Metacognitive Writing Strategies Used by Omani Grade Twelve Students

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Abstract. The current study investigated the extent to which metacognitive writing strategies are used by Omani EFL (English as a Foreign Language) grade twelve students. It also explored if there is a significant relationship between grade 12 students' use of metacognitive writing strategies and their language performance. Besides, it examined gender differences in the use of these strategies. The sample of the study was 263 Omani EFL grade twelve students from Batinah North Governorate in the academic year 2018/2019. Metacognitive Strategies of Writing Survey (MSWS) and semi-structured interviews were used to collect data. The results of the study revealed that students use the three types of metacognitive writing strategies; planning, monitoring and evaluating at high frequencies. However, the findings revealed no significant relationship between students' use of the three types of metacognitive strategies and their language performance. Moreover, students differ in terms of gender in using metacognitive writing strategies. Female students tend to use more metacognitive strategies in writing compared to male students. In light of these findings, implications for practice and future studies have been recommended.

Keywords: Metacognitive strategies; Writing; Language performance; Oman

1. Introduction
Over the past decades, writing has received more attention from researchers due to the growing recognition of language acquisition as well as professional demands. Researchers explain that possessing good writing skills has a positive impact on learners’ academic achievement (Abedin, Hossein, Naseri, and Taghizadeh, 2013; Binandeh, Rahmani and Raoofi, 2017; Briody, Shang, and Wei,
2012) as it helps learners “to remember, observe, think, and communicate.” (as cited by Barras in Briody et al., 2012, p.155). Moreover, getting better job perspectives and promotions in the world of globalization where English is considered a lingua franca, put more emphasis on writing skill as a fundamental requirement (Binandeh et al., 2017, Briody et al., 2012). Yet, writing in a second language is not an easy task. Unlike speaking, writing is a complex and challenging process in which writers try to transmit their knowledge, thoughts and ideas on papers to be read and understood by a reader who is not present. Accordingly, it requires a proper choice, link, and sequence of sentences to ensure that the text “can be interpreted on its own” (Byrne, 1979, p.4, 5). Therefore, researchers in the area of second language learning have been trying to find techniques to help and support learners in writing, especially struggling writers. Indeed, there has been a popular agreement and recognition of the significant role of writing strategies in enhancing language performance (Diaz, 2013; Nasihan & Cahyono, 2017; Okasha & Hamdi, 2014; Binandeh et al., 2017). Compared to L1 in which writers can automatically access grammatical and lexical collections while writing (Binandeh et al., 2017), it is more challenging in the foreign language that compels writers to consciously use strategy to access the knowledge they have (Okasha & Hamdi, 2014).

Writing strategies refer to particular processes, methods, or techniques deployed by learners to enhance and improve their writing (Baker & Boonkit, 2004; Bai, Hu and Gu, 2014). According to Riazi and Wenden (as cited in Xiao, 2016), there are four types of writing strategies: rhetorical, metacognitive, cognitive, and social/affective strategies. Rhetorical strategies help writers to organize and present their ideas, whereas metacognitive strategies include monitoring and evaluating the writing process. Cognitive strategies are concerned with implementing the actual writing, and social/affective strategies focus on interaction with others, motivation, emotions, and attitudes in writing (Xiao, 2016). Among these strategies, metacognitive is considered the most important as they assist learners to direct, guide, and control their learning as well as foster the way to be active, aware, independent, autonomous, and life-long learners (Boghian, 2016; Bouirane, 2015; Haukas, 2018; Oz, 2005).

This study attempts to investigate the metacognitive writing strategies used by grade 12 students in Oman through answering the following research questions:

1. To what extent do grade twelve Omani students use the different types of metacognitive writing strategies?
2. Is there any significant relationship between the types of metacognitive writing strategies students use and their English language performance?
3. Are there any significant differences between grade twelve males and females in the type of metacognitive writing strategies they use?

Actually, several important gaps have been identified with regard to studies on metacognitive writing strategies. First, there is little research on school students’ metacognitive writing strategies as the majority of the work targeted learners in the higher education sector. Second, investigating metacognitive writing strategies in the Omani context is absent and there is a scarce descriptive study
exploring metacognitive strategies. Hence, because of these gaps, and to further contribute to this field of study, the results of the present research will hopefully assist teachers to be aware of the metacognitive writing strategies students use and could lead to a varied inclusion of these strategies in the future syllabus. Moreover, the study could provide suggestions for enhancing writing classes in light of the findings of this study.

