Academic Writing Performance and Writing Strategy Use

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Abstract

Background: Academic reading and writing proficiency especially in globally accepted languages such as English is a key contributor to university students’ success in any disciplinary area. Reading and writing strategies play a vital role in the development of reading and writing skills. Despite the rapidly expanding body of research on various aspects of reading and writing, only a few studies have focused on documenting the association between language proficiency and writing or reading strategies.

Purpose: This article describes a study into university students’ use of writing strategies. The study examined the relationship between writing strategy use and writing proficiency, looking at how three proficiency groups differ in writing strategies.

Methods: In this cross-sectional survey study, 194 undergraduate students enrolled in an English writing course at a public university took a two-part writing test, followed by a 26-item writing strategy scale. The study employed quantitative data analyses. Descriptive statistics were used for describing the overall use of different writing strategies, and Analysis of Variance (ANOVA) was used to assess the differences in writing strategies among three different writing proficiency groups.

Results: The students reported a relatively high degree of writing strategy use. The study found that meta-cognitive strategy was the most frequently used strategy. The results also revealed that high writing proficiency group reported a significantly higher level of writing strategy use than middle writing proficiency group who in turn reported a significantly higher usage of these strategies than low writing proficiency one.

Conclusions: Students with high writing proficiency had higher writing strategy use than those with low writing proficiency. However, further research is needed to confirm these conclusions.

Implication: The findings have some implications writing instruction. Teachers can help students to improve their writing by teaching appropriate and effective strategies.

Keywords: second language writing, language learning strategies, English as a second language, language proficiency, undergraduate students

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INTRODUCTION

It is generally believed and accepted that language learning strategies including reading and writing strategies play a vital role in second or foreign language learning. Researchers believe that successful language learners use more effective strategies and techniques than less successful one. They maintain that strategies primarily distinguish good language learners from poor ones. (Chamot and El-Dinary, 1999; Dörnyei, 2005; Raimes, 1985; Zamel, 1982). Successful learners not only employ more strategies but also they use them more effectively compared with those who are not good at language learning. Indeed, successful language learners employ diverse types of strategies; and they choose the appropriate strategies for a particular task (Chamot and El-Dinary, 1999; Dörnyei, 2005).

Brown (2000) defines language strategies as the techniques and tactics that learners employ to tackle the problems in the process of language learning. Indeed, scholars have proposed different definitions. Despite the preponderance of research showing the importance of language strategies in the success of language learning, the definition of language strategies has remained somewhat controversial. There are different taxonomies of language learning strategies in SLA literature (Cohen, 1998; O’Malley and Chamot, 1990; Oxford, 1990; Wenden and Rubin, 1987). Oxford’s (1990) has classified the strategies into compensatory, social, cognitive, metacognitive, memory, and affective strategies. In another language strategy classification, O’Malley and Chamot (1990) have divided them into three broad categories namely metacognitive, cognitive, and socio-affective strategies.

Although all strategies that individuals use in the four language skills are instrumental for academic purposes, reading and writing strategies play a more important role in academia. Reading and writing are very similar in different ways. Firstly, both writing and reading are used for social and communicative purposes. Both of them involve sense of audience and authorship. When reading, readers cognitively interact with the writers of the text. They try to understand the notions and intentions of their authors. Similarly, when composing something, writers try to consider different aspects of their readers (audience) in order to make their textual composition more effective. In writing, authors try to anticipate various audience-related facets to make their text more effective, or to produce text that suits their readers (Fitzgerald and Shanahan, 2000; Shanahan, 2000; Tierney, 1999).

Secondly, writing and reading involve very similar cognitive and metacognitive processes. Both of them entail, task purpose, language strategies, and task evaluation. In both reading and writing, individuals need to have content knowledge (experiences and background) and language knowledge. In both of
them, individuals use schemata, content knowledge, and linguistic knowledge to perform the tasks (Ferris and Hedgcock, 2005; Fitzgerald and Shanahan, 2006; McGee and Richgels, 1994; Tierney and Shanahan, 1991).

Thirdly, reading and writing have also been viewed as reciprocal and connected subjects. Both reading and writing are required to accomplish a goal. For example, an individual may find it more beneficial and effective to take notes (writing) in order to increase his/her comprehension (reading). In the same vein, comprehending a job advertisement (reading) is needed to write an appropriate application or resume for that job (Slotte and Linka, 1999).

