Genric Differentiation in the Relationship between L2 Vocabulary Knowledge and Writing Performance

Davoud Amini^{1*}, Zahra Iravani²

^{1*}Department of English Language and Literature, Azarbaijan Shahid Madani University, Tabriz, Iran, *d.amini@azaruniv.ac.ir*

²M.A. in ELT, Azarbaijan Shahid Madani University, zahra.iravani95@yahoo.com

Abstract

In cognitive process theories of L2 writing, the rich lexical knowledge plays a key role in facilitated writing performance. Therefore, the inquiry into the relationship between dimentions of vocabulary knowledge and writing performance can proffer theoretical clues on L2 writing process. However, assessing and researching writing is not independent from the type of tasks or genres that are used for eliciting samples of writing. Accordingly, this study probed into the association between vocabulary knowledge and L2 writing performance with a focus on possible differences originating from descriptive and narrative genres of writing. Four distinctive writing tasks were given to 101 Iranian advanced-level EFL learners whose depth and breadth of vocabulary knowledge were measured with Word Associates Test and New Vocabulary Levels Test. The analyses indicated moderate positive correlations between depth and breadth of vocabulary knowledge and writing performance in both descriptive and narrative genres. Moreover, the results of regression analysis revealed a significant positive predictive power for both depth and breadth in descriptive and narrative writings. Also, Iranian EFL learners performed better on descriptive writing than narrative writing. Genric differentiations in the relationship between lexical knowledge and L2 writing performance seem to be mediated by such factors as learners' proficiency level and L1 cultural background. However, achieving an overarching view of the genric differentiations in affecting the relationship between EFL learners' vocabulary knowledge and writing performance awaits further complementary research with a focus on all genres of writing while the multidimensionality of L2 vocabulary knowledge is taken into account.

Keywords: Descriptive Writing, Genre of Writing, Narrative Writing, Proficiency Level, Vocabulary Knowledge, Writing Skill,

Received 26 August 2020

Accepted 26 September 2020

Available Online 15 November 2020 DOI: 10.30479/jmrels.2020.14009.1723

©2021 by the authors. Published by Imam Khomeini International University.



1. Introduction

Successful written communication entails an optimal level of proficiency in linguistic, discoursal and sociolinguistic knowledge of second/foreign language (L2). The part played by linguistic knowledge in L2 writing is a well-researched area (Kim & Crossley, 2018; Leki, Cumming & Silva, 2008; Schoonen, Van Gelderen, Hulstijn & de Glopper, 2011; Silva, 1993). Meanwhile, an aspect of linguistic knowledge that has turned out to be genuinely reflected in L2 writing performance is L2 lexical knowledge (Baba, 2009; Dabbagh & Janebi Enayat, 2017; Engber, 1995; Laufer & Nation, 1995; Johnson, Acevedo & Mercado, 2016; Varnaseri & Farvardin, 2016; Wu, Dixon, Sun & Zhang, 2019; Yi & Luo, 2013). Thus various dimensions of lexical knowledge including receptive vocabulary knowledge (depth and breadth) and productive vocabulary knowledge (sophistication) have been found to be correlated with writing proficiency though some moderating variables such as learners' level of proficiency and learning environment must also be taken into account (e.g., Atai & Dabbagh, 2010; Jeong, 2017).

Nonetheless, L2 writing ability cannot be considered as a monolithic potential identically manifested in different performance occasions. According to pragmatic-based approach to L2 writing (Qin & Uccelli, 2016), L2 writers are not assumed to be equally skilled across various genres of writing as rhetorical occasions of written communicative performance. The tasks used to elicit samples of writing, i.e., genres or discoursal modes such as narrative, descriptive or argumentative writing play a role in L2 writer's performance in terms of calling upon their command of language including aspects of lexical knowledge (Grabe & Kaplan, 1996; Kim & Crossley, 2018; Leki, et al, 2008). Therefore, in studying the links between word knowledge and writing performance, it is theoretically important to know which aspect of lexical knowledge is reflected in different genres of writing.

The current study examined the correlation and predictive power of depth and breadth of L2 vocabulary knowledge in relation to L2 writing performance while genric differences in eliciting writing samples were taken into account. The purpose was to examine through strict measures the advanced-level EFL learners' differential conduct on descriptive and narrative writing tasks and to study the relationship between their performance on these two writing tasks and their depth and breadth of word knowledge. The study was driven by the following research questions:

- 1. Is there any difference between EFL learner's performance on descriptive and narrative writing?
- 2. Are there any relationships between EFL learners' depth and breadth of vocabulary knowledge and their descriptive writing performance?

- 3. Are there any relationships between EFL learners' depth and breadth of vocabulary knowledge and their narrative writing performance?
- 4. To what extent EFL learners' descriptive writing proficiency can be predicted by their depth and breadth of vocabulary knowledge?
- 5. To what extent EFL learners' narrative writing proficiency can be predicted by their depth and breadth of vocabulary knowledge?

2. Literature Review

2.1. Vocabulary Knowledge and Writing Performance

Writing is a complex process which demands linguistic, cognitive and metacognitive competence on the part of the writer. Based on cognitive models of writing (e.g., Kellogg, 1996, 2001), due to the limited capacity of working memory, automated knowledge of aspects of language relieves the writer's working memory to focus on higher-order skills of generating, organizing and monitoring writing output (Berninger, 2000). Based on this conceptualization, rich word knowledge is presumed to be a plausible predictor of performance in L2 writing (Baba, 2009; Guo, Crossley & McNamara, 2013; Koda, 1993; Laufer & Nation, 1995; Olinghouse & Wilson, 2013; Schoonen et al., 2011).