2. Literature Review

Byrne (1979) defines writing as "a sequence of sentences arranged in a particular order and linked together in certain ways." (p.1). Hacker, Keener, and Kircher (2009) take this definition one-step further by laying stress on the writing process. They note, "writing is the production of thought for oneself or others under the direction of one's goal-directed metacognitive monitoring and control, and the translation of that thought into an external symbolic representation." (Hacker et al., 2009, p.154). Similarly, Flower and Hayes (1981) state that writing is a process of decisions and choices. However, it was not until the 1980s that researchers started to consider writing as a process rather than a mere product (Onozawa, 2010); transforming from focusing on accuracy to exploring writers' progress through the writing task (Xiao, 2016). Hence, several models have emerged to describe and understand the complexity of the writing process.

2.1 The Cognitive Process Model

The Cognitive Process Model was introduced to fill the gaps in the Stage Model of Writing that puts great attention on the written product neglecting how the writers approach the writing task (Flower & Hayes, 1981). The advocates of this model were Linda Flower and John Hayes. According to them, the main unit in the writing process is the mental process, which learners focus on to generate their final written product (Flower & Hayes, 1981; Onozawa, 2010). The Cognitive Process Model encompasses three major units presenting writing elements: the task environment, writers' long-term memory, and writing process. First, the task environment includes the rhetorical problem, and the text produced so far. Rhetorical problem refers to the assignment from which the learners can identify the topic, audience, and their role. Solving the problem needs higher-order thinking skills and strategies, which indicate the role of metacognitive strategies in this process. Besides, the text that is already written influences the writer's choice of whether to continue to write or to stop to modify what has been written. The second phase in the cognitive process is the writer's long-term memory that includes his knowledge about the topic, the audience, the plans, and the problem that contributes to the flow of the writing process. The last phase is the writing process. This stage includes three processes: planning, translating, and reviewing. In the planning process, the writers make decisions and choices about the knowledge that will be used in their composition. It involves three sub-processes: generating ideas, organizing, and goal setting. Translating refers to transforming ideas into "visible language" (Flower & Hayes, 1981, p. 373). Finally, reviewing includes two sub-processes, which are evaluating and revising.

The aforementioned processes are recursive, which is a key feature of the cognitive process model (Hacker et al., 2009; Victori, 1995). In this spiral and
cyclical process, the writer plays the role of a monitor as he needs to check his composition throughout the process and thinks how to modify it to reach the intended meaning. For instance, in the translating process, the writer might monitor what he has already written which might lead to a "new cycle of planning and transforming." (Flower and Hayes, 1981, p.374).

Moreover, Hacker et al. (2009) explain that monitoring might include reading, re-reading, reflecting, and reviewing. They argue that these strategies are monitoring strategies of thoughts, which presents writing as "applied metacognitive" (p. 161). Despite paying less attention to grammar and structure and giving little significance to the final product, the cognitive process model helps in generating and increasing students' intrinsic motivation as learners feel free to manage their own writing without being stuck to the traditional controlled writing (Onozawa, 2010).

2.2 The Knowledge Telling and the Knowledge Transforming Models
The Knowledge telling process and knowledge transforming process were influential within the process model. Bereiter and Scardamalia introduced the model in 1992 to address the problem of how to translate thoughts into written form (Victori, 1995). They claim that "not all writers are able to transform those mental ideas into some kind of coherent written form" (Victori, 1995, p. 21). More specifically, the two models explain the differences between mature (expert) and immature (novice) writers in the way they transform their knowledge and ideas into the writing process.

2.2.1 The Knowledge Telling Model
It is a model of immature writers. In this model, the writer focuses his attention on the topic. He tries to find some cues to activate his passive knowledge stored in his memory and then starts writing directly. Once the writer starts composing, the produced units of the text act like another cue or identifier for getting another stored knowledge (Bereiter and Scardamalia, 2013). Accordingly, the writer generates a text without applying the problem-solving strategies put forward by Flower’s and Hayes’s model.

2.2.2 Knowledge Transforming Model
This is a model of mature writers. It is also considered a process within which the former model is embedded (Bereiter and Scardamalia, 2013). In this model, the text is not transcribed immediately. Instead, it is preceded by problem-solving aspects; e.g. problem analysis, planning, setting goals, and paying attention to the readers (Victori, 1995). Through this process, writers go through continuing revision and rethinking which leads to new sub-goals for the text (Bereiter and Scardamalia, 2013). Mature writers who use this model are expected to use metacognitive strategies during their composition.

Interestingly, Camps (as cited in Victori, 1995) argues that most of the students at school follow the knowledge-telling model, which explains the obstacles students face in writing. Bereiter and Scardamalia (as cited in Victori, 1995) recommended that to improve students' composition, they should go beyond the knowledge telling model; use more knowledge transforming which requires applying higher-
level thinking strategies. In other words, students need to be aware of and use a variety of metacognitive writing strategies while completing writing tasks.

