

Creativity and Learners' Performance on Argumentative and Narrative Written Tasks

Reza Zabihi

University of Isfahan, Isfahan, Iran

Mohsen Rezazadeh

University of Isfahan, Isfahan, Iran

Dariush Nejad Ansari

University of Isfahan, Isfahan, Iran

This study explores the differential role of creativity in Iranian EFL learners' performance on argumentative and narrative written tasks. The study involved the measurement of learners' (N=70) creativity using the Abbreviated Torrance Test for Adults (ATTA) in terms of features of fluency, elaboration, flexibility and originality as well as the elicitation of the complexity, accuracy, and fluency of their performance on written narrative and argumentative tasks. Whereas the argumentative task required that learners wrote an argumentative essay giving their opinions concerning the effect of technology on human's life, the narrative task involved learners in narrating a story based on a picture as a visual cue. With regards to the argumentative task, the results shows negative relationships between two measures of argumentative task fluency and students' creative originality score. However, the syntactic complexity of argumentations was affected by creative elaboration. Concerning the narrative task, significant positive correlations were observed between creative fluency and the three fluency measures of narrations. Besides, all three fluency measures correlated positively with the total creativity score. Yet the number of words was found

to be negatively correlated with the creative originality. The findings are discussed in the context of language teaching and learning.

Keywords: creativity, task type, argumentative task, narrative task, upper-intermediate EFL learners

INTRODUCTION

A pursuance of understanding why some language learners are ahead of the game than others in academic success has newly turned towards individual differences. Such interest has accordingly spawned a number of recent studies on the topic (e.g., Chamorro-Premuzik & Furnham, 2003; Conard, 2006; Labby, Lunenburg, & Slate, 2012). Among these, creativity, which refers to the generation of ideas or products that are authentic, relevant or useful (Amabile, 1996; Sternberg & Lubart, 1996) as well as the ability to pinpoint the problems, make guesses and generate novel ideas (Torrance, 1966, 1988), has been regarded as an essential thinking skill to be developed for everyone (Torrance, 1988; Taylor & Sacks, 1981). Accordingly, it has received well-deserved attention and has been on the leading edge of research in education over the past fifty years (e.g., Atkinson, 2004; Fortner, 1986; Naderi et al., 2009).

Nonetheless, the underresearched status of creativity in some aspects of second or foreign language education seems to us like a lacuna that needs to be covered. Be that as it may, it is not yet conclusive as to whether creativity can be merely effective in the overall second or foreign language learning outcomes such as achievement (e.g., Meera & Remya, 2010; Otto, 1998) or whether these results may also be observed in more particular and local performance units such as learners' performance on tasks (Albert & Kormos, 2011; Rojas-Drummond, Albarran, & Littleton, 2008).

Thus, creativity has been found to be related to, learners' writing abilities (Sak, 2004; Smith, Paradice, & Smith, 2000) in that a cornucopia of features germane to the writing ability such as free communication of ideas (Beghetto, 2005; Torrance, 1992), the consideration of the human individual (Harrington, Block, & Block,

1987) and self-disclosure (Amabile, 1996) enjoy the same traits that researchers suggest enhancing creative thinking. However, the role of creativity in learners' performance on writing tasks is still undecided and cannot, by any means, be taken for granted.

Further, the advent of communicative and task-based methods in language teaching, which required that learners use their imagination, has accordingly ignited an interest in creativity to loom large in the literature (Albert, 2007). Meanwhile, we may take it for granted that creative learners are more successful than non-creative learners in any language-related task. Straightforward though this characterization may seem, it raises the thorny issue that some types of tasks might accentuate the role of creative thinking in learners' performance. With that in mind, in the present study the authors made attempts at exploring the differential role of creativity in learners' performance on two writing tasks. Put another way, the authors sought to investigate whether the features of learner creativity (i.e. fluency, elaboration, flexibility and originality) might have a role to play in enhancing or debilitating the complexity, accuracy, and fluency of learners' performance on these two tasks.

