

EFL students' attitudes towards self-regulated learning strategies in academic writing

Shirin Abadikhah, Zahra Aliyan and Seyed Hassan Talebi

University of Mazandaran, Iran

The aim of the present study was to investigate EFL university students' attitude towards self-regulated learning strategies in writing academic papers. A further aim of the study was to compare the attitudes of two groups of university students (third and fourth years) in the employment of self-regulated learning strategies to find out whether academic education assists students to become more self-regulated writers with the passage of time. A questionnaire was developed and administered to 98 college students majoring in English language. The questionnaire consisted of 60 items assessing six dimensions of self-regulated learning, namely, motive, method, time, physical environment, social environment, and performance. Descriptive analyses revealed that the participants were moderate to slightly high in the use of self-regulatory strategies and processes. Furthermore, the findings indicated that certain writing strategies including pre-writing, goal-setting and self-consequence were not appropriately employed by the participants, suggesting an important need to acquire additional strategies for their writing. Using independent samples t-tests, we found that the fourth year students more frequently employed self-regulatory learning strategies in writing (i.e. method and social environment) than did the third year students in this study. The implications of the study which may benefit writing instructors are discussed.

Introduction

Acquiring writing skills is essential for students of all disciplines in order to have an authorial voice in the academic world. Newfields (2003) maintained that the ability to write an exhaustive academic essay is broadly viewed as one of the hallmarks of the higher education. However, literature has shown that Asian students, for example, generally confront problems in developing and acquiring the practical skills for writing (Fujioka, 2001; Takagi, 2001). One possible reason could be that students of English as a foreign language (EFL) are not aware of self-regulated learning strategies in writing. A writer has to regulate cognitive, metacognitive, motivational and linguistic processes when creating lengthy texts (Boscolo & Hidi, 2007). Zimmerman and Risemberg (1997) defined self-regulation in writing as the "self-initiated thoughts, feelings, and actions that writers use to attain various literary goals, including improving their writing skills as well as enhancing the quality of the text they create" (p.76). They have to "negotiate rules and mechanics while maintaining a focus on the over-all organization, form and features, purposes and goals, and audience needs and perspectives" (Harris, Graham, Mason & Saddler, 2002, p.110). With such a demanding and effortful task, professional writers tend to employ various self-regulatory strategies to manage and regulate the complex nature of the writing process (Zimmerman & Risemberg, 1997).

Some studies have confirmed the positive effects of self-regulation on writing achievement (e.g., Bakry & Alsamadani, 2015; Hammann, 2005; Magno, 2009;

Zimmerman & Bandura, 1994). More recent studies have studied its relationship to other psychological constructs such as motivation, anxiety and meta-cognition (Cetin, 2015; Csizer & Tanko, 2015; Ning & Downing, 2012; Vrieling, Bastiaens & Stijnen, 2012), and feedback and portfolio assessment (Lam, 2014, 2015). Nonetheless, there seems to be a paucity of research on the use of self-regulated learning strategies in EFL writing. In the light of Zimmerman's (1994) conceptual model of academic self-regulation, the current study aims to conduct a survey in order to examine the extent to which EFL students employ self-regulated learning processes in their writing practice. Moreover, to find out if the educational system supports students in becoming more self-regulated in writing, this study intends to compare the attitudes of students from two different academic years towards self-regulated learning strategies.

Literature review

In the 1980s and 1990s, the concept of self-regulated learning (SRL) was introduced to describe the distinctive features of successful learners (Schloemer & Brenan, 2006). SRL attempts to explain how learners can be successful or unsuccessful in an academic context, apart from the advantages or disadvantages they might have in their mental ability, social and environmental background and the quality of schooling. Learners' own actions and selections with respect to their learning are central to learning as a whole (Bandura, 1986). On the other hand, educational systems should assist learners "to be aware of their own thinking, to be strategic and to direct their motivation toward valuable goals" (Montalvo & Torres, 2004, p.2).

One of the cognitive theories of self-regulated learning which has been widely used in educational settings is Bandura's (1986) *social cognitive theory*. He stated that human functioning results from reciprocal interactions among triadic factors including personal (e.g., cognitions, emotions), behavioural, and environmental. Self-regulated learning can be presented with the concept of reciprocal interactions among these three factors as they are not fixed during the learning process and must be monitored (Schunk, 2009). Drawing on this theory, Zimmerman (1994) put forward a conceptual framework of self-regulated learning strategies for academic education. His model illustrates these factors as self-regulating one's cognitive beliefs and emotional states (personal), structuring one's physical or social settings (environmental), and self-regulating overt motoric activities (behavioural) connected with writing. The model encompasses six scientific questions and logically their concomitant psychological dimensions.

According to Andrade and Evans (2013), these dimensions can be incorporated into the four categories of SRL: (a) metacognition (planning, setting goals, monitoring, and evaluating); (b) motivation (one's capability to self-motivate, shouldering responsibility for successes and failures and enhancing self-efficacy); (c) cognition (strategies to understand and remember information), and (d) behaviour (help-seeking and creating a positive learning environment for learning task). Dembo and Eaton (2000) supported this model and maintained that "this model is unique in that it uses non-subject matter outcomes of schooling to influence academic achievement" (p.473). They made some suggestions on

how teachers can assist students in learning self-regulatory skills. Andrade and Bunker (2009) applied this model to distance language learning and discussed its advantages in guiding course designers and assisting instructors in supporting their learners. They believed that it is “an all-encompassing model that acts as a framework from which to examine elements related to autonomy and self-regulated learning” (Andrade & Bunker, 2009, p.53). Andrade and Evans (2013) also implemented this model to second language writing instruction and maintained that “the six dimensions offer a straightforward and transparent means of implementing self-regulated learning into L2 writing instruction” (p.21).