2.3 Writing Strategies
Due to the transformation in the learning process that views learners as active thinkers, language-learning strategies have been considered as a significant cognitive factor involved in writing acquisition (Victori, 1995 & Zhan, 2016). Writing strategies refer to particular methods, processes, or techniques deployed by learners to enhance and improve their writing (Baker & Boonkit, 2004; Bai et al, 2014). Victori (1995) noted that there is no agreement on these processes as well as the labels used for them. This has led to the emergence of a variety of writing strategy taxonomies; e.g. Arndt, 1987; Riazi, 1997; Sasaki, 2000; Victori, 1990; and Wenden, 1991 (as cited in Mu, 2005). Yet, one of the contributions that are worth mentioning is Mu’s taxonomy (2005) as it synthesizes the aforementioned taxonomies. Mu classifies writing strategies into five types: rhetorical, metacognitive, cognitive, communicative, and social/ affective.

2.4 Metacognitive Writing Strategies
Metacognitive writing strategies can be defined as strategies that “are used to monitor the writing process consciously and evaluate the effectiveness of writing actions.” (Xiao, 2016, p.20). Metacognitive strategies play a vital role in language learning. Metacognitive writing strategies such as paying attention and overviewing help learners to stay focused and maintain concentration while writing (Oxford, 1990, p. 136). In addition, these strategies assist learners to plan their learning efficiently and effectively. Moreover, metacognitive writing strategies promote language acquisition, as the learner is aware of his learning (Rahimi & Katal, 2012). Moreover, learners’ ability to adapt their learning to new contexts and tasks will increase as they are exposed to more strategies (Chick, 2014). More significantly, metacognitive writing strategies contribute to more autonomous and independent learning (Diaz, 2013; Mu, 2005). Hence, metacognitive writing strategies “can lead to more profound learning and improved performance, especially among learners who are struggling.” (Anderson, 2002, p.2). Metacognitive writing strategies are categorized into three types: planning, monitoring and evaluating.

2.4.1 Planning
Planning involves thinking about and focusing on the goals to be accomplished and how to achieve them (Anderson, 2002). Self-questioning strategies are used to identify various components such as purpose, audience, and strategies to be used (Diaz, 2013; Xiao, 2016). Flower and Hayes (1981) listed three types of planning strategies: generating ideas, setting goals, and organizing. Generating ideas involve forming new information, using old ideas and information from long-term memory, making connections, and thinking about examples. Setting goals include content goals (e.g. text structure and audience), and process goal (how to proceed). Finally, organizing refers to filtering and choosing the most useful content generated and putting them in a writing plan (Xiao, 2016).
2.4.2 Monitoring
Monitoring, also identified as self-monitoring, is "a conscious control and regulation of the writing process." (Xiao, 2016). It involves assessing, self-questioning, verifying, controlling, directing, and arranging the writing performance while composing (Anderson, 2002; Diaz, 2013; Xiao, 2016). Monitoring helps learners to evaluate the effectiveness of writing strategies and to decide whether ideas need to be changed or added.

2.4.3 Evaluation/self-evaluating
Evaluation is defined as checking-back to decide about the effectiveness and the quality of one’s composition with respect to the intended goals (Anderson, 2002; Nemouchi, 2017, Xiao, 2016). It also encompasses reactions that should be taken based on the evaluation of the composition.

2.5 Studies on Metacognitive Writing Strategies
Razi (2012) investigated the metacognitive writing strategies of 250 Cypriot University students. The results demonstrated that less than half of the participants were aware of metacognitive writing strategies; indicating "lack of training in terms of strategy use" (Razi, 2012, p.10). However, a strong positive correlation was found between students’ grades and metacognitive writing strategies; successful students used more metacognitive strategies than medium and weak students did. For further clarification, the researcher interviewed six teachers who reported metacognitive strategies were confined by time, which might contribute negatively to students’ awareness of these strategies. Similar to Razi (2012), Briody et al. (2012) conducted a study to explore the relationship between English writing ability level and EFL learners’ use of metacognitive strategies. Majoring in applied English, 152 students at a university in Taiwan, completed a questionnaire designed by the researchers along with a composition test to classify their writing levels. The results revealed that high-level writers use more metacognitive strategies than low-level writers do, particularly in the planning and reviewing stages. Furthermore, by employing a multiple regression analysis, it was found that the planning stage is an important factor to predict the level of students’ writing. Accordingly, the researchers suggested that instructors train students on how to plan before writing; e.g. generating complete ideas and making an outline before writing. Zhan (2016), working with 93 Chinese college students, found that among four categories of metacognitive strategies, selective attention was the most frequently used while self-evaluating was the least. The researcher also found that successful writers used metacognitive strategies more than unsuccessful writers, which shows the role of these strategies in improving students’ writing. In the same vein, Azizi et al. (2017) examined the correlation between the use of metacognitive writing strategies and writing performance. The study was based on a questionnaire and a writing test completed by 30 Iranian female EFL learners and it showed a strong and positive correlation between metacognitive strategies and students’ writing performance. In addition, unlike Razi’s finding, the evaluating stage showed the strongest correlation to predict writing performance.