THEORETICAL FRAMEWORK

Creative Thinking

From the psychologist's standpoint, creativity is an important factor due to its potential for describing individuals and the particular differences between individuals. The inspection of these individual specificities seems to be imperative because they can be used to predict people's future behavior. Many people to date have therefore attempted to understand the essence of creativity as well as the ways through which it can be developed (e.g., Plucker, Beghetto, & Dow, 2004; Runco, 2004), some other people have developed and advocated certain theories of creativity (Amabile, 1996; Csikszentmihalyi, 1988; Maslow, 1968; Sternberg & Lubart, 1996), and still others have developed tests to measure the construct (Guilford, 1976; Meeker, 1985; Sternberg, 1997; Torrance, 1988; Urban & Jellen,

1996). Yet, not surprisingly, in trying to define the construct of creativity, we typically do not come up with a single definition (Dornyei, 2005) because creativity covers a broad range of distinct but intertwined realities such as the creative situation, the creative process, the creative individuals as well as their creative potential and performance (Brown, 1989; Lubart, 1994).

Nonetheless, if we narrow down the scope of our investigation and determine the aspect of creativity that is to be examined, we might have a fair discussion of the true nature of creativity and its components. As Duffy (1998) has pointed out, creativity refers to one's ability to look at things from novel and original perspectives, to transfer obtained experience to new situations, to think in unconventional and idiosyncratic ways and to use novel approaches to problem solving and making original things. Further, it comprises evaluative ability, problem sensitivity, production fluency, idea novelty, mind flexibility, synthesizing and analyzing capability, conceptual structure complexity and reorganization or redefinition of organized wholes (Guilford, 1950). In a later publication, Guilford (1959) added divergent thinking, i.e. the ability of an individual to generate several novel and unique ideas in response to a problem, as a core cognitive element of creativity. The added component was considered to cover a broad range of features such as creative fluency, flexibility, originality, and elaboration (Baer, 1993).

However, *idea production* was found by Carroll (1993) to be a principal human trait comprising several components such as ideational fluency, naming facility, associational fluency, expressional fluency, word fluency, sensitivity to problems, originality/creativity, figural fluency, and figural flexibility. The notion of idea production is typically measured by tasks that instigate examinees to bear in mind a series of responses quickly. Yet in order for the task to deliver what it promises in prompting the examinees to transcend the obvious and ordinary responses, it should be difficult and challenging enough. He further argues that idea production is "involved in any task or performance that requires the ready retrieval of concepts or items from long-term memory" (p. 625).

L2 Writing Tasks

As a new approach within the communicative framework, Task Based Language Teaching (TBLT) has put emphasis on centering language teaching on various language tasks (Pica, Kanagy, & Falodun, 1993; Skehan, 1998; Willis & Willis, 1996) and has introduced a new avenue of research in the field of language teaching and learning. As Skehan (1996) points out, task is “an activity in which: meaning is primary; there is some relationship to the real world; task completion has some priority; and the assessment of task performance is in terms of task outcome” (p. 38). But the point with which we need to take issue here is that the degree of complexity of tasks explains why some tasks are more demanding for one individual, but less demanding for another (Robinson, 2001); therefore, task difficulty might indicate, and justify the existence of, individual differences among learners (Albert & Kormos, 2011). As a case in point, affective individual variables have been found to explain variances in learners’ performance on tasks (Dornyei & Kormos, 2000). Be that as it may, one might argue that individual differences have differential roles in learners’ performance on different task types.

To take ‘learner creativity’ as but one example, although we might be tempted to believe that only gifted high-achievers are meant to be creative, research has shown that the basic components of creativity are normally distributed in the population (Cropley, 1972; Guilford, 1950; Harrington, Block, & Block, 1983). All children are able to think creatively disregarding their IQ as long as their parents provide the necessary conditions for children’s creativity to flourish (Fisher, 2005). Hence, creativity can be a factor influencing second or foreign language learning. The authors have made attempts at examining this potential by exploring the role of creativity in learners’ performance of written argumentative and narrative tasks.

One of the domains wherein creativity might open up a pertinent line of investigation is the narrative genre. The notion of ‘narrative’ has for over the last six decades constituted part and parcel of the research in social sciences and linguistics (Ozyildirim, 2009). Likewise, narrative tasks are a well-grounded and repeatedly studied task type (e.g., Foster & Skehan, 1996; Robinson, 1995). By virtue of their open-ended nature, these tasks demand that learners recite a fictional or real account

of an event or an experience sequentially (Justice et al., 2010), hence smoothing the way for learners to use their imagination. Accordingly, learners are usually required to produce a story in response to some visual stimuli such as picture strips or short films.