Reading and writing have traditionally been regarded as two separate processes, with writing skill viewed as productive and reading skill as receptive (Tompkins, 1997). They have been viewed as two separate skills. However, scholars have increasingly focused on the link between writing and reading, considering them as basically similar processes of learning especially the meaning construction. They are closely intertwined (Fitzgerald and Shanahan, 2000; Paris, Wasik, and Turner, 1991; Shanahan, 2006; Tierney and Pearson, 1983). Research indicates that both mature readers and writers purposefully choose and employ the appropriate cognitive strategies for a given task (Flower and Hayes, 1994; Pressley, 1991). The close link between writing and reading in second or foreign language has also been widely reported (Carrell and Connor, 1991; Esmaeili, 2002; Hedgcock and Atkinson, 1993; Janopoulos, 1986), though the research that has focused on documenting, the link between these two skills in first language is relatively more extensive. In a study that aimed at examining the relationship between reading and writing in English, Carrell and Connor (1991) found that there was a significant relationship between writing and reading in English.

Although writing and reading can be approached and practiced separately, combining these two skills can be more effective in different aspects than practicing each of these skills separately. Such combination enables students to have a good performance in different areas such as communicative functions, meaning-construction processes, and cognitive and linguistic skills (Ferris and Hedgcock, 2006; Fitzgerald and Shanahan, 2006; Shanahan, 1991, 2006; Smith, 1984; Tierney and Shanahan, 1991).

PREVIOUS RESEARCH

Some studies have shown that writing proficiency is closely related to strategy use (Chien, 2012; Raimes, 1985; Bai et al., 2013; Raoofi et al., 2014; Sasaki, 2000, 2002; Victori, 1999). These studies showed that skilled writers employed more writing strategies than unskilled writers. For instance, in a study aimed at investigating writing strategies of proficient and less proficient writers, Chien...
reported that students with high writing proficiency used significantly more writing strategies namely reviewing, planning, and revising strategies than their counterpart with low writing ability. However, the number of participants recruited for most of such studies was relatively small. Hence this makes it difficult to generalize their results.

Similarly, another line of inquiry has examined the relationship between reading strategies and reading strategies. A considerable number of empirical studies have indicated that reading comprehension and strategies are strongly correlated (Brantmeier, 2002; Dheib-Henia, 2003; Lee, 2007; Mokhtari and Reichard, 2004; Sheorey and Mokhtari, 2004; Sheorey, Kamimura and Freiermuth, 2008; Wu, 2008). For example, in a large scale study of 2237 Japanese university students, Sheorey, Kamimura and Freiermuth (2008) found that there were significant differences between low and high reading proficiency groups in reading strategies.

In tertiary level education, writing is a very instrumental skill for students to achieve their academic goals. It is highly required for academic purposes. Mastering academic writing gives students a chance to place their papers and academic works in a global outlet. It enables students to share their ideas widely with international readership. It provides opportunities for students to exchange knowledge and information in different domains as it is an interactional activity between the writers and readers. Indeed, writing in globally accepted languages such as English is essentially needed for academic development; and also increases job prospects.

Writing is the most challenging skill of language; it is massively complex and it is even difficult for those who write in their mother language. Given the complexity of writing, and its importance for the academic success, it is very essential to understand how students with varying degrees of writing ability differ in writing strategy use. In addition, despite the plethora of research into second language writing, very few previous studies of second language writing have examined the university students’ writing strategies.

METHODOLOGY

A. Participants

The participants of this cross-sectional study comprised 194 university freshman and sophomore students from a Malaysia national university where students speak English as a second language. Approximately sixty percent of the participants were female. Malay speakers formed the majority of the participants, and the remainders were the native speakers of Chinese and Tamil. All of them enrolled in a general writing course, and their age ranged between 19 to 25 years. The students majored in different areas (engineering, medicine, education,
environmental health, economics, physical education, animal science, agriculture, biomedical science, etc.).