In contrast to previous studies, a study by Abdollahzadeh (2010), on 230 undergraduate students in Iran, showed no significant differences in the
frequency of writing strategy use between high- and low-level writers. He attributed this to the role and effect of instruction they receive in their first year at university; e.g. taking notes, writing memos, and summarizing. Such findings are important because they suggest that teaching students to use strategies through explicit instruction and feedback has a significant impact on their writing performance. Moreover, the findings revealed no significant differences between males and females in using writing strategies; they both use metacognitive strategies at a similar frequency. Similar to the study by Abdullahzadeh (2010), Mutar and Nimechisalem (2017) explored the frequency of using writing strategies among 132 Iraqi high school students using Petric and Czarl’s Writing Strategy Questionnaire. The results showed no significant differences between high and low proficient students in using these strategies. However, the study revealed that female students used more writing strategies than male students did.

3. Methodology
3.1 Research design
This study aims to investigate metacognitive writing strategies used by Omani EFL grade twelve students. To achieve this, the study adopted a quantitative descriptive design as the researchers “express the relationship between variables using effect statistics, such as correlations, relative frequencies, or differences between means” (Hopkins, 2000, p.1). A questionnaire was used as the main instrument to collect quantitative data. Besides, for further investigation, a semi-structured interview was conducted with students to highlight the metacognitive strategies they utilize when writing.

3.2 Sampling
The population of the current study was grade 12 students in the Omani governmental schools in Batinah North Governorate for the academic year 2018/2019. The governorate had 7927 grade 12 students (4080 males and 3847 females). Convenience sampling was used to select the sample of the study by which two male, and two female post-basic schools were chosen, and two classes were selected from each school. Convenience sampling, also known as accidental sampling, is a type of nonrandom sampling techniques where a group of the population is chosen due to certain criteria; e.g. being easy to access, are willing to participate, or are available at a particular time (Etikan; Musa and AlKassim, 2016). The sample size comprised 263 students including 140 females (53.2%) and 123 males (46.8%). Their grades in the first semester’s final test ranged from 14 to 70 with a mean of 41.14 and a standard deviation of 14.99. The rationale for targeting students in grade 12 is that grade 12 is the exit level from which students join higher education institutions, where being autonomous, independent and lifelong learners – (the skills promoted by metacognitive strategies) is needed.

3.3 Instrumentation
3.3.1 The Metacognitive Strategies of Writing Survey (MSWS)
The main instrument of the current study was the Metacognitive Strategies of Writing Survey (MSWS) which was developed by the researchers after a review of the literature with special reference to Xiao (2016)’s Survey of Metacognitive Writing Strategies. The survey consisted of two parts (Appendix A). The first part
aimed to collect general biographical information about the participants. This information included gender, school’s name, and student’s number in the name list which was used to record his/ her mark in the first semester English final test. In the second part, students were asked to respond to a questionnaire of 27 items, divided into three categories presenting the types of metacognitive writing strategies, as follows: twelve planning items, nine monitoring items, and six self-evaluating items. Students were asked to indicate to what extent they used the given strategies and their responses are obtained on a 5-point Likert scale ranging from 1(never) to 5(always).

Content validity was verified for the questionnaire, which originally consisted of 37 items, by a number of experts who evaluated the relevance and clarity of each item. Based on their feedback, some modifications were made to the questionnaire items. The order of some items was also modified and some items were reworded to make them clearer. In addition, the questionnaire was translated into Arabic and validated by professional translators to avoid any misunderstanding caused by students’ proficiency level. The translators have good experience in translation and linguistics as they have been working at Sultan Qaboos University for more than 15 years. Furthermore, to verify the reliability of the instrument, the questionnaire was piloted on 32 students including 17 females and 15 males, and internal consistency reliability was found to be reliable at .926, as measured by Cronbach’s alpha.

3.3.2 The Semi-Structured Interview
To investigate deeper, the questionnaire was supported by semi-structured interviews with four female and four male students. Among them, there were four high-proficiency and four low-proficiency students who were selected based on their grades in the Final English Language Test (semester one), their English teachers’ evaluation, and their willingness to participate. The interview focused on eliciting the strategies employed by those students throughout the writing process and it was audio recorded. The researchers recommended the teachers to hold the interview in Arabic, so that the students from different levels are able to understand the questions clearly and respond accurately. The interview questions were validated by the same panel that validated the MSWS. They were also piloted by volunteering teachers to ensure clarity of the items. Two males and two females were selected from the piloting sample for the interviews. Two of them were high-achievers (one male and one female) and the other two were low achievers. In response to the validation panel’s and the interviewers’ feedback, some items were reworded to make them clearer for the interviewees. Similar to the MSWS, the questions were translated into Arabic and reviewed by the same translators who recommended some minor changes in the Arabic statements to avoid any ambiguity.