Another area which might be of particular interest to studies on creativity is the argumentative genre because argumentation is both cognitively-demanding and a typical form of academic writing. As far as justifying the role of creativity is concerned, *narrative written tasks*, which typically offer visual stimuli and demand that the learner reconstruct a story in written form, and *argumentative written tasks*, which demand that learners develop their own argument by bringing forth the relevant pieces of evidence as well as to assess arguments put forward by other people, seem to be quite relevant.

To round off this section, it is fair to say that because writing is a process with no prearranged limit or end it is commensurable in its goal to 'creative design' (Sharples, 1999) which in turn tends to build on the creative thinking ability of individuals (Vass, 2007). To give but two examples, in both *argumentative* and *narrative* tasks studies on creativity can raise a number of important concerns and questions that may bring us closer to an understanding of this area and better clarify its role in second or foreign language learning and teaching. The study reported in this article, therefore, aimed to examine the role of creativity in upper-intermediate EFL learners' performance on two particular task types, i.e. the argumentative and narrative tasks, while controlling for the differences in the participants' level of proficiency.

Given the fact that in an argumentative task, as befits the term, learners are generally required either to construct their own argument by providing adequate and relevant evidence or to evaluate someone else's argument by considering its claims and assessing the respective evidence and that a narrative task, by virtue of its open-ended nature, demands that learners recite a fictional or real account of an event or an experience sequentially (Justice et al., 2010), these task types seem to smooth the way for learners to use their imagination; in the light of this corollary, it was found markedly pertinent to establish the role of creativity.

Complexity, Accuracy, and Fluency (CAF)

In their attempts to find out the underlying constituents of L2 proficiency and performance, many scholars refer to (a) complexity, (b) accuracy and (c) fluency as three major dimensions (Ellis, 2008; Ellis & Yuan, 2004; Housen & Kuiken, 2009; Larsen-Freeman, 2009; Norris & Ortega, 2009; Skehan, 1998, 2009). Complexity, as defined by Ellis (2003), refers to “the extent to which the language produced in performing a task is elaborate and varied” (p. 340); it also pertains to the degree to which learners are willing to take risks to use the cutting edge of their linguistic knowledge which can finally result in the process of restructuring (Ellis & Barkhuizen, 2005). Accuracy, on the other hand, bears upon the degree of divergence from a particular norm which can be conceived of as errors (Wolfe-Quintero, Inagaki, & Kim, 1998). Moreover, fluency relates to learners’ general language proficiency, typified by impressions of ease, expressiveness, and smoothness in speech or writing (Chambers, 1997; Freed, 2000; Hilton, 2008).

Summary

The frequently increasing studies on creativity show its axiomatic status in language learning and the various ways through which this key concept can be explored. Although we might be tempted to believe that only gifted high-achievers are meant to be creative, research has shown that the basic components of creativity are normally distributed in the population (Cropley, 1972; Guilford, 1950; Harrington, Block, & Block, 1983). All children are able to think creatively disregarding their IQ as long as their parents provide the necessary conditions for children’s creativity to flourish (Fisher, 2005). Hence, creativity can be a factor influencing second or foreign language learning. However, unlike a fair amount of research conducted on the effect of creativity on oral task performance, the differential role of creativity in SLA writing tasks has mostly been ignored. From this we may conclude that creativity can have differential effects on the output that the learners provide while performing on different writing tasks.

THE PRESENT STUDY

Granted that most of the studies have considered the role of creativity in oral task performance (Albert & Kormos, 2011) and that its potential role in written performance has been somewhat ignored (Ong & Zhang, 2011), especially when it comes to task types (Albert & Kormos, 2011), the authors have thus made attempts at bridging this gap by exploring the role of creativity in learners' performance on written argumentative and narrative task types. The present research thus aimed to investigate the relationship between written argumentative and narrative task performance (in terms of three measures of task performance, i.e. complexity, accuracy, and fluency) and the features of learner creativity (fluency, elaboration, flexibility and originality). Therefore, in this study the authors attempt to answer the following two questions:

1. Does creativity have any role in the CAF of upper-intermediate EFL learners' argumentative writings?
2. Does creativity have any role in the CAF of upper-intermediate EFL learners' narrative writings?