In exploring the way mental lexicon is reflected in L2 writing, the researchers have recently made a distinction between vocabulary knowledge and vocabulary fluency (Milton, 2013). While vocabulary knowledge encompasses a wide range of depth and breadth of lexical knowledge predominantly denoting the receptive command of L2 words, vocabulary fluency usually overlaps with the way words are actually used in written L2 productions. Vocabulary fluency, or generally labeled lexical sophistication, is typically measured by assessing such lexical features of samples of elicited texts as diversity, range and frequency profiles. Both vocabulary knowledge and lexical sophistication are generally assumed to be important factors in determining the writing quality of L2 writers; however, some moderating variables like writers' level of proficiency (e.g., Atai & Dabbagh, 2010) or the learning environment (e.g., Wu, Dixon, Sun, & Zhang, 2019) might also play a role in this relationship.

The affinities between lexical fluency or sophistication and L2 writing has been the subject of numerous studies lately. Diversity, frequency, range and bigrams have been the most conspicuous aspects of lexical richness that have been examined in this regard. Vogelin, Jansen, Keller, Machts and Moller (2019) showed that essays with larger diversity and word range were more positively evaluated by teachers both in holistic and analytic scoring. In a pioneering study, Engber (1995) reported an acceptable level of

positive correlation between L2 writing scores and the lexical diversity (typetoken ratio) of the written text. It has almost been established that low-frequency L2 words appear more in high quality L2 writings (Crossley & McNamara, 2012; Guo et al., 2013, Laufer & Nation, 1995). Moreover, Kyle and Crossley (2016) found that "word range and bigram frequency" were the best predictors of L2 writing quality among the variables they analyzed.

The findings from lexical sophistication studies have shed some light on how lexical command of L2 learners gets involved in the process of writing performance. Nevertheless, the bulk of research in this regard has been centered on the practical links between aspects of vocabulary knowledge and writing proficiency or performance. While some studies have concentrated on the correlations between vocabulary knowledge and writing proficiency, some others have attempted to verify the power of vocabulary knowledge in predicting writing performance. Schoonen, et al (2011) found a positive correlation of .53 to .57 between lexical knowledge and writing proficiency. Baba (2009) came across a moderate positive correlation between vocabulary size (r = .40) and depth (r = .34) and holistic scores of writing. Similarly, Karakoc and Kose (2017) reported a positive correlation between vocabulary knowledge of both receptive and productive measures and independent writing performance. Shi and Qian (2012) indicated a strong correlation between writing quality and active vocabulary knowledge. Koda (1993) indicated a high level of correlation (.7) between Japanese as FL learners' vocabulary knowledge and quality of their essays. Varnaseri and Farvardin (2016) designed a more overarching plan to examine both correlations and predictive power of vocabulary knowledge in relation to writing performance. They found moderate correlation (.45) between breadth of word knowledge and writing performance of EFL learners. The finding was in line with the moderate correlation (.52) reported by Stahr's (2008) and strong correlation (.76) reported by Milton (2013). There was also a relatively high correlation (.59) between depth of vocabulary knowledge and writing performance. Furthermore, depth was a better predictor of writing performance than breadth. It predicted 48% of the variance in writing performance alone.

In the studies reviewed here, L2 learners' proficiency or performance on writing is typically elicited by a single type of independent or source-based task where genric differences are intentionally neglected. It has apparently been taken for granted by researchers and assessors that L2 writers' performance on tasks eliciting different genres of writing as well as the cognitive processes involved in the production of these rhetorical modes of writing are independent from the type of writing genre.

2.2. Genric Differentiation

Genre has been defined as the conventionalized way of using language with a particular communicative purpose on mind (Swales, 1990). Writing genres in L2 are generally categorized into narrative and non-narrative types. Narratives involve conveyance of real or imagined experiences in the form of detailed briefing of scenes, objects, events and people (Olson, Scarcella & Matuchniak, 2018). Non-narratives are further divided into expository (or informative) writing (including five types of descriptive, compare-contrast, cause-effect, process and problem-solution) and argumentative or persuasive writing.

In assessing writing proficiency or predicting future writing performance, engaging the writers with one type of genre or task cannot depict the language user's overall writing command because each genre or discoursal mode in writing demands different skills and knowledge (Weigle, 2002; Yoon, 2018). Accordingly, it has been suggested that in order to assess L1 writing proficiency, it is necessary that three texts in each one of the four typical genres be scored by at least two expert raters (Bouwer, Beguin, Sanders & van den Bergh, 2015). Bouwer et al (2015) managed to verify that by controlling the effects of task type, raters and genres, no more than 10% of the variance in L1 writing scores was ascribable to writing skills.

It has been established by genre researchers that the linguistic knowledge required for writing performance varies for different genres both in L1 and L2 (Beers & Nagy, 2011; Berman & Nir-Sagiv, 2004, Biber, Gray & Staples, 2016). Therefore, some researchers have attempted to look for a pattern of variation in the bonds between genre and writing performance in L1 and L2. L1 studies have generally demonstrated a better performance on narrative writing than other genres. For example, Englehard, Gordon and Gabrielson (1992) examined students' performance on three genres and showed highest performance for narrative, descriptive and expository writings, respectively. Meanwhile, the results of L2 studies concerning the relationship between genres and writing performance are mixed. Way, Joiner and Seaman (2000) studied low-proficiency L2 French learners' writing on three genres and reported higher performance on descriptive, narrative and expository writings, respectively. Ham-Lyons and Mathias (1994) reported better performance on argumentative writing than expository writing. Meanwhile, Qin and Uccelli (2016) showed that Chinese EFL learners' performance on narrative and argumentative tasks did not differ significantly. Yoon reported that narrative essays were evaluated as better than argumentative essays by assessors.