3.3.3 Students’ Semester Grades
According to Nambiar (2009), language performance is one of the factors that affect students’ use of learning strategies. Hence, addressing this factor is of great importance to understand students’ use of metacognitive learning strategies in writing. In the current study, students’ semester scores of the final English Language Test (semester one) were recorded and used as a measure of their
English language performance. End of Semester tests in Oman evaluate students' overall performance as their scores reflect their skills in reading, listening, and writing. Each student was required to write his/her list number in the first section of the questionnaire which was used later to record their scores in the final test.

3.3.4 Analysis procedures
The Metacognitive Strategies of Writing Survey (MSWS) was administered to the participants and the data collected was then analyzed through the Statistical Package of Social Sciences (SPSS). Descriptive statistics, Pearson product-moment correlation coefficients, and t-test were computed to answer the three research questions, respectively.

After questionnaire data were collected, the interviews were conducted and audio-recorded in Arabic by the volunteering teachers. Then, the interviews were transcribed by the researchers. The most frequent patterns of responses were highlighted. These patterns as well as other responses were discussed with the students. The strategy types (planning, monitoring, and evaluation) served as themes for content analysis.

4. Results
4.1 Omani EFL Grade Twelve Students’ Use of Metacognitive Writing Strategies
To answer the first research question, ‘To what extent do grade twelve students in Oman use different types of metacognitive writing strategies?’ the Metacognitive Strategies of Writing Survey (MSWS) was administered to the participants, and the data collected was then analyzed through Statistical Package of Social Sciences (SPSS). Descriptive statistics; namely means and standard deviations, of the entire metacognitive writing strategies, mean scores for the three types of metacognitive writing strategies, and individual strategies were calculated for the whole sample. According to Oxford’s (1990) classification of the mean scores of the strategy use, there are three main levels to describe students' strategy use: high (ranging from 3.5 to 5), medium (ranging from 2.5 to 3.4), and low (ranging from 1.0 to 2.4). Table 1 displays the means and standard deviations of the overall metacognitive writing strategies and the three categories of these strategies. As shown in the table, the participants reported a high level of metacognitive writing strategy use as the overall mean of the metacognitive writing strategies use was 3.82. Similarly, all of the categories had mean scores above 3.5, indicating that all the participants utilize the three categories of metacognitive strategies at high frequencies in their writing.

<table>
<thead>
<tr>
<th>Category</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>3.83</td>
<td>.69</td>
</tr>
<tr>
<td>Monitoring</td>
<td>3.82</td>
<td>.74</td>
</tr>
<tr>
<td>Evaluation</td>
<td>3.81</td>
<td>.89</td>
</tr>
<tr>
<td>Overall Use</td>
<td>3.82</td>
<td>.68</td>
</tr>
</tbody>
</table>
Among the different categories of metacognitive writing strategies, planning strategies (M= 3.83, SD= .69) were reported as the most frequently used strategies, while evaluation strategies were reported as the least frequently used category (M= 3.81, SD= .89). This might be attributed to the frequent training of these strategies by teachers and the various planning tasks students come across in their textbooks (Engage with English). These tasks include different techniques to plan and organize writing texts such as graphic organizers, mind maps, diagrams, and tables. Yet, the differences between the mean scores of the three categories are not very high (3.83, 3.82, 3.81).

4.2 The Relationship between the Type of Metacognitive Writing Strategies Students Use and their English Language Performance.

To answer the second research question, "Is there any significant relationship between the types of metacognitive writing strategies students use and their English language performance?", Pearson product-moment correlation coefficients were computed to explore the relationships between students' performance (measured by students' grades in English Language final exam of semester one, school year 2018/2019) and the three types of metacognitive writing strategies; planning, monitoring, and evaluation. Table 2 presents means and standard deviations of students' total use of planning, monitoring and evaluation strategies, as well as their grades in the English final exam of semester one along with the bivariate correlations among the variables.

Table 2: Means and Standard Deviations of Students' Total Use of Planning, Monitoring and Evaluation Strategies, and Students' Grades along with the Bivariate Correlations among the Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Planning</td>
<td>247</td>
<td>45.92</td>
<td>8.31</td>
<td>-.73</td>
<td>.68</td>
<td>-.05</td>
<td></td>
</tr>
<tr>
<td>2. Monitoring</td>
<td>254</td>
<td>30.55</td>
<td>5.93</td>
<td>-.77</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Evaluation</td>
<td>257</td>
<td>22.85</td>
<td>5.36</td>
<td>-.03</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01.

The following guidelines, suggested by Cohen (as cited in Pallant, 2011), were used to interpret the coefficient values.

