CHAPTER FIVE
Discussion of Findings

Chapter five discusses the findings of quantitative and qualitative data in two parts. Part one mainly deals with the discussion of the findings of the quantitative data gathered through the writing strategy questionnaire to address the four research questions in the following order.

1. What are the writing strategies employed most and least frequently by the study groups?
2. What writing strategies are related to the writing proficiency of the subjects?
3. Do the students from different disciplines use different writing strategies?
4. Are the writing strategies of the students associated with certain approaches to writing?

Part two of this chapter deals with the discussion of the findings of the qualitative data obtained through Questionnaire Part I and interviews. The discussion mainly focuses on writing behaviour of the subjects and their motivation for developing their writing skills and the relationship between motivation and writing strategy use.

5.1 Part One: Discussion on findings: Quantitative data

5.1.1 Research questions 1 and 2

In this section, the findings of the research questions 1 and 2 will be discussed. The discussion centers on the writing strategy use of the undergraduate students. The mean score of the overall writing strategy use for this group of students was found to be 3.32. This result indicates that the undergraduate students are medium strategy users.

At individual item level, of the 38 items, as shown in Table 4.1, 15 items having a mean equal to or greater than 3.5 were labeled as high strategy use, whereas 22 items with a mean between 2.25 and 3.4 were categorized as medium strategy use. Only one strategy, q31 was used with low frequency and it was classed as low strategy use.

In response to the first research question, the most frequently employed writing strategy for the participants was item 4. This strategy, as shown in Table 4.2, was employed usually or always by 494 (73.4%) students. The next frequently used strategy by this group of students was item 14. This strategy was also found to be used usually
writing course they took a year before. This is clearly evident in their responses to item 33. This item is one of the frequently employed strategies which is used usually and always by 387 (57.4%) of the respondents. The high use of this strategy by the majority of the students indicates the value they attached to the audience of writing they were supposed to address.

The high use of rhetorical strategy category (M=3.55) indicates that these students are trying to produce effective written texts that meet standards of the native speakers of English, by identifying ways of text organization and development that are in line with the culture of the native speakers.

5.1.1.2 Correlation of writing strategies with writing proficiency
As displayed in Table 4.8, among the 38 writing strategies, eight strategies (items q4, q5, q8, q10, q11, q20, q27 and q30) were found to vary with writing proficiency levels. From statistical perspective, based on chi-square tests, the variation between the eight items and writing proficiency level is statistically significant only at p<0.05 level. Here when items 4 and 20 show positive variation with writing proficiency levels (a clear pattern is visible, as the use of strategy increases the level of proficiency also increases), item 30 shows mixed pattern of variation with writing ability, but all the other 5 items show negative variation with writing proficiency. On the other hand, Pearson correlation coefficient does not show a statistically significant correlation between item 20 and writing ability (r=-.035, P=.379) but all other items show a statistically significant correlation with writing proficiency levels.

The results obtained from chi-square tests indicate that, the students who employed writing strategies, items 4 and 20, more frequently had better writing performance than those who used them less. The two writing strategies which have strong positive relationship with high proficiency are from two different categories of writing strategies (COG and MET).

The multiple regression analysis results indicated that items 10, 27, 37, 36, 4, 11 and 2 were found to be significant predictors of writing performance. Of these, items: q37, q4, and q2 with Bet=.181, p<.001; Beta=.097, P=.032 and Beta=.098, P=.035 respectively were positive predictors of writing performance, whereas all the other four items (q10, q27, q36 and q11) were negatively (or inversely) correlated with writing performance, as the beta values showed.
of use of cognitive and social/affective category (M = 3.57 and 3.55 respectively). The mean score for other strategy category (M = 2.99) was higher for Business Administration students than for students from other disciplines.

Statistically significant differences in the mean of use of strategy categories among students from different disciplines were found using one way ANOVA (Table 4.11). A post hoc test was conducted to identify the groups that show significant differences in the use of the five writing strategy categories among students from different fields of studies. The results revealed that significant differences were found in the use of only two (metacognitive and social/affective) of the five categories of writing. For instance, Statistics students were found to employ greater metacognitive strategy category than were students from other four disciplines (Medical, Electrical Engineering, Law, and Chemistry).