Self-regulated learning in writing

According to Graham and Harris (1997), one way to increase writers’ self-regulatory skill is to provide “a writing environment or writing situations that increase the likelihood of self-regulation” (p.109). They further explained that teachers can create such environments by encouraging writers to deal with projects of their own choice, develop their own specific understandings or personal ideas about the educator’s assigned topics, develop personal plans for doing writing tasks, move on the tasks at their own speed, and provide an appropriate writing environment.

Zimmerman and Bandura (1994) found that students’ perceived self-efficacy beliefs in academic achievement and self-regulation of writing could predict their final writing course grade. Their findings indicated that students with higher levels of self-efficacy set higher writing goals and made more efforts to improve their writing quality. Hammann (2005) examined the writing beliefs, self-regulatory behaviours, and epistemology beliefs of 82 pre-service teachers in academic writing tasks. Using three different instruments, the researcher found that the participants who were more self-regulated during their writing had a positive view of writing as a learnable skill. Magno (2009) investigated the relationship between two specific approaches (deep and surface) to learning and the self-regulatory processes that learners undergo in English composition writing. A cross-sectional explanatory design was used in the study and two questionnaires were administered to 294 college students from different universities in Philippines. The results showed that the deep approach significantly correlated with various factors of self-regulation.

To find out the relationship between help-seeking behaviour and writing success, Williams and Takaku (2011) carried out a study at a small university in Southern California. Help-seeking behaviour of 671 undergraduate students was assessed by the number of visits made to a writing centre over eight years. It was found that help-seeking behaviour could be a significant predictor of success in writing performance. Calicchia (2015) conducted an interview with nine professional writers and three undergraduate students to ascertain their preference for listening to music while writing. Although their opinions varied, the study showed that a musical background influenced their preferred setting and concluded that music, as an environmental element involved in the writing process, ought to be regulated by the writers.

Bakry and Alsamadani (2015) examined the effects of SRL strategies on writing persuasive essays by students of Arabic as a foreign language. The participants (N=24) were divided into an experimental group which received instruction on writing persuasive essays through SRL strategies for nine sessions, and a control group taught persuasive essays using a teacher-centred model. The analysis showed that the experimental group outperformed the control group, suggesting that SRL strategies were effective in writing persuasive essays.

Csizer and Tanko (2015) conducted a study to investigate the self-regulatory strategy use and its relationship to L2 motivation, writing anxiety, and self-efficacy beliefs in the academic writing of first-year students in Budapest. Descriptive and correlational analysis showed that the students employed a medium level of strategy use. It was also found that these strategies have a relationship with an increased level of motivation and self-efficacy and with a decreased level of anxiety.

Given the fact that EFL learners need to have an optimum level of proficiency in writing skills, especially in higher education, it is necessary for them to become self-initiators of their own learning process, that is, they should take the responsibility of improving writing skills on their own. However, few studies have been conducted on SRL in the EFL context, particularly in Iran; thus, it is not clear to what extent EFL students perceive the use of SRL strategies in their writing practice. By getting insights from self-regulated learning theory, we can conduct a survey to study learners' initiation into developing self-regulated writing.

Purpose of the study

A primary aim of this paper is to provide a succinct examination of the attitudes of university students towards SRL strategies during their writings. To assess the attitudes of the participants to the SRL strategy use in writing, a self-report measure of self-regulation contextualised in writing was adopted and developed, based on Zimmerman's (1994) model of academic self-regulation. A further aim of this study is to explore whether any change in using SRL strategies could be traced among university students in different academic years. Two research questions have been posited for the current study:

1. To what extent do EFL students think that they employ self-regulated learning (SRL) strategies in academic writing, as stated in their responses to the questionnaire?
2. Is there any significant difference in the attitudes of the third and fourth year EFL students towards the employment of self-regulated learning strategies in academic writing?

Method

Participants

A convenience sampling method was used for the selection of the participants, which is “the most common sample type in L2 research” (Dornyei, 2007, p .98). The participants were 98 undergraduate students (32 males and 66 females) aged between 20 and 29 years studying English language teaching and literature at a state university, located in Mazandaran, Iran. Of the 98 participants, 38 were studying in their third academic year and had already passed four writing courses including *Grammar and Writing (1)*, *Grammar and Writing (2)*, *Advanced Writing* and *Letter Writing*. The rest of the students (n=60) were studying in their fourth academic year and had additionally passed a two-credit course of *Essay Writing*. All writing classes were taught by the same professors following the same writing syllabus. The study did not control the age and gender factors.

To answer the first research question, we analysed the data collected from all of the participants (N=98) with no control over the academic level of the participants. However, due to a limitation in our sample size, namely the number of third year students (n=38) was less than that of the fourth year students (n=60), we randomly selected 30 participants from each academic level (third and fourth), rendering 60 participants in total to conduct a pair-wise comparison for the second research question. Prior to the study, they were informed of the objectives of the study and were invited to sign the consent forms.

