3. Complexity

Complexity index of this study was lexical density. Lexical density was coded through the ratio of lexical or 'open class', words (full verbs, nouns, adjectives and adverbs ending in -ly) to total words and multiplied by 100 (Following Rahimpour & Jahan, 2011).

Statistical Analysis

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) version 20, for further data analysis. Then, the independent samples t-test was adopted to find out the effect of planning condition.

Results

Accuracy Measure

Table 1 displays descriptive statistics of accuracy measure in structured vs. unstructured tasks. As the table shows, the accuracy mean of the structured task equals 0.6760, while the accuracy mean of the unstructured task equals 0.5660.

Table 1: Paired Samples Statistics for Comparing Accuracy in Structured vs. Unstructured Tasks

Measure	Structure		Mean	Std. Deviation	Std. Mean	Error
Accuracy	Structured	25	.6760	.17909	.03582	
	Unstructured	25	.5660	.22657	.04531	

Table 2 shows the significance level of the paired samples t-test, which is 0.001. The significance value is less than 0.05 and it is confirmed that task structure has a significant effect on the accuracy of performance under the planned condition.

Therefore, the research hypothesis claiming that “task structure will have a significant effect on accuracy of L2 learners’ narrative writing performance” is accepted.

Table 2. Paired Samples Test to Compare Accuracy in Structured vs., Unstructured Tasks

Measure	Structure	Mean	SD	SEM	df	Sig.(2-tailed)
Accuracy	Structured	.11000	.14922	.02984	3.686	24
	Unstructured					

Fluency Measure

As explained earlier, fluency was measured by calculating the number of words per minute. Learners were given 20 minutes to complete the task in both ‘structured’ and ‘unstructured’. However, some participants needed less than the 20 minute time limit to complete the task dropping the mean length of time for the both structured and unstructured tasks, 17.10 and 17.26 respectively. The average number of words produced by the ‘structured’ was 174.88 words. This average for the ‘unstructured’ was 152.23 words. Table 3 displays the means, standard deviations and standard errors of mean for the fluency of structured vs. unstructured tasks.

Table 3: Paired Samples Statistics for Comparing Fluency in Structured vs. Unstructured Tasks

Measure	Structure	Mean	Std. Deviation	Std. Error
Fluency	Structured	25	10.2236	1.64061
	Unstructured	25	8.8220	1.43721

Table 4 shows the significance of the paired samples t-test which is 0.000 and the research hypothesis stating that “task structure will have a significant effect on fluency of L2 learners’ narrative writing performance” is strongly accepted. That is, fluency increases when learners are engaged in performing structured tasks.

Table 4: Paired Samples Test to Compare Fluency in Structured vs. Unstructured Tasks

Measure	Structure	Mean	SD	SEM	df	Sig. (2-tailed)
Fluency	Structured	1.4016	1.58943	.31789	4.409	24
	Unstructured					

Complexity Measure

Table 5: Paired Samples Statistics for Comparing Complexity in Structured vs. Unstructured Tasks

Measure	Structure	Mean	Std. Deviation	Std. Error
Complexity	Structured	25	46.4612	3.09868
	Unstructured	25	45.0476	3.94264

According to table 6, the significance of the paired samples test equals 0.161. It means that learners produced a higher percentage of lexical density when performing structured tasks than when doing unstructured tasks, but this difference was not significant. Therefore, the alternative hypothesis predicting that "task structure will have a significant effect on complexity of L2 learners' narrative writing performance" is rejected.

Table 6: Paired Samples Test to Compare Complexity in Structured vs. Unstructured Tasks

Measure	Structure	Mean	SD	SEM	df	Sig. (2-tailed)
Complexity	Structured	1.4136	4.88388	.97678	1.447	24
	Unstructured					

Discussion and Conclusions

Accuracy

The hypothesis regarding accuracy of task structure claimed that “task structure will have a significant effect on accuracy of L2 learners’ narrative writing performance”. The results of the study suggested that performance in the structured tasks was more accurate than performance in the less structured tasks. These results suggest that presence of structure in a narrative facilitates the act of producing accurate utterances. Performing a more structured task, an L2 writer does not perhaps need to allocate a substantial amount of her/his attentional resources to understanding the theme of the story or to working out how the sequence of the events develop (Tavakoli, 2009). As a result of having more attentional resources available, relieve the narrative processing load and frees up attentional space to be devoted to accuracy (Skehan, 1998), consequently the L2 writer can focus on other aspects of their performance, i.e. making sure their performance is accurate.

As a result, this hypothesis is accepted regarding accuracy. This finding is consistent with the findings of the research by Skehan & Foster, 1999; Tavakoli & Skehan, 2005, and Tavakoli & Foster, 2011. In these studies they found out that accuracy of the performance is affected by task structure especially when learners have the opportunity to engage in some kind of pre-task activity prior to task performance.

Fluency

Regarding fluency, the reported findings confirmed the hypothesis that “task structure will have a significant effect on fluency of L2 learners’ narrative writing performance”. The result of this study is in line with other studies in the literature (Foster & Skehan, 1996; Skehan & Foster, 1999; Tavakoli & Skehan, 2005; Tavakoli & Foster, 2011). They reported that task structure led to the production of more fluent language. Tavakoli and Foster (2011) accounted for this effect by suggesting that in monologic tasks such as writing greater demand is on attentional resources than an interactive task. When the attentional load gets too great, pausing has to increase. Therefore, strategic planning can assist and enhance fluency (Ellis, 2005). Consequently, if learners have the opportunity to plan their performance before performing structured tasks, they will be able to produce more fluent language.