Table 3: Cohen’s Guidelines of interpreting Correlation Coefficients

<table>
<thead>
<tr>
<th>Correlation Coefficient (r)</th>
<th>Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>.10 to .29</td>
<td>Small</td>
</tr>
<tr>
<td>.30 to .49</td>
<td>Medium</td>
</tr>
<tr>
<td>.50 to 1.0</td>
<td>large</td>
</tr>
</tbody>
</table>

Results showed that there was a very weak negative relationship between the use of planning strategies and students' grades. Similarly, there was a very weak negative relationship between the use of evaluation strategies and students' grades. In addition, the analysis displayed a very weak positive relationship between the use of monitoring strategies and students' grades. However, the
relationship between the use of the three strategies and students’ grades were not significant ($p > .01$).

4.3 The Differences in Students’ Use of Metacognitive Writing Strategies with Respect to Gender

To answer the third research question, ‘Are there any significant differences between grade twelve males and females in the type of metacognitive writing strategies they use?’, an independent-samples t-test was run to examine gender differences on the students’ use of the three types of metacognitive writing strategies; planning, monitoring, and evaluation. Table 4 presents means, standard deviations, and p-value of the three strategies use for males and females.

Table 4: Means, Standard Deviations, and p-value of the Three Strategies Use for Males and Females

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Males</td>
<td>117</td>
<td>3.60</td>
<td>.71</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>130</td>
<td>4.03</td>
<td>.61</td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td>Males</td>
<td>120</td>
<td>3.63</td>
<td>.79</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>134</td>
<td>3.99</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td>Males</td>
<td>121</td>
<td>3.5</td>
<td>.94</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>136</td>
<td>4.08</td>
<td>.75</td>
<td></td>
</tr>
</tbody>
</table>

Results showed that there were significant differences between males and females in the use of planning strategies ($t(245) = -5.21, p = .000$), monitoring strategies ($t(252) = -3.95, p = .000$), and evaluation strategies ($t(228.68) = -5.45, p = .000$). The average use of each category of metacognitive writing strategies of females was higher than the average use of males; female students use more metacognitive writing strategies than their male counterparts do. Oxford (1993) indicated that females are generally more active strategy users than males (as cited in Al Abri, 2017). Statistics also revealed that gender accounted for 9.98%, 5.83%, and 10.43% of the variance in the use of planning, monitoring, and evaluation strategies, respectively. Accordingly, the magnitude of the differences in the means between males and females was moderate (Cohen, 1998).

4.4 Interview Findings

For a deeper understanding, semi-structured interviews were conducted with eight students- four females and four males. Among them, there were four high achievers and four low achievers. The strategy types (planning, monitoring, and evaluation) served as themes for content analysis.

1. Planning

The interview data was in alignment with the questionnaire results that all participants (100%) referred to planning strategies as the most used strategy in their writing. 75% spend more time planning for their essays and they pay more attention to generating and organizing ideas.

- "I start to read the statements in the exam question to know the type of writing and the number of words I have to write. Secondly, I start to write points or ideas to help me (I write them in pencil). Then I start to put them in pen.”
On the other hand, 25% of students spend less time in the planning and, indeed, there is no clear indication in their responses about making an outline before starting to write their essays. In fact, they mostly think about grammar, structures, and words they need to use in the task.

- “I think about the basics of writing that essay. Then I write the essay and the conclusion.”
- “First, ideas, and then I think about grammar and vocabulary.”

Regarding the audience, only one interviewed student considered readers in the planning stage, which confirms the quantitative results where students reported items concerning the audience as the least used planning strategy.

- “I make sure the ideas are clear to the reader.”

2. Monitoring
While writing, 87.5% of the students believe that it is very crucial to check their writing. For instance, they make sure that their vocabulary is right, their work is clear to the audience and they make sure that they remain focused on the topic.

- “Yes, this is one of the most important things to do. So, your writing is clear to the reader.”

However, twenty-five percent of the respondents indicated that their main concern while writing is the local errors (grammar, vocabulary, spelling).

- “I check vocabulary and grammar.”
- “I count the words to check if I reach the required words, number and I check the layout of my essay.”

3. Evaluation
All the students highlighted the significance of self-evaluation as they indicated that they use a variety of techniques to evaluate their writing. For example, re-reading their essays several times, reading their essays loudly to check if they make sense, and using programs and applications to help them in their evaluation. They explained that these techniques are of paramount importance to check the clarity of the essays to the reader and to check that ideas are sufficient to clarify the topic:

- “Yes, I do. I read them aloud to make sure they make sense. If not, I do it again.”
- “I read it again two or three times to organize it and make the ideas clear to the reader. I also check grammar and vocabulary.”

Nevertheless, similar to monitoring strategies, fifty percent of the students stated that their focus is the local errors; namely grammar, vocabulary, and spelling:

- “Yes, I check punctuation and verbs.”
- “I check my essay and words spelling.”