Design and procedures

This case study research was carried out in a cross-sectional explanatory design, that is, the data were collected at one point in time (Creswell, 2009). To investigate self-regulatory processes in L2 writing, a 60-item questionnaire was administered to EFL students studying English at the University of Mazandaran, during the academic year of 2016-2017. At the outset of the study, the researchers gained the agreement of individuals in authority to assist them in the administration of the questionnaire in their classes. The purpose of the survey was explained to the participants and they were assured that their names would remain anonymous and be used only for the research purposes. From among 120 third and fourth year students attending four different classes, 22 students did not agree to participate and the researchers did not attempt to change their decisions. Therefore, one of the classes was deleted from the list of the participating classes, reducing the total number of participants to 98 students. Along with the SRL questionnaire, the participants' demographic information (first and last name, age, gender, major, years of exposure to English, and previous courses passed) was collected. The questionnaire took between 25 to 35 minutes to complete. After completion, they returned their questionnaires and were thanked for their cooperation and support.

Instrument

A 60-item questionnaire using a 5-point Likert scale from ‘never’(1) to ‘always’(5) was developed by adopting questions from different questionnaires validated in various

research studies (Honeck, 2013; Magno, 2009). The six dimensions, mentioned in Table1, formed a conceptual framework for the measurement of the self-regulated learning strategies.

Table 1: Operational definition of self-regulated learning strategies

Dimensions	Scales	More information on the scales
Motive	Goal-setting, self-efficacy	“Specifying intended actions or outcomes” (Zimmermann, 1998, p.76) “Belief in one’s own capabilities to successfully perform an activity” (Brown, 2007)
Method	Task strategies	“Analyzing tasks and identifying specific, advantageous methods for learning” (Zimmermann, 1998,p.76)
Time	Time-management	“Estimating and budgeting use of time” (Zimmermann, 1998, p.77)
Performance	Self-evaluation, self-consequence	“Setting criteria and using them for judging oneself” (Zimmermann, 1998, p.76) “Making personal rewards or punishments contingent on accomplishments” (Zimmermann, 1998, p.76)
Physical environment	Environmental structuring	“Locating places to study that are quiet or not distracting” (Dembo & Eaton, 2000, p. 483)
Social environment	Help-seeking	“Selection of particular models, teachers or books to help oneself to learn” (Zimmermann, 1998, p.76)

To verify the content validity of the questionnaire, two writing professionals and three experienced EFL teachers studied its items, considering the operational definitions provided for each dimension (see Table 1). In addition, the reliability of the items estimated based on Cronbach’s α was high enough (0.95) to indicate that the questionnaire could elicit consistent responses from the participants. Since the purpose of a questionnaire is to elicit responses from the participants and not assess their reading comprehension, it was first translated by the authors, and then reviewed and commented by three EFL teachers and a professional translator. The participants had freedom to read either Persian or English statements or even both of them.

Data analysis

To analyse the data, each response option of the 5-point Likert scale was assigned a number as follows: never =1, rarely =2, sometimes = 3, most often = 4, and always = 5. For all statements, the response ‘always’ indicates the most positive attempt at regulating writing processes, except for statement 15, where it was scored 1. Descriptive statistics, mean and standard deviation were used to offer a macro-perspective of the self-regulatory trends in L2 writing among college students. A professional way of describing the responses to the questionnaires is providing the mean and the range of a variable instead of listing all scores (Dornyei, 2007, p. 209). Moreover, the six conceptual dimensions were categorised and interpreted using the three levels of language learning strategy use identified by Oxford and Burry-Stock (1995). These categories are high (means of 3.5-5.0), moderate (means of 2.5-3.4), and low (means of 1.0-2.4). To compare the attitude of the

third and fourth year students on the practice of SRL, several independent samples t-tests were also run. The quantitative results for each dimension are presented in the following parts.

Results

Findings related to the first research question

Table 2 presents the overall quantitative results for the six conceptual dimensions, which have been ordered from the highest to the lowest means. As the table indicates, the SRL dimensions of method and social environment were ranked as the two highly regulated ones by the participants (3.95 and 3.72, respectively). While the physical environment, performance, and motive are moderately regulated, the time dimension was ranked as the lowest one (2.85), indicating that a considerable number of participants are likely to have problems in managing their time for writing.

Table 2: Ranking of the means scores of the six dimensions

Dimension	N	Mean	SD
Methods	98	3.95	0.97
Social environment	98	3.72	1.07
Performance	98	3.43	1.09
Physical environment	98	3.28	1.18
Motive	98	3.25	1.01
Time	98	2.85	1.01

The method dimension

Table 3 demonstrates the participants' regulation of the methods dimension. The means of the responses to the items were ranked from the highest to the lowest ones. The highest mean score belonged to item 43 with a numerical value of 4.36, which asked the participants to rate their tendency to revise their papers. The lowest mean score was related to item 16 with a numerical value of 2.28, which required the participants to rate their practice of drawing graphic organisers to organise ideas. The same result was found in the study by Honeck (2013), in which the participants rated the lowest score for using graphic organiser to organise the ideas. This might be due to the fact that the students in our context are not taught to employ methods such as graphic organisers to organise their ideas.