The type of linguistic knowledge utilized by writers in different genres might also vary. As a consequence, the linguistic and discoursal

elements in L2 writing can affect judgments on the quality of writing (Crossley & McNamara, 2012; Grabe & Kaplan, 1996; Kim & Crossley, 2018; Weigle, 2002). According to Crowhurst and Piche (1979), descriptive texts include a larger number of words per clause than narratives though Beers and Nagy (2011) came up with contradicting results by indicating more words per clause for narratives than descriptive and persuasive writings at least for higher level learners. Qin and Uccelli (2016) displayed higher lexico-syntactic complexity for argumentative essays in terms of frequency of long words', abstract nouns, lexical diversity and words per clause. However, this must not lead us to hasty conclusion that argumentative writing necessarily entails complex linguistic features (Bi, 2020). The proficiency level of L2 writers is one factor to act as a source of differentiation (Carrel & Conner, 1991; Jeong, 2017)

Studies have shown that aspects of vocabulary knowledge are not reflected identically in different genres of writing. Olinghous and Wilson (2013) indicated a variation in the association between vocabulary knowledge and writing conduct in the three genres of narrative, persuasive and informative writing. They demonstrated that the aspects of learners' vocabulary knowledge including elaboration, maturity, diversity, academic words and register were reflected differently in each of the three genres. For example, narrative texts had higher diversity than informative texts. Diversity alone predicted writing quality in the case of narrative writing while content words were strong predictors in the case of informative texts. In other studies the quality of narrative and argumentative essays were predicted to a large extent by frequency of stance markers and diversity of organizational markers, respectively (Qin & Uccelli, 2016). According to Olsen, et al (2018), narrative writings mostly demand a rich vocabulary knowledge relating to the emotions and desires of story character or the narrator's impressions.

Narrative and argumentative writings have been studied as the two poles of writing genres. In this study, descriptive writing was chosen to be compared with narrative writing with due regard to the fact that it might share in its structure some elements from both narrative (e.g., description of people) and argumentative (e.g., describing concepts and opinions) writings.

3. Method

3.1. Participants

In the present study, a sample of 101 Iranian Bachelor students majoring in English Language and Literature and TEFL at Azarbaijan Shahid Madani University were selected on the basis of convenient sampling principle. They were at the first year of their studies at the university, and

normally students at this stage are considered as high-intermediate to advanced learners of English proficiency based on the university entrance exam requirements they have to pass. The first language of the participants was Turkish, Kurdish and Persian.

3.2. Instruments and Materials

To collect the data related to each of the research variables, the following instruments were used:

New Vocabulary Levels Test (NVLT). This test is used for measuring the vocabulary breadth. It is a new version of vocabulary levels test (VLT) primarily designed by Nation in the early 1980's. The NVLT assesses the knowledge of English lexis at five word frequency levels of 1000, 2000, 3000, 4000, 5000 and the Academic Word List (AWL) (Coxhead, 2000).

Word Associates Test (WAT). The WAT is used to assess the depth dimension of learners' vocabulary knowledge (Read, 1993). High rates of reliability have already been substantiated for this test. Read (1995) reported very high reliability of .93 and Qian (2002) testifies to reliability of .89.

According to Zhang and Koda (2017), WAT is scored in three main scoring systems of 40, 160 and 320 points. In this study the 160-point system was adopted for data analysis. That is, neither the selection of distracters was penalized nor the non-selection of them was awarded. Each associate received one point.

Descriptive Writing Task. To ensure construct content validity of descriptive writing performance task, two descriptive composition writing tasks were developed to elicit descriptive writing from participants, and the average of writers' performance rated by two raters was calculated as their overall descriptive writing performance. Composition A asked students to describe their most effective teacher they had ever had, and composition B asked them to describe their dream vacation (Appendix 1). A list of detailed elements to describe was also included in the stimulus so that the writers were directed to stick to the characteristic features of descriptive writing. The minimum number of words to write for each task was specified at 150 words.

Narrative Writing Task. The participants' narrative writing performance, too, was elicited by using two narrative composition writing tasks for the sake of ascertaining construct validity of narrative writing tasks. Composition A asked students to talk about an event that made them realize the importance of a good friend, and composition B asked students to tell about a memorable experience they had had when they were traveling (Appendix 2). Like descriptive writing, a list of detailed elements to narrate was provided to ensure that the writers were guided to stay within the

structural and discoursal framework of narrative writing. The average length of the composition was set to 150 words.

Holistic Assessment Scale. The assessment scale used for scoring elicited samples of writing in this study was adopted from ECPE (Examination for the Certificate of proficiency in English) writing rating scale developed by CaMLA (Cambridge-Michigan Language Assessment) which is based on three dimensional components of rhetoric, grammar/syntax and vocabulary.

3.3. Procedure

The study was a correlation-based research, and the data concerning the depth/breadth dimensions of vocabulary knowledge and descriptive and narrative writing performance were collected in three consecutive sessions. In the first meeting the NVLT test and WAT test were administered. NVLT which had a multiple-choice format took 30 minutes to complete. The WAT which assessed participants' depth of vocabulary knowledge lasted for another 30 minutes. In the next meeting in the following week, the first versions of the two writing tasks (descriptive writing task 1 and narrative writing task 1) were administered to the participants. The participants were not permitted to use dictionaries or reference tools during writing. The other two writing tasks (descriptive task 2 and narrative task 2) were completed in another session of 60 minutes in the following week.