METHOD

Participants

A total number of seventy upper-intermediate learners (male and female) majoring in English Language and Literature at the University of Isfahan in Iran took part in the study. Their ages ranged from 18 to 26. Based on a version of an Oxford Placement Test (OPT), upper-intermediate-level learners were selected for the study. The overall rationale for the selection of upper-intermediate learners was that the participants had to provide the researchers with writings of at least 250 words, being able to give their own opinion (for the argumentative task) and narrate a whole story (for the narrative task). Given that, the number of advanced learners was low, the researchers had to choose upper-intermediate learners. After

correcting the papers, 70 learners were selected as the upper-intermediate group based on the categorizations put forth in the OPT manual.

Measurement Tools

The Oxford Placement Test (OPT)

The test contained 60 multiple choice items, and it was used to enable the researchers to control the language proficiency of the learners. This test consisted of grammar (20 items), vocabulary (20 items), reading comprehension (20 items) together with a writing section. The allotted time for answering the questions was 45 minutes.

Creativity Test

Considering the fact that the participants in this study were young adults in Iran, the Abbreviated Torrance Test for Adults (ATTA, Goff & Torrance, 2002) was selected for measuring creativity. The ATTA is a shortened version of the Torrance Test of Creative Thinking (TTCT) and has been commonly utilized by several researchers (e.g., Kharkhurin, 2008; Lin et al., 2011; Meintjes & Grosser, 2010; Rosenthal, et al., 1983; Runco & Albert, 1985; Wang, 2011).

The ATTA measures *creative fluency* (i.e. the number of ideas the learner can produce within a particular time period), *creative originality* (i.e. the extent to which these ideas are unique), *creative elaboration* (i.e. the number of details that the learner can add to the original idea), and *creative flexibility* (i.e. how many varieties of ideas can be produced for solving a problem). It comprises three tests: one verbal and two figural tests. In order to solve problems or communicate ideas, within a particular time period, the learners are expected to recognize problems, make guesses, and generate ideas by writing phrases or sentences and by drawing pictures. The Creativity Index is ranked with seven levels whose values range from 1 to 7 (1 = Minimal; 2 = Low; 3 = Below Average; 4 = Average; 5 = Above Average; 6 = High; 7 = Substantial).

The test has proved to be as reliable and valid as the TTCT (Goff & Torrance, 2000; Kim, 2006; McCann, 2005; Runco, Dow, & Smith, 2006; Torrance, 2000). It takes about 15 minutes to complete. Goff and Torrance (2002) have reported a reliability of 0.90 for the Creativity Index, using a KR-21 reliability coefficient. Besides, they have found reliability coefficients ranging from 0.38 to 0.84 for the subscales of creativity.

Tasks

1) Written argumentative task

The first group of learners (N = 36) were asked to write an argumentative essay. A written argumentative task was chosen in the present study because the authors needed to ensure that the task was reasonably demanding on the participants and thus would exploit their linguistic resources fully. It is now well accepted that argumentation is a cognitively-demanding task and requires that learners develop their *own* argument by bringing forth the relevant pieces of evidence and to assess arguments developed by others. Specifically, the participants were asked to give their opinions on the effect of technology on human's life. In doing so, they were expected to present evidence and support their own positions on the issue on an assignment sheet.

2) Written narrative task

The second group of learners (N = 34) were assigned a narrative task. The narrative task involved learners in narrating a story based on a number of pictures, as visual cues, in the form of a cartoon strip. Thirty minutes was accordingly allotted to the activity. A written narrative task was chosen, as this task type seems to easily lend itself to eliciting the creativity of learners by offering visual stimuli and demanding that the learner *reconstruct* a story in written form. The task comprised learners' narration of a memory of their first days at the university based on a picture demonstrating different locations at a university.