The social environment dimension

The social environment dimension "involves the interaction of learners with peers, teachers, tutors, and others to improve learning" (Andrade & Evans, 2013, p.104). Table 4 presents the participants' attitudes towards the regulation of this dimension by providing descriptive analysis from the highest means to the lowest means. The lowest mean score belonged to item 28 with a value of 3.56, which asked them to rate their interest in group

writing work, and the highest mean score belonged to item 36 with a value of 3.96, which asked them to rate their seeking assistance about a missed class.

Table 3: Descriptive statistics for the methods dimension

Questionnaire items	N	Mean	SD
43 I revise my paper if I'm not content with it.	97	4.36	0.72
56 I proofread my work.	98	4.25	0.79
50 I reread my work several times to find errors in my writing.	98	4.11	0.88
32 I create outline (physically or mentally) before I write.	97	3.84	1.04
38 I create a draft before writing the final paper.	97	3.84	1.14
53 I ask my peers to edit my writing.	96	3.66	1.15
58 I ask tutors to evaluate my writing and give suggested revision.	98	3.62	1.07
8 I brainstorm (i.e. listing thoughts as they come to you) for ideas before I write.	98	3.52	1.07
24 I free-write (i.e. writing about the subject without worrying about sentence structure) to get out my thoughts.	98	3.45	1.12
16 I use graphic organisers (e.g. tree diagrams) to organise my ideas.	98	2.28	1.16

Note: Statements are in descending order from the highest to the lowest.

Table 4: Descriptive statistics for the social environment

Questionnaire items	N	Mean	SD
36 I call a classmate about the writing homework that I missed.	98	3.96	.98
4 I use a variety of sources in making my writing paper.	98	3.91	.84
12 I use library sources and the Internet to find the information I want.	98	3.74	1.24
48 I look for a friend whom I can have an exchange of writing questions.	98	3.59	1.01
20 I take my own notes in writing class.	98	3.58	1.13
28 I enjoy group writing works because we help one another.	98	3.56	1.22

Note: Statements are in descending order from the highest to the lowest.

The performance dimension

The performance dimension involves “the practice of a learner monitoring the level of success on a task” (Andrade & Evans, 2013, p.127). The scales used to measure this dimension were self-evaluation and self-consequence. As Table 5 shows, the highest mean score belonged to the self-evaluation scale (item 59) with a numerical value of 4.09, which asked them to rate their openness to modifications based on others' feedbacks. The lowest mean score was for the self-consequence scale (item 21) with a mean score of 2.55, which asked the participants to rate the frequency of setting a reward for doing a writing homework. On the whole, the participants scored the lowest points for the self-consequence scale, since the items designed to measure this strategy (item 13, 29, 5, 46, 21) were placed in the lower part of the table.

Table 5: Descriptive statistics for the performance dimension

Questionnaire items	N	Mean	SD
59 I am open to changes based on the feedback I received.	97	4.09	.87
52 I am open to feedbacks to improve my writing.	96	4.05	.91
47 I listen attentively to people who comment on my writing.	97	4.04	.88
45 I ask feedback of my writing performance from someone who is more capable.	98	3.97	1.08
57 I ask others what changes should be done with my writing.	97	3.84	.96
11 I welcome peer evaluations for every writing output.	98	3.72	1.10
27 I ask others how my writing is before passing it to my professors.	98	3.59	1.08
35 I take note of the improvements on what I write.	98	3.59	1.13
40 I monitor my improvements in doing writing task.	98	3.41	1.12
19 I evaluate my accomplishments at the end of each writing session.	98	3.38	1.14
55 I browse through my past writing outputs to see my progress.	97	3.15	1.21
13 I make a deal with myself that I get a certain amount of the writing done I can do something fun afterwards.	97	3.12	1.24
29 I tell myself I can do something I like later if I right now I do the writing I have do get done.	97	3.11	1.23
3 If I am having a difficulty in writing, I inquire assistance from an expert.	98	3.10	.99
5 I promise myself I can do something I want later if I finish the assigned writing now.	98	3.01	1.16
46 I set a goal for how much I need to write and promise myself a reward if I reach that goal.	96	2.66	1.31
21 I promise myself some kind of a reward if I get my writing done.	98	2.55	1.25

Note: Statements are in descending order from the highest to the lowest.

The physical environment dimension

The physical environment dimension focuses on students' ability to structure their study environment to make it as conducive as possible for learning. Table 6 presents a statistical description of the participants' views on the regulation of their study environment for writing. The highest mean score belonged to item 14 with a value of 3.91, which asked the participants to rate their behaviour for keeping themselves away from noisy places. The lowest mean score belonged to item 6 with a value of 2.80, which asked them to report on whether they avoid watching TV or using the Internet if they have an uncompleted writing assignment.

The motive dimension

The motive dimension of academic SRL examines students' reasons for learning (Andrade & Evans, 2013) and their motive towards self-regulating their learning (Zimmerman & Risemberg, 1997). The scales used to measure the motive dimension were goal-setting and perceived writing self-efficacy. As Table 7 shows, the highest mean score belonged to the self-efficacy scale (item 39) with a numerical value of 3.71, and the lowest mean score belonged to the goal-setting scale (item 26) with a numerical value of 2.21.