The collected writing samples had to be scored after sorting out. To ensure inter-rater reliability, two experienced EFL instructors were engaged to rate the essays on the basis of the holistic rating scale. The raters were called to take part in a short training session with the researcher on how to use the holistic scale with a few sample compositions. The training session helped the raters become familiar with the general guidelines involved in the scoring procedure to ensure a higher level of consistency between the judgments criteria of the two raters. All the essays were then rated by both assessors. The average of the two narrative and the two descriptive compositions by the two raters were used as the assessment of students' performance on each of the two genres of writing. The inter-rater reliability for descriptive writing was .43, and this figure was .46 for narrative writing. These figures signify a caveat for writing researchers not to rely on a single rater in assessing writing quality. Therefore, the obtained four scores from the two raters and two narrative compositions were reduced by their average into one final score. In the same way the four scores obtained from the two raters and the two descriptive writings were reduced to one final score by calculating the mean of the four scores. This was meant to increase the reliability of measuring the students' writing performance.

4. Results and Discussion

4.1. Results

Descriptive statistics related to the participants' performance is displayed in Table 1.

Table 1Summary of Data

| Variables | N | Mean | SD |
|---------------------------------|-----|------|------|
| Breadth of Vocabulary Knowledge | 101 | 35 | 8.28 |
| Depth of Vocabulary Knowledge | 101 | 101 | 20.5 |
| Descriptive Writing | 101 | 9.97 | 2.05 |
| Narrative Writing | 101 | 9.45 | 1.85 |

Moreover, Table 2 below displays the detailed descriptive statistics of all the scores given to the four writing tasks by the two expert raters.

 Table 2

 Details of the Scores of the Four Writing Tasks by the Two Raters

| Variables | N | Mean | SD |
|-----------|-----|-------|------|
| DW1, R1 | 101 | 9.13 | 2.21 |
| DW1, R2 | 101 | 9.60 | 2.68 |
| DW2, R1 | 101 | 10.30 | 6.00 |
| DW2, R2 | 101 | 10.46 | 2.45 |
| NW1, R1 | 101 | 8.29 | 2.22 |
| NW1, R2 | 101 | 9.44 | 2.73 |
| NW2, R1 | 101 | 10.25 | 1.81 |
| NW2, R2 | 101 | 9.83 | 2.81 |

Table 2 above is provided to show the mean score and standard deviations of both sets of scores assigned by the two raters on the first task of descriptive writing, the second task of descriptive writing, the first task of narrative writing, and the second task of narrative writing.

4.1.1. Relationship between Depth and Breadth of Vocabulary Knowledge and Descriptive Writing Performance

To investigate the first research question which involved the possible links between EFL learners' depth and breadth of vocabulary knowledge and their descriptive writing performance a Pearson Correlation was performed the results of which are presented in Table 3.

Table 3

Correlation between the Learners' Depth and Breadth of Vocabulary Knowledge and Descriptive Writing Performance

| Variable | Descriptive Writing | | | | | |
|----------|-------------------------|-----------------|--|--|--|--|
| | Correlation Coefficient | Sig. (2-tailed) | | | | |
| DVK | .28** | .00 | | | | |
| BVK | .24** | .00 | | | | |

The r value reported for the relationship between depth of vocabulary knowledge and descriptive writing performance is a low moderate correlation of .28 which is statistically significant at .01 level of significance (p = .00; $\alpha = .01$; $p < \alpha$). The correlation coefficient value between the two variables of breadth of vocabulary knowledge and descriptive writing performance is reported to be a similar low moderate correlation of .24 which is statistically significant for p = .00; $\alpha = .01$; $p < \alpha$.

4.1.2. Relationship between Depth and Breadth of Vocabulary Knowledge and Narrative Writing Performance

To answer the second research question which involved any relationship between Iranian EFL learners' depth and breadth of vocabulary knowledge and narrative writing performance, another Pearson Correlation was run, the outcomes of which are presented in Table 4 below.

Table 4The Correlation between the Learners' Depth and Breadth of Vocabulary Knowledge and Narrative Writing Performance

| Variable | Narrative W | riting |
|----------|-------------------------|-----------------|
| | Correlation Coefficient | Sig. (2-tailed) |
| DVK | .37** | .00 |
| BVK | .34** | .00 |

Table 4 shows the correlation coefficient value between the two variables of depth and breadth of lexical knowledge and narrative writing performance of the participants which is reported as .47 and .34 for depth and breadth of word knowledge respectively. Both correlations are moderate and statistically significant at p = .00; $\alpha = .01$; $p < \alpha$. Compared to correlations demonstrated for descriptive writing, both depth and breadth of word knowledge turned out to indicate a considerably higher correlation with narrative writing performance.

The r value reported is .34 which can be considered significant due to the p value which is smaller than the standard .01 level of significance $(p = .00; \alpha = .01; p < \alpha)$.

4.1.3. Predictive Power of Depth and Breadth of Vocabulary Knowledge in Descriptive Writing Proficiency

Multiple regression analysis was carried out to examine the extent to which Iranian EFL writers' descriptive writing proficiency could be predicted by their depth and breadth of vocabulary knowledge.