3) Measures of task performance (CAF)

Given the fact that "a full picture of language development in L2 writing can only be obtained by engaging fluency, accuracy, and complexity measures at

various linguistic levels” (Lu, 2011, p. 38), measures of Complexity, Accuracy and Fluency (CAF) were used in the present study to assess the quality of learners’ written productions. In order to conduct this analysis, all written outputs were firstly coded for T-units and clauses. A T-unit is characterized as “one main clause plus whatever subordinate clauses happen to be attached to or embedded within it” (Hunt, 1966, p. 735). For the measurement of complexity and accuracy, the writings had to be analyzed for clauses wherein independent and dependent clauses were distinguished. In the present study, dependent clauses were those which comprised a finite or a non-finite verb and at least one additional clause element such as subject, object, complement or adverbial.

(a) Complexity: A number of measures have been employed to operationalize the construct of syntactic complexity in both oral and written data. In a historical overview, Norris and Ortega (2009) have stipulated three measureable subconstructs in syntactic complexity, namely complexity in terms of subordination, general complexity, and subclausal complexity characterized as phrasal elaboration. It is generally acknowledged that coordination can show complexity at beginning levels of L2 development, subordination is a powerful index of complexity at intermediate and upper-intermediate levels, and subclausal complexity has a better predictive power when measuring syntactic complexity at advanced levels. Since the participants of this study were at the upper-intermediate level of proficiency, we took it for granted that subordination measures would be the most reliable indicator of syntactic complexity. Complexity was therefore measured in this study through calculating the proportion of clauses to T-units, which according to Foster and Skehan (1996) is a reliable measure of subordination correlating well with other complexity measures. Besides, the T-unit can be ideal for intermediate or advanced written data which are typically formed in full clauses and sentences (Norris & Ortega, 2009). Still another measure of complexity used in the present study is the proportion of dependent clauses to clauses (DC/C), which investigates the degree of embedding in the text (Wolfe-Quintero, Inagaki, & Kim, 1998). To take a concrete example, the following independent clauses (*) contain both a subject and a verb and can stand as sentences: *Parents ask their children to study hard,* and they provide good atmosphere at home.**

(b) Accuracy: Unlike complexity and fluency, measures of accuracy are more agreed-upon among researchers (Tavakoli & Skehan, 2005). In the present study, two general measures of accuracy were used as percentages: the proportion of error-free T-units to all T-units (EFT/T) and the proportion of error-free clauses to all clauses (EFC/C). Moreover, errors were either errors of syntax such as errors in word order and missing elements or errors of morphology such as errors in use of articles and prepositions, verb tense, subject-verb agreement and errors in word forms.

(c) Fluency: To estimate learners' fluency in writing, L2 writing researchers have used various measures to date: syllables per minute and number of dysfluencies (Ellis & Yuan, 2004); mean number of words per minute (Ong & Zhang, 2011); average number of words per T-unit (Larsen-Freeman, 2006); number of words, T-units and clauses per text (Wigglesworth & Storch, 2009). In the current study, following Wigglesworth and Storch, fluency was appraised with regards to the average number of words, T-units and clauses per text. As in the following example, a T-unit (#) is shown to be a combination of a dominant clause (*) and its dependent clauses (*d): *Some teachers reward students for good grades,* assigning a specific gift to each good grade.# While you are in the taxi,*d try to find Mellat Bank on your left.#*

It should be noted that the reliability of the measures of task performance was determined by two trained raters who coded the data for the all the learners in each group. One of the raters was an assistant professor of Teaching English as a Foreign Language (TEFL) at the University of Isfahan, Iran. The other rater was a Ph.D. candidate of Applied Linguistics at the same University of Isfahan. Reliability was determined by looking at the percentage of agreement between the two raters. An inter-rater reliability check on the two raters was calculated on each of the rating categories and yielded coefficients ranging from .77 (for complexity) to .92 (for fluency).

RESULTS AND DISCUSSION

Creativity and Narrative Task Performance

A Pearson product-moment correlation coefficient was computed to assess the relationship between creativity and the CAF of narrative task performance. As shown in Table 1, significant positive correlations were observed between creative fluency and the three fluency measures of the narrative task (number of words $r = .50, p < 0.05$; number of T-units $r = .56, p < 0.05$; number of clauses $r = .55, p < 0.05$). Besides, all three fluency measures correlated positively with the total creativity score (number of words $r = .51, p < 0.05$; number of T-units $r = .57, p < 0.05$; number of clauses $r = .62, p < 0.01$).