Table 6: Descriptive statistics for the physical environment dimension

Questionnaire items		N	Mean	SD
14	I isolate myself from unnecessary noisy places.	98	3.91	0.98
30	I can't study nor do my writing homework if the room is dark.	98	3.41	1.16
22	I don't want to hear a single sound when I'm writing.	98	3.23	1.29
41	I switch off my TV or mobile phone for me to concentrate on my writing.	98	3.09	1.25
6	I avoid watching the television or using the Internet (e.g. mobile programs such as <i>Telegram</i> or <i>Line</i>) if I have a pending writing homework.	98	2.80	1.25

Note. Statements are in descending order from the highest to the lowest.

In our sample, the participants reported a 'high' sense of perceived self-efficacy with a mean score of 3.51. The highest mean appeared in item 39, which assessed their beliefs in being able to write a well-organised paper with introduction, body, and conclusion. They rated the lowest value for item 1, which asked about their ability to generate ideas. In the study by Honeck (2013), the participants also reported the lowest strength of belief for generating ideas. However, the mean score for goal-setting statements (items 2, 18, 10, 34 and 26) was 2.78, which indicates a moderate engagement in goal setting. For the goal-setting scale, the highest mean appeared in item 2, which asked them to rate the frequency of preparing a schedule for their writing activities. The lowest mean was item 26, which examined how often the participants use a planner to keep track of what they are supposed to achieve.

Table 7: Descriptive statistics for the motive dimension

Questionnaire items		N	Mean	SD
39	I can write a well-organised and sequenced paper with good introduction, body, and conclusion.	98	3.71	1.02
25	I can write a proper conclusion of an essay.	98	3.68	.85
9	I can write paragraphs with details that support the ideas in the topic sentences or main ideas.	98	3.52	.89
60	I can complete a writing task without difficulty by the due date.	98	3.50	1.04
17	I can write a proper introduction to an essay.	98	3.47	.91
44	I can write on an assigned topic without difficulty.	98	3.47	.94
33	I can edit essays throughout the writing process.	96	3.45	.96
51	I can get ideas across in a clear manner by staying focused without getting off the topic.	98	3.44	.82
1	I can easily generate ideas to write about.	98	3.40	.82
2	I make a detailed schedule of my writing activities.	96	3.16	1.02
18	I plan the things I have to write in a week.	95	2.96	1.21
10	I make a timetable of all the writing activities I have to complete.	98	2.87	1.19
34	I keep track of everything I have to write in a notebook or on a calendar.	98	2.60	1.26
26	I use a planner to keep track of what I am supposed to accomplish.	98	2.31	1.22

Note. Statements are in descending order from the highest to the lowest means

The time dimension

The time dimension of academic SRL strategies focuses on the scientific question of “when” to study and for how long one commits to a learning task (Andrade & Evans, 2013; Zimmerman, 1998). Table 8 illustrates that the highest mean score belongs to item 31 with a value of 3.61, which asked the participants to rate the frequency of their attendance in the writing class. The lowest mean score was for item 54 with a value of 2.28, which asked them to report on their use of day time for planning writing activities.

Table 8: Descriptive statistics for the time dimension

Questionnaire items	N	Mean	SD
31 I attend writing class regularly.	98	3.61	1.09
23 I make sure I keep up with the weekly writing assignments for the writing course.	98	3.17	1.12
15 I find it hard to stick to a writing schedule.	97	3.02	1.22
7 I make good use of my study time (e.g.5:00-7:00 pm) for writing assignments.	98	2.89	.85
42 I make a schedule of the writing activities I have to do on work days.	98	2.69	1.27
37 I make a list of the things I have to write each day.	98	2.60	1.30
49 I write a set of goals (including writing one or two paragraphs) for myself each day.	98	2.55	1.06
54 I spend time each day planning for writing.	98	2.28	1.09

Note. Statements are in descending order from highest means to lowest.

Findings related to the second research question

The second research question dealt with differences that may be found in the employment of self-regulation between the participants of the two academic years. We wanted to examine whether SRL strategies would improve with students’ advancement in academic years and more exposure to academic writing. The descriptive statistics of the two groups’ responses to the items are presented in Table 9.

To study possible differences in the employment of the six dimensions, several independent samples t-tests were calculated on the mean scores of the two groups. As Table 10 shows, there is a significant difference in the regulation of the two dimensions of method ($p=.024<.05$) and social environment ($p=.012<.05$) in the writing practices of these two groups of students. In other words, it seems that fourth year students regulate method (mean=3.75) and social environment (mean=3.94) dimensions considerably more than third year students (see Table 8). The strength of the difference or effect size was also estimated through *eta* squared formula and resulted in modest effect sizes, .08 for methods and .10 for social environment. This may confirm a significant difference in the employment of the two dimensions between the two groups. However, there was no significant difference between the two groups in employment of the other dimensions, namely motive, time, physical environment, and performance. The findings also suggest that there is a need to practise SRL strategies among EFL students.