Complexity

Reported findings disconfirmed the research hypothesis regarding complexity of task structure, that is, "task structure will have a significant effect on complexity of L2 learners' narrative writing performance" which is in line with the findings of the research by Skehan and Foster (1999) and Tavakoli and Foster (2011).

Tavakoli and Foster (2011) further pointed to the effect of environment on complexity. Learners in Malaysia don't benefit from the exposure to the target language outside the classroom. As a result, they fail to develop diverse vocabulary and more complex language.

In addition to above findings, results showed that participants produced more accurate and fluent language but failed to produce more complexity while performing the structured task under the planned condition. This finding can be considered as support for Skehan's (1998) limited-attentional model. Skehan (1998) proposes that learners possess a limited processing capacity such that trade-offs between fluency, accuracy and complexity are likely to occur.

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Narrative Task

Write a Story Based on the Following Picture Series



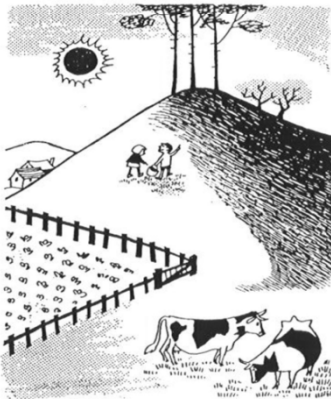
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2



3



4

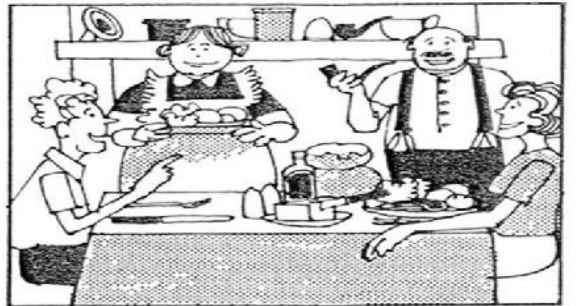
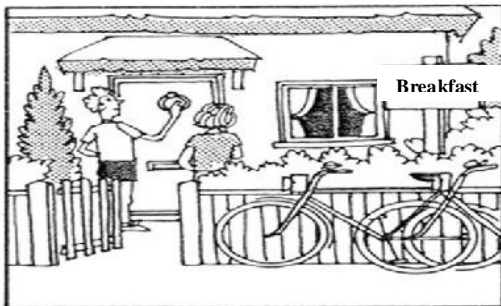
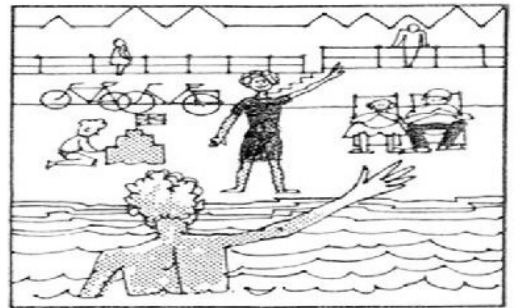
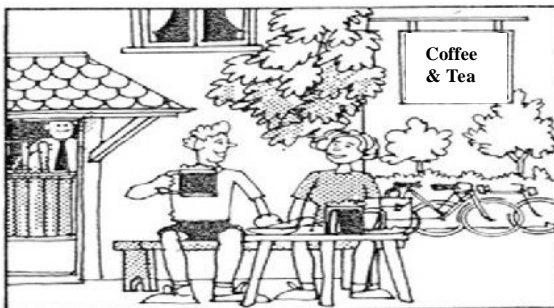
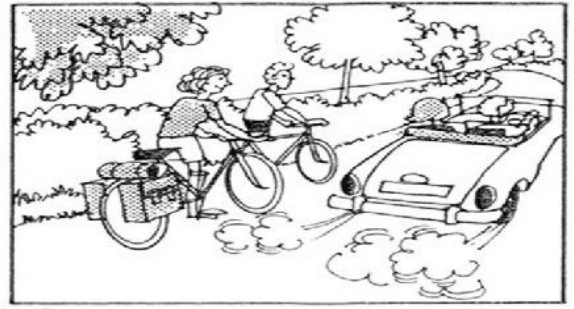


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Picture 1 picnic Task, Tavakoli and Foster (2011)



Picture 2: Journey Task, Tavakoli and Foster (2011)

Appendix D: Instructions Given to the Participants in Each Group

Pre- task Planning

You have just seen a set of pictures. These pictures tell us a story. In a short while, I would like you to retell this story in English. Before you retell the story, you have 10 minutes to plan what you are going to write. Imagine that somebody has never seen these pictures and this is his/ her first time to learn about the story from you. So please tell the story in as much detail as you can. To assist you to prepare, you are given a sheet of paper and a pencil. You can use them to write some notes. But please do not write a complete sentence either in your L1 or English. *When you began to tell the story, I will take the paper away.* You have minutes to retell the story and you must produce at least 150 words.

You can begin your story like this: this morning, Tom, Susan, and George... Please prepare now.(After 10 minutes) It is time for you to begin. Please begin.

No Planning

You have just seen a set of pictures. These pictures tell us a story. Now, I would like you to retell this story in English. Imagine that somebody has never seen these pictures and this is his/ her first time to learn about the story from you. So please tell the story in as detailed as you can. You have minutes to retell the story and you must produce at least 150 words. You can begin your story like this: this morning, Tom, Susan, and George... Please begin now.