Correlation analysis shows that the number of words ($r = -.56, p < 0.05$) is negatively correlated with the creative originality. However, the two other measures of fluency are also negatively correlated with originality; they are not shown to be significant. In other words, students who generated more ideas (creative fluency) within the set time on the creativity test produced longer texts (fluency of the text) and those who scored highly on the originality component of the creativity test wrote shorter narrations. As illustrated in Table 1, there is a positive correlation between one complexity measure (dep. clauses percentage $r = .61, p < 0.01$) and creative elaboration. The other measure of complexity (clauses per T-unit) and none of the accuracy measures correlated with any of the creativity components.

TABLE 1
Correlations between Creativity and the CAF of Narrative Task Performance

Narrative Task		Creative Fluency	Creative Originality	Creative Elaboration	Creative Flexibility	Creativity Index
No of Words	Pearson Correlation	.503*	-.563*	.333	.172	.519*
	Sig. (2-tailed)	.040	.019	.191	.508	.033
	N	34	34	34	34	34
No of T-units	Pearson Correlation	.561*	-.401	.303	.202	.572*

Creativity and Learners' Performance on Argumentative and Narrative Written Tasks

	Sig. (2-tailed)	.019	.111	.237	.436	.016
	N	34	34	34	34	34
No of	Pearson	.553*	-.445	.440	.101	.624**
Clauses	Correlation					
	Sig. (2-tailed)	.021	.073	.077	.701	.007
	N	34	34	34	34	34
Clauses	Pearson	.262	.118	.177	.211	.345
per	Correlation					
T-unit	Sig. (2-tailed)	.309	.653	.497	.416	.175
	N	34	34	34	34	34
Dep.	Pearson	.238	-.208	.612**	-.012	.401
Clauses	Correlation					
Percentage	Sig. (2-tailed)	.358	.423	.009	.965	.110
	N	34	34	34	34	34
Error	Pearson	-.060	.212	.435	-.257	.050
Free	Correlation					
Clauses	Sig. (2-tailed)	.818	.414	.081	.320	.848
Percentage	N	34	34	34	34	34
Error	Pearson	.204	.399	.032	.209	.234
Free	Correlation					
T-units	Sig. (2-tailed)	.433	.112	.903	.422	.367
Percentage	N	34	34	34	34	34

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Regarding the significant correlations between creativity and measures of narrative task performance, the ability of fluency constantly appears to make the most pronounced and constant association in that three fluency measures of narrative task performance (number of words, number of T-units, number of clauses) were found to positively correlate with creative fluency (Torrance, 1966) and with the total creativity score. This finding is in line with that obtained by Albert and Kormos (2011) who also indicated that learners who performed better on a creativity test were found to produce ideas more fluently in a narrative task. In the present study, the learners' creative fluency coincided with using more words, T-units, and clauses in the narrative task. Since the participants were required to narrate a story based on some visual cues, it can be hypothesized that these learners

had some unconventional ideas which they utilized while figuring out various events that might have occurred in the story; this, in turn, might have led to longer stories as the proposition of ideas needed further explanation.

Creativity and Argumentative Task Performance

Correlation analysis reported in Table 2 shows negative relationships between the two measures of argumentative task fluency and students' creative originality score (number of words $r = .50, p < 0.05$; number of T-units $r = .48, p < 0.05$). In addition, Table 2 shows a non-significant and negative correlation between fluency of the text and creativity index. Unlike the narrative task, there is no correlation between the fluency of the argumentations and creative fluency.

Results with regard to complexity measures, illustrated in Table 2, reveal that the syntactic complexity of argumentations produced was affected by creative elaboration, since the number of clauses per T-unit ($r = .49, p < 0.05$) and dependent clauses percentage ($r = .47, p < 0.05$) correlated positively with the elaboration measure of the creativity test. Finally, there was no significant correlation between complexity and any of the creativity scores.