Table 9: Descriptive statistics of six dimensions of SRL for third and fourth year students

	Groups	Mean	SD
Motive	3rd year	3.00	.592
	4th year	3.22	.814
Method	3rd year	3.40	.570
	4th year	3.75	.602
Time	3rd year	2.67	.655
	4th year	2.93	1.106
Physical environment	3rd year	3.37	.841
	4th year	3.46	.922
Social environment	3rd year	3.52	.608
	4th year	3.94	.646
Performance	3rd year	3.07	.595
	4th year	3.29	.731

3rd year = third year students (n=30); 4th year = fourth year students (n=30)

Table 10: Independent samples t-test

Dimensions	df	t	Sig. (2-tailed)
Motive	58	-1.212	.230
Method	58	-2.310	.024*
Time	58	-1.113	.270
Physical environment	58	-.409	.684
Social environment	58	-2.596	.012*
Performance	58	-1.252	.215

*:Significant at $p < .05$

Discussion

The analysis of data revealed that although the overall strength of each dimension was generally in a moderate range, except for the method and physical environment dimensions, which received the highest rates. The time dimension received the lowest rate amongst all, which may indicate that the majority of the participants had trouble in time-management. Moreover, the findings indicated that there was a significant difference in the employment of SRL strategies in the writing practices of the third and fourth year students. Indeed, the fourth year students regulated the method and social environment dimensions more frequently than the third year students. However, there was no significant difference in the use of other dimensions including motive, time, performance, and social environment. One reason for these findings might be that our educational system does not put adequate emphasis on the issue of self-regulation, and consequently the students do not attain fully improved self-regulation through the passage of academic years.

The issue of time-management has considerable importance for college students as they have to accomplish more tasks (Dembo, 2004). Preparing a well-written academic paper in due time is one of the requirements that college students are often obliged to fulfil during

an academic year. It is clear that the situation becomes more complicated for EFL students when they have to write in an entirely new language. Andrade and Evans (2013) explained that students who write in a second language may procrastinate due to their feelings of insecurity about stating complex ideas in an entirely new syntactic, lexical, and discourse system. Additionally, poor time management causes students to avoid using some self-regulatory strategies and processes. For example, when the participants were asked to rate the frequency of drawing the graphic organiser to organise their ideas, their responses indicated that they do not employ this strategy efficiently. The same result was found in the study by Honeck (2013), where the participants reported that they avoid organising their thoughts with graphic organisers or writing outlines, for it takes a lot of time. Having poor time management can deprive them of the benefits that these strategies could provide.

Goal-setting is another essential feature of SRL which is problematic for EFL students. A study by Page-Voth and Graham (1999) showed that students who were taught goal-setting strategies outperformed the control group in writing performance. The majority of the participants in the present study reported that they engaged in goal-setting less frequently since the total mean for the goal-setting statements was slightly 'moderate'. It can be inferred that their lack of goals could be considered as one of the factors contributing to their having poor time management. Britton and Glynn (1989) stated that poor time management or task management can be a consequence of not having specific goals to be attained, one's inability to break them into sub-goals, and not knowing how to manage time to accomplish certain goals (as cited in Dembo, 2004). It seems evident that when a person does not have any specific goal in mind, one finds it difficult to keep track of activities having to accomplish in due time since time is not regulated effectively or efficiently. Therefore, writing academically is a cognitively demanding task; a writer must have sufficient time to go smoothly through various stages to produce good writing. To proactively ensure the stages, students need to develop a grasp of time management and structure their study time as appropriately as possible until they accomplish their specific goals. Boscolo and Hidi (2007) stated that "a writer *controls internally* the writing activity such as setting specific objectives and assigning time for the writing task" (p.8).

Weigle (2014) explained that the nature of L2 writing could be understood from two perspectives: from cognitive ability, which involves writing ability and L2 proficiency, and from a sociocultural perspective, which involves learning the values and assumptions of a particular discourse community. In other words, EFL students need to possess not only a writing ability and L2 linguistic knowledge but also an awareness of the meta-textual conventions of a specific discourse community.

Process writing could be an appropriate instructional approach for including time planning into writing. Andrade and Evans (2013) maintained that "a first step for L2 writing is developing awareness of the writing process and of the need to allow sufficient time to address the stages of prewriting, planning, writing, revising, and editing" (p.14). Accordingly, a self-regulated writer should know how to manage time to address each stage in writing. They stated that "process writing can be used to teach multiple concepts at once — good writing, time management, and self-regulated learning" (Andrade &

Evans, 2013, p.69). Therefore, the learners need to understand that writing is primarily a process and it could not be wrapped up in a single writing session. They have to be familiar with SRL strategies and go through various stages of pre-writing, writing, revising, editing and evaluating in order to produce a well-written product (Weigle, 2014). Although it seemed that our participants were aware of the terms used for describing the writing process as generating ideas, drafting, editing, revising, and proofreading and also were familiar with writing strategies such as brainstorming, using graphic organisers and outlining, the findings showed that most of them did not find the inherent value of some writing strategies and processes. For instance, the items assessing goal-setting yielded low average in comparison with statements assessing perceived writing self-efficacy. Or, self-consequence strategy was not frequently used by the participants.

It appears that teachers need to explain the values and advantages of various writing strategies, as well as scaffolding the use of them by extensive modelling opportunities in the classroom. Following Zimmerman and Kitsantas (2005), Effeney, Carroll and Bahr (2013) explained that learners need to be equipped with SRL skills and strategies through four-stage training. Learners can acquire SRL strategies from social sources by observation of models, verbal descriptions and social guidance. The next two stages involve imitation and internalisation of the strategies when used independently. The final stage is systematic adaptation when learners can match their SRL strategies to the challenging situations. Teachers can contribute substantially to this issue by introducing SRL strategies and training their students to internalise those strategies to produce more strategic writing.