Table 5Predicting Descriptive Writing Proficiency with Depth and Breadth of Vocabulary Knowledge

| Predictors | Dependent | f | p | r | r^2 | p | t | β |
|------------|-----------|------|-------|------|-------|-------|-----|------|
| BVK | | | | | | 0.018 | 2.4 | 0.26 |
| | DW | 10.9 | 0.001 | 0.43 | 0.18 | | | |
| DVK | | | | | | 0.027 | 2.2 | 0.24 |

As Table 5 shows, a significant equation (F=10.9, $p \le .001$) with a correlation coefficient of .43. The numerical value of R^2 indicates that 18% of the variance in participants' descriptive writing proficiency can be explained by their depth and breadth of vocabulary knowledge. Furthermore, regression coefficients of β verify a positive and significant predictive power for both DVK and BVK (.24 and .26, respectively).

4.1.4. Predictive Power of Depth and Breadth of Vocabulary Knowledge in Narrative Writing Proficiency

A similar analysis of regression was conducted for probing the hypothesized predictive power of depth and breadth of vocabulary knowledge in another genre, i.e., narrative writing. The general statistics of multiple regression analysis have been displayed in Table 6.

First of all, we were interested to see whether lexical knowledge could significantly predict narrative writing proficiency. Similar to descriptive writing, a significant equation (F=9.9, $p \le .001$) with a correlation coefficient of .41 was witnesses. Put together, DVK and BVK were able to explain 17 % (R²=0.17) of the variance in the participants' narrative writing proficiency. Regression coefficients of β indicate both similar and different pattern compared to the regression analysis related to descriptive writing. Like descriptive writing, a regression coefficient of β for narrative writing indicates a positive and predictive power for DVK and BVK. However, these numbers are reverse for DVK and BVK in narrative writing (.27 and .21, respectively). That is, Descriptive writing is more sensitive to BVK while narrative writing seems to be relatively more sensitive to DVK. By increasing a unit of DVK, there will be more effect on narrative writing than by increasing a unit of BVK

Table 6Predicting Narrative Writing Proficiency with Depth and Breadth of Vocabulary Knowledge

| Predictors | Dependent | F | P | R | \mathbb{R}^2 | β | T | P | |
|------------|-----------|-----|-------|------|----------------|------|-----|-------|--|
| BVK | NW | 9.9 | 0.001 | 0.41 | 0.17 | 0.21 | 1.9 | 0.04 | |
| DVK | | | | | | 0.27 | 2.5 | 0.027 | |

4.1.5. The Difference between Iranian EFL Learners' Performance on Descriptive and Narrative writing

To investigate the difference between Iranian EFL learners' performance on descriptive and narrative writing performance, a Paired-Samples T-Test was run, the outcomes of which are reported in Tables 7 below.

 Table 7

 The Difference between Descriptive and Narrative Writing Performance

| Paired Differences | | | | | t | df | Sig. (2- tailed) |
|--------------------|-------------------|---------------|-------------------------------|--------|-------|-----|---------------------|
| Mean | Std. Deviation | Std. Error | 95% Con Interval Differ | of the | | | |
| | | Mean - | Lower Upper | | | | |
| .485 | 2.062 | .205 | .078 | .892 | 2.364 | 100 | .02 |

According to the information presented in Table 7, the difference between the two mean scores reported in Table 1 is statistically significant because the calculated t value is large enough to enjoy a level of significance smaller than the .05 standard at a hundred degrees of freedom ($t_{(100)}$ = 2.364; p = .02; α = .05; p< α). That is, Iranian EFL learners' performance on descriptive writing performance was significantly better than that on narrative writing.

4.2. Discussion

The overall purpose of the current study was to inquire into the possible associations between EFL learners' lexical knowledge and their writing performance while examining the way this relationship might be affected by the type of writing genre employed in the tasks used to elicit samples of writing from the learners. Two genres of descriptive and narrative writing were comparatively examined for the hypothesized relationship between depth and breadth of vocabulary knowledge and writing performance as well as the predictive power of these aspects of lexical knowledge in L2 writing proficiency.

As a subsidiary purpose, the current study intended to examine in a small-scale data the differences between Iranian EFL learners' overall performance on descriptive and narrative writings. The results showed that Iranian EFL learners performed better on descriptive writing than narrative writing. Although the data used here is too narrow to be generalized to over all Iranian EFL context, it provides an initial insight to examine EFL writing performance from genric point of view which is quite rare in literature. The results here indicated that Iranian advanced-level EFL learners performed significantly better in descriptive writing than narrative writing.

This finding is consistent with previous literature. Although studies in L1 writing show that narrative writing is typically easier for learners than other genres of writing (Bouwer, et al, 2015; Crowhurst, 1980; Kegley, 1986), the reflection of genre difficulty in L2 seems to be different. L2 writers perform better on descriptive writing compared to narrative writing (Way, et al, 2000). Meanwhile, it seems that the effect of genres as sources of difference in writing performance depends to a large extent on learners' level of proficiency. For instance, Jeong (2017) found that low proficiency L2 writers performed better on narratives while high-proficiency learners scored higher on expository writing. Similarly, Carrel and Conner (1991) depicted that high-proficiency ESL learners performed remarkably better in persuasive writing than descriptive writing while low-proficiency learners did not show any significant variation in the two genres. As advanced level EFL learners, the participants of this study manifested a better performance in descriptive writing than narrative writing, which is compatible with previous studies.

A major result of the present study concerning the relationship between depth/breadth aspects of vocabulary knowledge and writing performance verified a significant and positive relationship in both descriptive (r=.28, .24) and narrative writings (r=.37, .34). All four relationships are statistically significant. However, the association is numerically larger in the case of narrative writing compared to descriptive writing, and in both cases depth of vocabulary knowledge indicates a non-statistically stronger relationship with writing performance than breadth of vocabulary knowledge.