TABLE 2
Correlations between Creativity and the CAF of Argumentative Task Performance

Argumentative Task		Creative Fluency	Creative Originality	Creative Elaboration	Creative Flexibility	Creativity Index
No. of Words	Pearson Correlation	.069	-.502*	-.126	.014	-.359
	Sig. (2-tailed)	.786	.034	.619	.957	.143
	N	36	36	36	36	36
No. of T-units	Pearson Correlation	.256	-.494*	-.089	.185	-.285
	Sig. (2-tailed)	.305	.037	.725	.462	.251
	N	36	36	36	36	36
No. of Clauses	Pearson Correlation	.131	-.300	.041	.256	-.335
	Sig. (2-tailed)	.603	.227	.871	.305	.174

Creativity and Learners' Performance on Argumentative and Narrative Written Tasks

	N	36	36	36	36	36
Clauses per T-unit	Pearson Correlation	.172	.108	.497*	.401	.235
	Sig. (2-tailed)	.495	.669	.036	.099	.348
	N	36	36	36	36	36
Dep. Clauses Percentage	Pearson Correlation	-.046	.227	.473*	.398	.323
	Sig. (2-tailed)	.855	.365	.047	.102	.191
	N	36	36	36	36	36
Error Free Clauses Percentage	Pearson Correlation	.097	.268	.326	.161	.121
	Sig. (2-tailed)	.702	.282	.187	.524	.632
	N	36	36	36	36	36
Error Free T-units Percentage	Pearson Correlation	.179	.339	-.023	-.032	.150
	Sig. (2-tailed)	.478	.169	.929	.901	.552
	N	36	36	36	36	36

*. Correlation is significant at the 0.05 level (2-tailed).

Therefore, unlike the narrative task, in the argumentative task creative fluency did not prove a significant correlate of any of the CAF measures. This finding lends some support to the fact that argumentation is a taxing and cognitively-demanding task (Foster & Skehan, 1996) which requires a great deal of contemplation on the part of learners. The rationale behind using an argumentative task in the present study was that the authors sought to ensure that the task was reasonably demanding on the participants and thus would exploit their linguistic resources fully. For this to happen, the learners were expected to transform the knowledge in order to come up with main and supportive reasons to support their positions. In the light of this conclusion, it would seem that increasing learners' cognitive load via the assignment of a complex task might have caused excessive monitor in their minds, hindering the emanation of their production fluency.

Integrated Consideration of Findings

There is a positive correlation between learners' creative elaboration and one complexity measure in the narrative task (i.e. dependent clauses percentage) on the one hand, and two complexity measures in the argumentative task (i.e. the number of clauses per T-unit and dep. clauses percentage) on the other. This significant correlation between creative elaboration and some measures of performance in both narrative and argumentative tasks suggests that creative elaboration, characterized by the number of details that the learner can add to the original idea, might be linked to learners' complex performance or, in Ellis' (2003) words, "the extent to which the language produced in performing a task is elaborate and varied" (p. 340).

Meanwhile, it was interesting to find out that creative elaboration has shown a stronger effect on learners' complex performance in the argumentative task than in its narrative counterpart. Nonetheless, this recognition would lend only partial support to the idea that argumentative tasks are inherently problem-solving tasks (Bell & Linn, 2000; Cho & Jonassen, 2002) which would necessarily demand more elaboration on the part of students whereas narrative tasks are less cognitively-demanding and would thus need less elaboration. This also seems to be in line with Robinson (1995), who concluded in his studies on narrative tasks of varying cognitive complexity, concluded that lexical variety, referred to as creative elaboration (Ellis, 2003), tends to increase in more cognitively-complex tasks.

However, to our utmost surprise, it was found that creative originality, or the extent to which learners are able to produce unique and unusual, was negatively correlated with some measures of performance fluency in both tasks. Although this finding provides support for the claim made by Albert and Kormos (2011) and runs counter to a number of other studies (e.g., Ehrman & Oxford, 1995; Grigorenko, Sternberg & Ehrman, 2000) which have found that creative originality is an essential ability in defining language learning success, it is justifiable considering the fact that in order to bring forth unique solutions to a problem, learners would require a long period of contemplation, hence the production of fewer solutions on the whole.