Conclusion

Assessing students' attitudes towards the employment of SRL strategies in writing is beneficial for academic writing course design as it can provide a substantial amount of information to help instructors enhance their students' academic performance. Instructors have an important role in assisting students to become self-regulated writers. To this end, they have to ensure which SRL strategy needs to be focused more extensively in order to tailor the instruction to meet the students' needs. The current study has important pedagogical and research implications. The need for the acquisition of time management skills is critically important for the students to adequately address various stages in the process of writing. EFL teachers should discuss the benefits of each strategy and provide opportunities whereby they could use it efficiently in practice.

However, no generalisation can be made to other EFL contexts as we are restricted by our sample size and the sampling procedure confines us from generalising the findings. Future studies could involve a larger sample size, from other language backgrounds and randomly selected participants. Besides, other researchers can triangulate their data, using multiple methods of data collection procedure such as interviewing and observation. To gain insights into the development of SRL, open-ended questions could also be added to the SRL questionnaire in order to elicit more detailed responses from the participants. Moreover, it is interesting to study the relationship between self-reported development of SRL strategies and end of the semester grade achieved by the learners. Finally, some recent studies (Effeney, Carroll & Bahr, 2013; Zimmerman & Kitsantas, 2005) have

suggested a 4-stage training (observation, imitation, internalisation and systematic adaptation to challenging situations) to develop SRL skills and strategies. A longitudinal study could be carried out to examine changes occurring in the student's SRL behaviour in writing practice after receiving this particular SRL training over a period of time.

References

- Andrade, M. S. & Bunker, E. L. (2009). A model for self-regulated distance language learning. *Distance Education*, 30(1), 47-61. <https://doi.org/10.1080/01587910902845956>
- Andrade, M. & Evans, N. (2013). *Principles and practices for response in second language writing: Developing self-regulated learners*. New York: Routledge.
- Bakry, M. S. & Alsamadani, H. A. (2015). Improving the persuasive essay writing of students of Arabic as a foreign language (AFL): Effects of self-regulated strategy development. *Procedia - Social and Behavioral Sciences*, 182, 89-97. <https://doi.org/10.1016/j.sbspro.2015.04.742>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Boscolo, P. & Hidi, S. (2007). The multiple meanings of motivation to write. In S. Hidi & P. Boscolo (eds.), *Writing and motivation* (pp. 1-14). UK: Emerald.
- Brown, D. (2007). *Principles of language learning and teaching* (5th ed). White Plains, NY: Pearson Education.
- Calicchia, S. (2015). To “play that funky music” or not: How music affects the environmental self-regulation of high-ability academic writers. *Young Scholars in Writing*, 11, 62-72. <https://arc.lib.montana.edu/ojs/index.php/Young-Scholars-In-Writing/article/view/278>
- Cetin, B. (2015). Academic motivation and self-regulated learning in predicting academic achievement in college. *Journal of International Education Research*, 11(2), 95-106. <https://doi.org/10.19030/jier.v11i2.9190>
- Csizer, K. & Tanko, G. (2015). English major's self-regulatory control strategy use in academic writing and its relation to L2 motivation. *Applied Linguistics*, 38(3), 386-404. <https://doi.org/10.1093/applin/amv033>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: SAGE.
- Dembo, M. H. (2004). *Motivation and learning strategies for college success: A self-management approach* (2nd ed.). Mahwah, NJ: Erlbaum.
- Dembo, M. H. & Eaton, M. J. (2000). Self-regulation of academic learning in middle-level schools. *The Elementary school Journal*, 100(5), 473-490. <http://www.jstor.org/stable/1002280>
- Effeney, G., Carroll, A. & Bahr, N. (2013). Self-regulated learning: Key strategies and their sources in a sample of adolescent males. *Australian Journal of Educational & Developmental Psychology*, 13, 58-74. https://www.newcastle.edu.au/__data/assets/pdf_file/0012/100245/V13_Effeney_Carroll_Bahr.pdf
- Fujioka, M. (2001). Asian students' English writing experience. *Proceedings of the 27th Annual JALT Conference*. (pp. 185-194). <http://jalt-publications.org/archive/proceedings/2001/185.pdf>