B. Instrument

1. Writing Strategy Scale. The students’ use of writing strategies was measured through a Writing Strategy Scale with items reflecting different types of strategies. The Scale was created based on previous studies (He, 2005; Petrić and Czárl, 2011; Oxford, 1990; Raoofi et al., 2017). The scale measures five broad categories of writing strategies as follow: (1) Cognitive, (2) Affective, (3) Social, (4) Metacognitive, and (5) Effort Regulation Strategies. The students were told to rate 26 strategy items on a five point Likert scale. The 26-item instrument was assessed and validated using large samples of university students speaking English as second language. The Cronbach's alpha for the scale (internal consistency reliability of the questionnaire) was 0.91, indicating a highly dependable instrument of writing strategies.

2. Writing Test. An academic writing test was used to measure the writing proficiency of the students. The test was given after completing the questionnaire and included both a descriptive essay and an argumentative essay. The students had 90 minutes to complete both of them. All essays were scored by two writing experts according to the scoring rubric for TOEFL writing test (a holistic assessment scale for EFL writing ranging between 0 and 5). The participants were divided into three writing proficiency groups (high, middle and low) according to the score they got in the writing test.

C. Data Analysis

In the beginning of the study, the researcher explained the purpose of the study and invited the students to participate in the study. The data was analyzed using Statistical Package for Social Sciences (SPSS, version 22). Descriptive statistics (mean, standard deviation, frequency and range) were used for the overall use of different writing strategies. Analysis of Variance (ANOVA) was used to assess the differences in writing strategies among three different writing proficiency groups.

RESULTS AND DISCUSSION

The Students reported using writing strategies at a high level as the overall mean was 3.61. Oxford (1990) maintains that the mean scores of the strategy use above 3.5 on a five-Likert scale ranging from 1 to 5 is high. Each of the five categories had a mean above 3.5, that is, the students highly employ writing strategies when writing in English. The students reported a relatively high degree of writing strategy use. The study found that meta-cognitive strategy was the most frequently used strategy (M = 3.77, SD = .41). The high usage of writing strategies can be explained in several ways. First, Malaysian universities offer writing
courses for undergraduate students. Students in such courses receive instructions about writing techniques and strategies, and this may have affected their writing strategy use. Second, it can be assumed that students in English as a second language context such as in most Malaysian universities need English for different academic purposes and therefore they are likely to orchestrate a series of strategies and techniques to develop their writing. Indeed, unlike students in English as foreign language context, students in ESL contexts are exposed to different types of authentic input of English language and they use English frequently for their academic and social uses. This finding supports Wharton’s (2000) explanation that the amount of authentic input and interaction appear to influence the strategy use.

The results also revealed that three writing proficiency groups (low, middle and high) significantly differed in the overall use of writing strategies. The results of ANOVA showed that the groups differed significantly, F (2, 192) = 14.03, p = .00. The students in high writing proficiency group reported a significantly higher use of writing strategies than those in middle or low proficiency group. These results are consistent with those of previous studies (e.g., Lai, 2009; Wharton, 2000) that reported that there is a significant link between proficiency and strategy use.

Results also showed that the three groups differed significantly in metacognitive strategies, F (2, 192) = 14.88, p = .00, cognitive strategies F (2, 192) = 12.03, p = .00, effort regulation strategies F (2, 192) = 11.32, p = .00, and affective strategies F (2, 192) = 9.05, p = .00. Table 1 presents the ANOVA results for the different categories of writing strategy.

### TABLE 1. Differences in Writing Strategy Categories among Three Proficiency Groups

<table>
<thead>
<tr>
<th>Writing strategy categories</th>
<th>Low (n = 38)</th>
<th>Middle (n = 117)</th>
<th>High (n = 44)</th>
<th>F</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.53 ± .21</td>
<td>3.68 ± .23</td>
<td>3.55 ± .27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Metacognitive</td>
<td>3.50 ± .24</td>
<td>3.76 ± .18</td>
<td>3.96 ± .19</td>
<td>14.88</td>
<td>.00</td>
</tr>
<tr>
<td>Cognitive</td>
<td>3.44 ± .23</td>
<td>3.72 ± .24</td>
<td>3.80 ± .20</td>
<td>11.32</td>
<td>.00</td>
</tr>
<tr>
<td>Affective</td>
<td>3.46 ± .29</td>
<td>3.76 ± .23</td>
<td>3.82 ± .21</td>
<td>9.05</td>
<td>.00</td>
</tr>
<tr>
<td>Effort regulation</td>
<td>3.42 ± .27</td>
<td>3.76 ± .24</td>
<td>3.80 ± .21</td>
<td>11.32</td>
<td>.00</td>
</tr>
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</table>