However, flexibility was the only dimension of creativity which did not correlate with any of the measures of task performance concerning the two task types at issue. Given the fact that the participants in the present study were expected to complete the tasks under time pressure (30 minutes for each task), their flexibility, which pertains to how many varieties of ideas they can produce for solving a problem (Goff & Torrance, 2002), could have been impeded, accordingly.

CONCLUSION

The results of this study lent enough support to the claim that creativity is not an indivisible construct but comprises several independent elements (Brown, 1989; Sternberg, 1985) as only some measures of creativity such as creative fluency, creative originality, and creative elaboration were found to be relevant to learners' performance on language tasks. As one particular case in point, among these dimensions, creative fluency correlated with measures of the narrative task but not with its argumentative counterpart. Such a general conclusion is justifiable in the sense that, according to Carl Rogers, learners require psychological safety and psychological freedom to be creative, hence the superiority of the narrative task in this regard.

All in all, the findings obtained concerning the interface between creativity and measures of written task performance may contribute to making pedagogical decisions and can make materials developers, syllabus designers and language teachers revisit the selection and implementation of language teaching tasks. Accordingly, the professionals in the field of materials development ought to include definitive tasks in the textbooks with the purpose of enhancing learners' creativity. To give but one example, they may opt for including tasks which demand a considerable degree of imagination and generation of novel ideas, as it has been found that, in Asian contexts, divergent thinking, curiosity and initiation in learning will be most admired (Cheng, 2011).

Perhaps this is best summed up in the statement that the conditions under which writing develops allow children to think independently and communicate in diverse

ways; yet language teachers themselves, recognizing the importance of creative thinking, are expected to widely endorse creativity practices. In the interim, language teachers may opt for developing consciousness-raising programs to help learners become more aware of their actual and potential creativity. As Chen and Zhou (2010) have pointed that, it is necessary that teachers set the scene for the transcendence of educational goals beyond the status quo towards being and becoming more creative. In doing so, teachers should provide learners with more opportunity to support their divergent and creative abilities. By and large, there is hope and cause for being optimistic, as signs emerge that outlooks on language teaching may be changing. It seems that by reallocating the role of teachers from language teachers to “educational” language teachers (Pishghadam, Zabihi, & Kermanshahi, 2012) there is hope for future language education. For this to happen, confident professionals who are able not only to acquire complete knowledge of language teaching but also to acquire sufficient knowledge of other disciplines are required.

Key recommendations from the research reported in this study can be summarized as follows: (a) ELT professionals should recognize the necessity of explicit creativity teaching in language classes and smooth the way for the incorporation of creativity courses into the whole ELT curriculum; (b) English practitioners should introduce, and be introduced to, the specific techniques and materials that facilitate the enhancement learners’ creative thinking abilities; and (c) there should be partnerships between language teachers and psychologists of education to figure out the what and how of creativity practices that ELT classes can provide.

THE AUTHORS

Reza Zabihi is a Ph.D. candidate of Applied Linguistics at University of Isfahan, Iran. He is also a member of Iran’s National Elites Foundation (INEF). He has taught English courses for more than seven years in different universities and language institutes in Iran. His major research interests include issues in language

teaching/learning, syllabus design, positive psychology, happiness studies, and life skills education. He has published more than 30 research articles in local and international journals.

Email: zabihi@hotmail.com

Mohsen Rezazadeh is a Ph.D. candidate at the University of Isfahan. He earned his M.A. in TEFL from the University of Isfahan, and has taught English courses for more than five years in different schools and language institutes in Iran. His main research interests are in the areas of EFL teaching and learning, language testing and assessment, and psycholinguistics. He has published several articles in his areas of interest.

Email: M1rezazadeh@gmail.com

Dariush Nejad Ansari is an academic member of the University of Isfahan. He has been teaching at different levels in English Department of the Faculty of Foreign Languages. He graduated with an MA in applied linguistics from Tarbiat Modarres University in 1996 and completed his Ph.D. at Allame Tabatabaei University in TOEFL in 2009. His areas of interest are issues in language teaching/learning and translation.

Email: ansari@fgn.ui.ac.ir

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