- Graham, S. & Harris, K. R. (2000). The role of self-regulation and transcription skills in writing and writing development. *Educational Psychologist*, 35(1), 3-12.
https://doi.org/10.1207/S15326985EP3501_2
- Graham, S. & Harris, K.R. (1997). Self-regulation and writing: Where do we go from here? *Contemporary Educational Psychology*, 22(1), 102-114.
<https://doi.org/10.1006/ceps.1997.0920>
- Lam, R. (2014). Promoting self-regulated learning through portfolio assessment: Testimony and recommendations. *Assessment and Evaluation in Higher Education*, 39(6), 699-714. <https://doi.org/10.1080/02602938.2013.862211>
- Lam, R. (2015). Feedback about self-regulation: Does it remain an “unfinished business” in portfolio assessment of writing? *TESOL Quarterly*, 49, 402-413.
<https://doi.org/10.1002/tesq.226>
- Hammann, L. (2005). Self-regulation in academic writing tasks. *International Journal of Teaching and Learning in Higher Education*, 17(1), 15-26.
<https://pdfs.semanticscholar.org/c4f3/f310444b5fc18530652ed0d305f958a166b8.pdf>
- Harris, K. R., Graham, S., Mason, L. H. & Saddler, B. (2002). Developing self-regulated writers. *Theory into Practice*, 41(2), 110-115. <https://www.jstor.org/stable/1477462>
- Honeck, A. Y. (2013). *Assessing perceived writing self-efficacy beliefs in the community college environment*. Masters thesis, Hamline University, USA.
https://digitalcommons.hamline.edu/hse_all/507/
- Magno, C. (2009). Self-regulation and approaches to learning in English composition writing. *TESOL Journal*, 1, 1-16. <https://ssrn.com/abstract=1579404>
- Montalvo, F. T. & Torres, M. C. G. (2004). Self-regulated learning: Current and future directions. *Electronic Journal of Research in Educational Psychology*, 2(1), 1-34.
http://www.investigacion-psicopedagogica.org/revista/articulos/3/english/Art_3_27.pdf
- Ning, H. K. & Downing, K. (2012). Influence of student learning experience on academic performance: The mediator and moderator effects of self-regulation and motivation. *British Educational Research Journal*, 38(2), 219-237.
<https://doi.org/10.1080/01411926.2010.538468>
- Newfields, T. (2003). Helping EFL students acquire academic writing skills. *Journal of Nanzan Junior College*, 30, 99-120. <http://www.tnewfields.info/Articles/research.htm>
- Oxford, R. L. & Burry-Stock, J. (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the Strategy Inventory for Language Learning (SILL). *System*, 23(1), 1-23. [https://doi.org/10.1016/0346-251X\(94\)00047-A](https://doi.org/10.1016/0346-251X(94)00047-A)
- Page-Voth, V. & Graham, S. (1999). Effects of goal setting and strategy use on the writing performance and self-efficacy of students with writing and learning problems. *Journal of Educational Psychology*, 91(2), 230-240.
<http://psycnet.apa.org/doi/10.1037/0022-0663.97.2.157>
- Schloemer, P. & Brenan, K. (2006). From students to learners: Developing self-regulated learning. *Journal of Education for Business*, 82(2), 81-87.
<https://doi.org/10.3200/JOEB.82.2.81-87>
- Schunk, D. (2009). Self-regulated learning. [retrieved from <http://www.education.com/reference/article/self-regulated-learning/>; not found 30 Dec 2017, see D. H. Schunk & B. J. Zimmerman (Eds) (1998), *Self-regulated learning: From teaching to self-reflective practice*.
<https://www.guilford.com/books/Self-Regulated-Learning/Schunk-Zimmerman/9781572303065>

- Takagi, A. (2001). The need for change in English writing instruction in Japan. *The Language Teacher*, 25(7) 5-9. http://jalt-publications.org/old_tlt/articles/2001/07/takagi
- Vrieling, E. M., Bastiaens, T. J. & Stijnen, S. (2012). Effects of increased self-regulated learning opportunities on student teachers' metacognitive and motivational development. *International Journal of Educational Research*, 53, 251-263. <https://doi.org/10.1016/j.ijer.2012.03.014>
- Weigle, S. C. (2014). Considerations for teaching second language teaching. In M. Celce-Murcia, D. M. Brinton, & M. A. Snow (Eds.), *Teaching English as a second or foreign language*, (pp.222-237). Boston: Heinle Cengage.
- Williams, J. D. & Takaku, S. (2011). Help seeking, self-efficacy, and writing performance among college students. *Journal of Writing Research*, 3(1), 1-18. <http://dx.doi.org/10.17239/jowr2011.03.01.1>
- Zimmerman, B. J. (1998). Academic study and the development of personal skill: A self-regulatory perspective. *Educational Psychologist*, 33(2-3), 73-86. <https://doi.org/10.1080/00461520.1998.9653292>
- Zimmerman, B. J. (1994). Dimensions of academic self-regulation: A conceptual framework for education. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulation of learning and performance* (pp. 3-21). Hillsdale, NJ: Lawrence Erlbaum.
- Zimmerman, B. J. & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal*, 31(4), 845-862. <https://doi.org/10.3102/00028312031004845>
- Zimmerman, B. J. & Risemberg, R. (1997). Becoming a self-regulated writer: A social cognitive perspective. *Contemporary Educational Psychology*, 22(1), 73-101.

Shirin Abadikhah (corresponding author) is an assistant professor of TEFL in the Department of English Language & Literature at the University of Mazandaran, Iran. She holds a PhD in applied linguistics from The University of Edinburgh, UK. Her general research interests include applied linguistics and English education.
Email: abadikhah@umz.ac.ir

Zahra Aliyan holds an MA in TEFL from the University of Mazandaran. Her research interests include teaching writing and classroom interaction.
Email: zahra.aliyan88@gmail.com

Seyed Hassan Talebi is an assistant professor in the Department of English Language & Literature at the University of Mazandaran, Iran, where he conducts research, lectures and supervises BA and MA students. He specialises in teaching English as a foreign language and his main research interest is cross-linguistic transfer studies.
Email: hstalebi@umz.ac.ir

Please cite as: Abadikhah, S., Aliyan, Z. & Talebi, S. H. (2018). EFL students' attitudes towards self-regulated learning strategies in academic writing. *Issues in Educational Research*, 28(1), 1-17. <http://www.iier.org.au/iier28/abadikhah.pdf>