Previous studies have reported a range of moderate to high correlations between vocabulary knowledge and L2 writing performance (Atai & Dabbagh, 2010; Dabbagh & Janebi-Enayat, 2017; Johnson et al, 2016; Karakoce & Kose, 2017; Koda, 1993; Milton; 2013; Schoonen et al, 2003; Stahr; 2008; Varnaseri & Farvardin, 2016). The current study approved a lower moderate correlation between lexical knowledge and descriptive writing performance and a moderate correlation between lexical knowledge and narrative writing performance. Despite the difference in the numerical values of the correlations both genres demonstrated positive and significant

correlations with depth and breadth of vocabulary knowledge. Therefore, in this case, the genre of writing was not any source of differentiation.

A word of caution that needs to be reminded here concerns the learners' level of proficiency. There are some studies in the literature that have introduced proficiency level as a crucial factor to play a role in associations between vocabulary knowledge and L2 writing. For instance, according to Wu, et al. (2019), vocabulary depth was more effective on the writing performance of Chinese EFL 8th graders than 9th graders. Vocabulary breadth was more effective in writing performance among students of 8th and 9th grades than 7th graders. In another study, Atai and Dabbagh's (2010) findings attested to the significant role played by the depth of word knowledge in overall writing performance. However, this effect was approved only for upper-intermediate level learners, and it was not witnessed for lower-intermediate level learners. In trying to justify the lack of effectiveness of DVK in writing performance of L2 learners, Atai and Dabbagh (2010) refer to the possibility of genre differences. According to them, learners might not have been able to manifest their deep vocabulary knowledge in descriptive genre only. Nevertheless, the results of the current study approved that at least in the case of advanced EFL learners, the type of genre used to elicit writing did not have any differentiating effect on the relationship between depth and breadth of vocabulary knowledge and performance in the two genres of descriptive and narrative writing.

The results of the study concerning the contribution of depth and breadth of vocabulary knowledge in predicting EFL learners' distinctive performance in descriptive and narrative genres of writing do not provide corroboration for the differentiating role of the two genres under study. In both descriptive ($\beta = .24$, $\beta = .26$) and narrative ($\beta = .21$, $\beta = .27$) writings, significant positive predictive role was observed for the depth and breadth of vocabulary knowledge. Approximately similar portions of writing ability in the two genres were able to be explained totally by depth and breadth of vocabulary knowledge (18% and 17% for descriptive and narrative writings respectively). A relatively different predictive power observed for depth and breadth of vocabulary knowledge in descriptive writing had already been reported by Dabbagh and Janebi-Enayat (2017). They had reported that vocabulary breadth alone predicted 19% of the descriptive writing performance while inserting vocabulary depth to the model only added 6% to predictability which was not significant. So, in their study, breadth was a stronger predictor of descriptive writing performance than depth. So far, there has not been any report on the predictive power of vocabulary knowledge in narratives. However, Varnaseri and Farvardin (2016) have written up about the high predictive power of vocabulary depth (48% of the variation) in argumentative writing. In their study, vocabulary breadth was also a significant predictor of argumentative writing performance.

To sum up, the findings of this small-scale correlation-based study signifies the crucial role played by rich vocabulary knowledge invariably in both descriptive and narrative genres of writing for high proficiency EFL learners. In parallel with previous similar empirical findings, this study can help elaborate our previous knowledge of the L2 writing process.

Writing is a complicated procedure where many cognitive and metacognitive skills play a role. According to cognitive theories of writing (Flower & Hayes, 1981; Kellogg, 1996, 2001), for creating high quality writing, lower-order skills such as aspects of linguistic knowledge should be active and automatic on writers' mind so that their mental resources are freed for such higher-order skills as generating, organizing and revising coherent ideas in the writing. Aspects of vocabulary knowledge seem to make up an important part of these lower order skills. All over the writing process, cognitive demands on the writer are high and those with a rich knowledge of words in their verbal working memory appear to be in an advantage in using the language. As the learners start to write, they use the vocabulary available in their working memory, and they can write with a higher degree of ease and speed. Of course, the issue of rich vocabulary knowledge goes beyond the depth and breadth of vocabulary and it encompasses a wide range of productive aspects of lexical knowledge which have been scrutinized under the general term of lexical sophistication. Future research needs to have broader view of vocabulary knowledge when investigating its contributions to the writing process.

5. Conclusion

Multidimensionality of writing is an issue of paramount importance when researching or assessing L2 writing performance or proficiency. The type of task or genre of writing that is used for eliciting samples of writing, and judgments on L2 writers' overall writing ability is based on them might themselves be a source of variation in L2 writers' performance. To be able to keep up with theoretical postulations regarding writing process, the possibility of genric variation in the way linguistic features are reflected in L2 writing capacity must not be neglected. This initiates a novel research framework in which the associations between a wide range of aspects of productive and receptive vocabulary knowledge, on the one hand, and L2 writing performance in different narrative and non-narrative genres, on the other, are studied in relation to one another. Coming up with general patterns concerning the way different dimensions of lexical knowledge are manifested in various genres of L2 writing will have significant ramifications for language methodologists and assessors. Once such a general picture is

achieved, EFL methodologists will be in a better position to trace the developmental processes involved in L2 writing with a specific focus on each type of writing genre. The findings in this study that indicated identical effects of breadth and depth in descriptive and narrative writing should not obviate the necessity of further research looking for the differential effects of types of lexical knowledge on producing L2 texts in different modes of discourse.