Furthermore, all the students reported that the strategies mentioned in the questionnaire they completed (MSWS) are very useful to improve their writing:

- “They are very useful strategies. I am glad they come up with strategies.”
- “They are wonderful. They help me to minimize the mistakes in writing”.

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Moreover, students were asked to describe the difficulties they encounter when they write essays. Fifty percent of the students refer to planning and generating ideas as the biggest challenge they encounter when writing.

- “I have problems with the subject itself. If the subject is new, I need more time to generate ideas.”

And a quarter of them i.e. 25% of them pointed out that they have an issue with handwriting which impacts the clarity of their compositions.

- “Yes, my handwriting is very bad.”

5. Discussion

This study revealed that Omani EFL grade12 students use metacognitive writing strategies at a high level of frequency. It was also found that they utilize the three types of metacognitive writing strategies: planning, monitoring, and evaluation, at different frequency levels. Planning strategies were reported as the most frequently used strategies, whereas evaluation strategies were the least used strategies among all the participants. These findings were confirmed by the results of the semi-structured interview, which showed that all the interviewee students begin writing tasks by planning and organizing their ideas. These results corroborate the findings of Razi (2012), Bai et al. (2014), and Zhan (2016), whose participants reported using planning strategies at a high frequency compared to other metacognitive strategies. They explained that students perceive planning as a vital element of good writing, which involves spending time thinking about ideas, words, phrases, and sentences they use in their compositions.

With regard to students’ use of the writing metacognitive strategies and their language performance, the results of the current study showed there was no significant relationship between the types of metacognitive writing strategies students use and their English language performance. This confirms the findings of Abdollahzadeh (2010) who found no significant differences between high and low proficient students in using writing strategies. This finding also supports what Mutar and Nimechisalem (2017) reported on the differences between high- and low-profiency level students. They concluded that the two groups use writing strategies in a very similar way. However, the findings of this study are not in line with those of Azizi, Estahbanati, and Nemati (2017), Bouirane (2015), and Razi (2012) who found that there is a strong positive correlation between students metacognitive writing strategy use and their grades; increasing the strategies corresponds to increasing students' scores or proficiency level. The findings of the present study also do not echo the studies by Zhan (2016) and Liu (2015) which revealed significant differences between successful and unsuccessful students i.e. high proficient students use more writing strategies than students with low proficiency levels. The reason for this lack of consistency could be the definition of students' language performance. While the current study used students' grades in an End semester final English test to measure students' performance, other studies identify students' performance based on their scores in writing tests administered to students before completing the targeted questionnaire. The current study also found that there were significant differences between males and females in the use of metacognitive writing strategies.
Similarly, Bouirane (2015) explored the difference in using metacognitive strategies in relation to gender and found that female students use more metacognitive strategies than male students do. Likewise, Mutar and Nimechisalem (2017) and Liu (2015) studied the writing strategies used by high school students in Iraq and China, respectively, and revealed that there is a significant difference between female and male students’ strategy use. Female students employed better and more writing strategies compared to male students.

This result, however, does not seem to be conclusive. Surat, Rahman, Mahmod, and Kummin (2014) investigated the use of metacognitive strategies among university students in Malaysia and did not find any difference in the use of metacognitive strategies based on gender. The findings match to some extent those found by Abdollahzadeh (2010) who conducted a study to investigate writing strategies used by Iranian university students and concluded that male and female students use writing strategies with approximately the same frequency.

6. Conclusion and Recommendations

This study investigated the metacognitive writing strategies used by Omani EFL grade twelve students. The researcher administered a questionnaire and used a semi-structured interview to determine the extent to which students use the three types of metacognitive writing strategies: planning, monitoring, and evaluation. The current study also explored the relationship between students' English language performance and the types of metacognitive writing strategies they use. It also looked at differences between male and female students in using the three types of target strategies.

The results of the study revealed that grade twelve students use the three types of metacognitive writing strategies at high frequency. The findings also indicated that there is no relationship between students' language performance and the use of the three types of strategies. Students with high-performance levels and low-performance levels use these strategies similarly. The results of the present study also disclosed that there are significant differences between males and females in the use of all the types of metacognitive writing strategies. Females tend to use more strategies than their male counterparts do.