With regard to metacognitive strategies, the results showed that highly proficient student writers employ more techniques such as planning, evaluation, and revision than low proficient ones. This implies that metacognitive strategies are very instrumental for the development of writing ability. This finding corroborates previous research (Bruen, 2001; Green and Oxford, 1995; Peacock and Ho, 2007).
which maintains that students with high language proficiency use more metacognitive strategy than those who have low language ability. The results also indicate that successful student writers used more cognitive strategies than less successful ones, this result is in line with those of Bruen (2001) and Liu (2008).

It was also found that the proficiency groups differed significantly in their effort regulation strategies, $F(2, 301) = 11.32, p = .00$. However, follow-up Scheffé test revealed that there was not a significant difference between middle and high ability writing groups in their effort regulation strategies ($p = .27$). Unfortunately no study in the area of SLA has focused on the role of effort regulation strategies in language learning. This study also found that effort regulation strategies were used more by skilled student writers than less skilled ones. These results are in agreement with previous research (Komarraju and Nadler, 2013, Pintrich, et al., 1993) which found that strategies of effort regulation are linked to successful performance. Furthermore, the results of this study indicated that affective strategies are more common among the students in high proficiency group. Indeed, students who are good at writing can control their anxiety more effectively when they are writing than those whose writing is poor.

It was also found that there was not a significant difference in social strategies among the three groups, $F(2, 192) = 1.18, p = .28$. This finding is not consistent with previous research (e.g., Salahshour, et al., 2013; Lai, 2009) which showed that that language proficiency is significantly associated with social strategy. This finding might be attributable to a number of factors. First, It can be assumed that regardless of their writing proficiency, most of ESL students seek help from others (teachers, peers, friends, classmates and writing experts, and so on) when writing in English. Writing is a challenging skill, and it requires both language knowledge and content knowledge. Thus, most of the university students need help to perform such complicated tasks. Second, all of the participants in this study enrolled in an ESL writing course. In Malaysia, most of the universities offer writing course in which students cooperate with their classmates to do their assignments and writing tasks. The writing courses strongly promote cooperation and supports interactive learning among the students for the sake of sharpening their writing skill. Given the important role of such courses in promoting cooperative writing activities among the students, it can be assumed that the insignificant differences could be caused by the writing course, as all the students received strategy instruction, and may have been encouraged to use social strategies. Third, extroversion can be a prime contributor to the use of social strategies (Liyanage and Bartlett, 2013). Extroverted students are more gregarious than introverted ones. They have a strong preference for cooperative learning; they tend to sort out their problems by asking questions and seeking assistance. Hence, it seems logical to assume that some factors such as personality traits rather than language proficiency play a more vital role in determining the use of social strategies. Fourth, one possible explanation for
the insignificant differences in social strategies among the proficiency groups is that cultural settings affect the use of social strategies. Most of the individuals’ activities and behaviors are culturally-driven. Students in collectivistic societies show a preference for teamwork and cooperative activities. Participants in this study were all of Malaysian origin and they all might use particular culturally-driven practices for developing their writing. It is probably because of cultural settings that social strategies were similarly used by all the three groups of the students.

This study had several limitations that need to be considered when interpreting the findings. The study employed only quantitative self-reported data collected via questionnaires. Future research may well benefit from both qualitative (e.g., think aloud and interview) and quantitative data in order to get a more comprehensive picture of writing strategies. Second, all the participants of the study were Malaysian students from a public university. Thus, it makes it difficult to generalize the results to all university student population in Malaysia.

The findings have some practical implications for second language writing instruction. Writing strategies can be incorporated into ESL/EFL classroom activities. Students should be given more opportunities to use writing strategies. Exposing students to different writing activities gives them a chance to employ these strategies in their writing. The findings suggest that it is quite essential to integrate strategy training into classroom activities. Since some strategy categories such as cognitive and metacognitive were used more by students with high writing proficiency compared with those with low writing ability, the teacher should teach these strategies to the students who are poor at writing. This will promote the use of different strategies among the students.

REFERENCES