The present study explored the relationship between two aspects of vocabulary knowledge (depth and breadth) and writing performance in two selected genres of descriptive and narrative writing. As a small-scale empirical research, the findings of the study are of limited value of generalizability. Parallel research is required in which the relationship between aspects of word knowledge and writing performance on different genres of writing are compared to each other. An important matter to be toted in these studies is the grave role played by such variables as learners' level of proficiency or L1 cultural background. As the result of the present study indicated, learners' proficiency level seems to interact with the type of writing genre in affecting the associations between vocabulary Knowledge and writing.

References

- Atai, M. R., & Dabbagh, A. (2010). Investigating vocabulary depth and semantic set in EFL learners' vocabulary use in writing. *TELL Journal*, 4(2), 27–49.
- Baba, K. (2009). Aspects of lexical proficiency in writing summaries in a foreign language. *Journal of Second Language Writing*, 18(3), 191–208.
- Beers, S. F., & Nagy, W. E. (2011). Writing development in four genres from grades three to seven: Syntactic complexity and genre differentiation. *Reading and Writing*, 24(2), 183–202.
- Berman, R. A., & Nir-Sagiv, B. (2004). Linguistic indicators of inter-genre differentiation in later language development. *Journal of Child Language*, *31*(2),339–380.
- Berninger, V. W. (2000). Development of language by hand and its connections to language by ear, mouth, and eye. *Topics of Language Disorders*, 20, 65-84.
- Bi P. (In press). Revisiting genre effects on linguistic features of L2 writing: A usage-based perspective. *International Journal of Applied Linguistics*; 1–16.
- Biber, D., Gray, B., & Staples, S. (2016). Predicting patterns of grammatical complexity across language exam task types and proficiency levels. *Applied Linguistics*, *37*, (5), 639–668.
- Bouwer, R., Béguin, A., Sanders, T., & van den Bergh, H. (2015). Effect of genre on the generalizability of writing scores. *Language Testing*, 32(1), 83–100.
- Carrel, P., & Conner, U. (1991). Reading and Writing Descriptive and Persuasive Texts. *The Modern Language Journal*, 75(3), 314-324.
- Coxhead, A. (2000). A new academic word list. TESOL Quarterly, 34(2), 213-238.
- Crossley, S. A., & McNamara, D. S. (2012). Predicting second language writing proficiency: The roles of cohesion and linguistic sophistication. *Journal of Research in Reading*, *35*, 115–135.
- Crowhurst, M. (1980). Syntactic complexity and teachers' quality ratings of narrations and arguments. *Research in the Teaching of English*, 14(3), 223–231.
- Crowhurst, M., & Piche, G. L. (1979). Audience and mode of discourse effects on syntactic complexity in writing at two grade levels. *Research in the Teaching of English*, 13(2), 101–109.
- Dabbagh, A., & Janebi Enayat, M. (2017). The role of vocabulary breadth and depth in predicting second language descriptive writing performance. *The Language Learning Journal*, 47(5), 575-590.
- Engber, C. (1995). The relationship of lexical proficiency to the quality of ESL compositions. *Journal of Second Language Writing*, 4(2), 139-55.

- Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32, 365-387.
- Grabe, W., & Kaplan, R. B. (1996). *Theory and practice of writing: An applied linguistic perspective*. London: Longman.
- Guo, L., Crossley, S. A., & McNamara, D. S. (2013). Predicting human judgments of essay quality in both integrated and independent second language writing samples: A comparison study. *Assessing Writing*, 18(3), 218–238.
- Hamp-Lyons, L., & Mathias, S. P. (1994). Examining expert judgments of task difficulty on essay tests. *Journal of Second Language Writing*, 3(1), 49–68.
- Jeong, H. (2017). Narrative and expository genre effects on students, raters, and performance criteria. *Assessing Writing*, *31*, 113–125.
- Johnson, M. D., Acevedo, A., & Mercado, L. (2016). Vocabulary knowledge and vocabulary use in second language writing. *TESOL Journal* 7(3), 700-715.
- Karakoc, D. & Kose, G. D. (2017). The impact of vocabulary knowledge on reading, writing and proficiency scores of EFL learners. *Journal of Language and Linguistic Studies*, 13(1), 352-378.
- Kegley, P. H. (1986). The effect of mode discourse on student writing performance: Implications for policy. *Educational Evaluation and Policy Analysis*, 8(2), 147–154.
- Kellogg, R. T. (1996). A model of working memory in writing. In C. M. Levy &S. E. Ransdell (Eds.), *The science of writing: Theories, methods, individual differences and applications* (pp. 57-71). Mahwah, NJ: Lawrence Erlbaum.
- Kellogg, R. T. (2001). Competition for Working Memory among Writing Processes. *The American Journal of Psychology*, 114(2), 175-191.
- Kim, M. & Crossley, S. A. (2018). Modeling second language writing quality: A structural equation investigation of lexical, syntactic, and cohesive features in source-based and independent writing. *Assessing Writing*, *37*, 39-56.
- Koda, K. (1993). Task-induced variability in FL composition: Language-specific perspectives. *Foreign Language Annals*, 26, 332–346.
- Kyle, K., & Crossley, S. (2016). The relationship between lexical sophistication and independent and source-based writing. *Journal of Second Language Writing*, 34, 12–24.
- Laufer, B., & Nation, P. (1995). Vocabulary size and use: Lexical richness in L2 written production. Applied Linguistics, 16(3), 307–322.
- Leki, I., Cumming, A., & Silva, T. (2008). A synthesis of research on second language writing in English. London: Routledge.