Although the present study revealed that students use the three types of metacognitive writing strategies at high frequencies, they reported using the individual strategies at different rates. Accordingly, there is a need to raise students’ awareness of various metacognitive strategies they can access to control and evaluate their writing. To achieve this, teachers should equip students with sufficient practice of these strategies explicitly through a systematic writing strategy instruction and implicitly through tasks, activities, and materials in writing classes targeting these strategies. Students also need to be taught how to monitor their writing, so they can identify the problems and shortcomings of their compositions which in turn helps them to take responsibility for their learning. This can be achieved by providing an ongoing practice to evaluate, modify, and correct their work, as well as by providing students with constructive feedback, by their teachers, which "enhance learning, promote the acquisition of skills, and
drives professional growth and development." (Omer & Abdulrahim, 2017, p. 45).
Moreover, the results of the present study showed that students place emphasis on local errors, which is probably a result of adopting the product-oriented approach in writing. Consequently, teachers should consider developing students’ monitoring skills to tackle global errors as well as local ones by adopting the process and genre approaches to writing.

Furthermore, professional development and in-service programs should consider the importance of metacognitive writing strategies and conduct workshops to raise teachers' awareness of the importance of these strategies. Teachers also should be equipped with techniques that assist them in implementing these strategies in writing classes.

Curriculum designers are also expected to consider these strategies when designing writing units. These units should include tasks and activities that enhance students’ metacognitive writing strategies. For instance, providing students with guidelines to check their performance in a form of a checklist can be a very effective technique by which students can highlight the aspects they need to evaluate in their writing. Moreover, the study revealed students' growing interest in using different programs and applications to improve their writing skill which should direct curriculum developers' attention for integrating technology in writing classes to enhance students' writing, as well as raising their motivation. One of these promising applications is using Blogs to write diaries, which is very inspiring and encouraging to enhance students' writing performance.

8. References


## Appendix A

### Metacognitive Strategies of Writing Survey (MSWS)

<table>
<thead>
<tr>
<th>Strategies I use in writing</th>
<th>How frequent I use the strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Planning</td>
<td>Never</td>
</tr>
<tr>
<td>1. I pay attention to the genre of the writing task (e.g., a letter, descriptive, a narrative).</td>
<td></td>
</tr>
<tr>
<td>2. I pay attention to the purpose of the writing task (e.g., to express opinion, to thank someone, to complain about a service).</td>
<td></td>
</tr>
<tr>
<td>3. I consider the reader of the writing task (e.g., the teacher, supervisor, classmates).</td>
<td></td>
</tr>
<tr>
<td>4. I pay attention to the language of the writing task (e.g., the wording and grammar).</td>
<td></td>
</tr>
<tr>
<td>5. I set up my goals based on the requirement of a writing task.</td>
<td></td>
</tr>
<tr>
<td>6. I make a plan for achieving my goals.</td>
<td></td>
</tr>
<tr>
<td>7. I generate ideas to include in my writing.</td>
<td></td>
</tr>
<tr>
<td>8. I make a plan for organizing the ideas of my essay.</td>
<td></td>
</tr>
<tr>
<td>9. I first decide what the thesis statement of the essay is.</td>
<td></td>
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<tr>
<td>10. I think about the topic sentence of each paragraph.</td>
<td></td>
</tr>
<tr>
<td>11. I think about examples to support the ideas in my essay.</td>
<td></td>
</tr>
<tr>
<td>12. I recall the model essays related to the writing topic.</td>
<td></td>
</tr>
<tr>
<td>2. Monitoring</td>
<td>Never</td>
</tr>
<tr>
<td>13. I check to see if my essay meets the requirements of the writing task.</td>
<td></td>
</tr>
<tr>
<td>14. I check if I consider the reader in my essay.</td>
<td></td>
</tr>
<tr>
<td>15. I check to see if the content of my essay is relevant to the topic.</td>
<td></td>
</tr>
<tr>
<td>16. I check to see if the organization of my essay is logical.</td>
<td></td>
</tr>
<tr>
<td>17. I check to see if the language of my essay is clear.</td>
<td></td>
</tr>
</tbody>
</table>
18. I check to see if my word usage is accurate.
19. I check to see if my grammar is correct.
20. I adjust my writing plan.
21. I try to identify my problems during the process of writing.
22. I review the content of my essay to see if any addition or deletion is needed.
23. I mainly focus on reviewing the accuracy of my grammar.
24. I review my use of the words to see if they are correct.
25. I check the organization of my essay to see if it is clear.
26. I review my essay holistically to see if it achieves the goals of writing.
27. I think the English writing strategies (planning, monitoring, evaluating) mentioned in this survey are very helpful.

<table>
<thead>
<tr>
<th>3. Evaluation</th>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Usually</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. I review the content of my essay to see if any addition or deletion is needed.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>23. I mainly focus on reviewing the accuracy of my grammar.</td>
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<tr>
<td>24. I review my use of the words to see if they are correct.</td>
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<tr>
<td>25. I check the organization of my essay to see if it is clear.</td>
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<tr>
<td>26. I review my essay holistically to see if it achieves the goals of writing.</td>
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<tr>
<td>27. I think the English writing strategies (planning, monitoring, evaluating) mentioned in this survey are very helpful.</td>
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</tbody>
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