- Milton, J. (2013). Measuring the contribution of vocabulary knowledge to proficiency in the four skills. In: C. Bardel, C. Lindqvist, & B. Laufer (Eds.), L2 vocabulary acquisition, knowledge and use: New perspectives on assessment and corpus analysis (pp. 57-78). European association of second Language Acquisition Monographs.
- Olinghouse, N. G., & J. Wilson. (2013). The relationship between vocabulary and writing quality in three genres. *Reading and Writing*, *26*, 45-65.
- Olson, C. B., Scarcella, R., & Matuchniak, T. (2018). Task Development: Narrative, Expository, and Argumentative Writing. In John I. Liontas (Ed.), *The TESOL encyclopedia of English language teaching* (Vol. 4, pp. 2530-2536). Hoboken, USA: John Wiley & Sons, Inc.
- Qian, D. (2002). Investigating the relationship between vocabulary knowledge and academic reading performance: An assessment perspective. *Language Learning*, 52(3), 513-36.
- Qin, W., & Uccelli, P. (2016). Same language, different functions: A cross-genre analysis of Chinese EFL learners' writing performance. *Journal of Second Language Writing*, 33, 3–17.
- Read, J. (1993). The development of a new measure of L2 vocabulary knowledge. *Language Testing*, 10(3), 355-71.
- Read, J. (1995). Validating the word association format as a measure of depth of vocabulary knowledge. Paper presented at the 17th Language Testing Colloquium, Long Beach, CA.
- Schoonen, R., van Gelderen, A., de Glopper, K., Hulstijn, J., Simis, A., & Snellings, P. (2003). First language and second language writing: The role of linguistic knowledge, speed of processing, and metacognitive knowledge. *Language Learning*, 53(1), 165-202.
- Schoonen, R., van Gelderen, A., Stoel, R. D., Hulstijn, J., & de Glopper, K. (2011). Modeling the development of L1 and EFL writing proficiency of secondary school students. *Language Learning*, 61, 31–79.
- Shi, L., & Qian, D. (2012). How does vocabulary knowledge affect Chinese EFL learners' writing quality in web-based settings? Evaluating the relationships among three dimensions of vocabulary knowledge and writing quality. *Chinese Journal of Applied Linguistics*, 35(1), 117–127.
- Silva, T. (1993). Toward an understanding of the distinct nature of L2 writing: The ESL research and its implications. *TESOL Quarterly*, 27(4), 657-677.
- Stahr, L. S. (2008). Vocabulary size and the skills of listening, reading and writing. *The Language Learning Journal*, *36*(2), 139–52.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Varnaseri, M., & Farvardin, M. T. (2016). The relationship between depth and breadth of vocabulary knowledge and writing performance of Iranian

- MA students of TEFL. *Modern Journal of Language Teaching Methods*, 6(2), 544-554.
- Vogelin, C. Jansen, T., Keller, S. D., Machts, N., & Moller, J. (2019). The influence of lexical features on teacher judgments of ESL argumentative essays. *Assessing Writing* 39, 50-63.
- Way, P., Joiner, E. G., & Seaman, M. (2000). Writing in the secondary foreign language classroom: The effects of prompts and tasks on novice learners of French. *The Modern Language Journal*, 84(2), 171–184.
- Weigle, S. C. (2002). Assessing Writing. Cambridge: Cambridge University Press
- Wu, S., Dixon, L. Q., Sun, H., & Zhang, P. (2019). Breadth and depth of vocabulary in Chinese English-language beginning writers' development. *International Journal of Bilingual Education and Bilingualism*. 1-17. https://doi.org/10.1080/13670050.2019.1572066
- Yi, B. & Luo, S. (2013). Working memory and lexical knowledge in L2 argumentative writing. *Asian Journal of English Language Teaching*, 23, 83-102.
- Yoon, H. (2018). The development of ESL writing quality and lexical proficiency: Suggestions for assessing writing achievement. *Language Assessment Quarterly*, 15(4), 387-405.
- Zhang, D., & Koda, K. (2017). Assessing L2 vocabulary depth with word associates format tests: Issues, findings and suggestions. *Asian-Pacific Journal of Second and Foreign Language Education*, 2(1), 1-30.

Appendices

Appendix 1: Descriptive Writing Tasks

Write a short composition in 150 words about the following topics:

- 1. Describe the most effective teacher you have ever had. Write in detail his/her appearance, personality, behavior, etc. Try to answer following questions in your description.
 - Who was your most effective teacher?
 - What were the characteristics of his/her?
 - •What kinds of personality did he/she have?
 - How did he/she behave in class?
- 2. Describe your dream vacation. Try to answer following questions in your description.
- What's your dream vacation?
- Where would you go?
- Who would go with you?
- What kinds of food, cloths, music, etc do you prefer?
- Do you prefer fancy places or simple places?

Appendix 2: Narrative Writing Tasks

Write a short composition in 150 words about the following topics:

- 1. Some of your richest experiences take place when we travel. Tell about a memorable experience you had when you were traveling. You can use following questions to tell the story of your trip.
- Where did you go?
- How did you get there?
- What did you do there?
- Who went with you?
- 2. Movies and books often talk about the importance of loyalty and friendship. Tell about a time in your life when friendship proved to be of great importance to you. Try to answer following questions:
 - •What did happen that time?
 - When did that event happen?
 - •Who was with you?
 - What did he/she do for you?
 - What kinds of feeling did you have that time?

Bibliographic information of this paper for citing:

Amini, D., & Irvani, Z. (2021). Genric differentiation in the relationship between L2 vocabulary knowledge and writing performance. *Journal of Modern Research in English Language Studies*, 8(1), 97-117.