The post hoc test results further revealed that significant differences occurred in the use of social/affective writing strategy category between Chemistry students and students from other six disciplines (Medical, Environmental Health, Vet. Medicine, Electrical Engineering, Law, and Chemistry). These differences indicated that Chemistry students were more accustomed to cooperative learning than students from other disciplines.

5.1.2.3 Differences in the use of individual writing strategies across disciplines

To identify any significant differences in the mean of individual writing strategy use, one way analysis of variance (ANOVA) and post hoc tests were performed. The ANOVA results, as shown in Table 4.13, indicated that of the 38 writing strategies, 20 strategies exhibited significant mean differences of use among students from different fields of studies. The post hoc Dunnett’s T3 test results also revealed that 14 of the 38 strategies were found to show significant variation in the average frequency of use of individual strategies across different disciplines (see Table 4.14).

For instance, Chemistry students employed items 5 (M = 3.66) and 8 (M = 2.88) significantly more often than Medical students (M = 2.84, p = .001) and Environmental Health students (M = 2.02, p = .003) did respectively. Chemistry students also reported a greater use of other three strategies, items 23 (M = 3.60), 13 (M = 4.06), and 11 (M = 3.41). Likewise, Statistics students reported a more frequent use of other four items 22 (M = 4.03), 21 (4.32), 16 (M = 4.41) and 15 (M = 4.32). English major students reported a
and edition strategies. This indicated that Statistics students were inclined to show more concern with the quality of their writing by employing different revision and edition techniques than the students from other disciplines.

Another trend in the use of certain writing strategies was also reflected by Chemistry students. These students were found to be the more frequent users of five items: 23, 13, 11, 8, and 5 than were students from other disciplines. Of these, items 23 and 5 deal with cooperative learning, and thus it is possible to infer from these that Chemistry students were more interested in group writing than were students of other disciplines. As discussed above, this behaviour was also reflected in their frequent use of social/affective category of writing strategies. Moreover, there is a close relationship between items 8 and 11, for both of them deal with writing practice. This also indicates the presence of consistency in the strategy use of Chemistry students.

In general, as shown in Table 4.14, significant variations in the average frequency of use of several strategies were observed. Students from certain disciplines were found to be significantly higher users of certain strategies (i.e., items 5, 16, 20…). However, the high use of such strategies may not help differentiate high achievers from low achievers, for both high achievers and low achievers may be found to employ them at high level of frequency (Wharton, 2000).

5.1.2.4 Writing strategies related to the writing proficiency of students from different fields of studies

As the chi-square test results displayed in Table 4.15 indicated that eleven (items, q10, q27, q9, q24, q30, q4, q26, q5, q11, q18, and q20) of the 38 strategies were found to be significantly associated with writing proficiency of students from different fields of study (p<.05). Of these, four items (q27, q30, q5, and q18) were negatively associated with writing proficiency. These items were found to be employed by students from three disciplines: Item 27, (P=.002) by Economics, item 30, (P=.047) by English major, items 5, (P=.013) and 18 (P=.014) by Statistics students.

The remaining seven strategies that were strongly associated with writing proficiency levels were found to exhibit mixed variation pattern, that is, neither positive nor negative variation was observable as defined by Green and Oxford (1995). In addition to these, item 5 showed mixed variation pattern when the pattern of its use by the students of Vet. Medicine was examined.
5.1.2.5 Effects of strategies on writing proficiency

The relationship between the use of certain writing strategies and levels of writing proficiency was further examined using another statistical technique called a stepwise multiple regression analysis. The results of the stepwise multiple linear regression analysis revealed that twenty one strategies (items 32, 10, 19, 7, 15, 33, 20, 27, 14, 3, 30, 23, 1, 8, 6, 31, 35, 25, 4, 37, 18) out of the 38 writing strategies, as shown in Table 4.16, were found to have strong effects on the writing proficiency of the students. Of these, 14 strategies (items 10, 19, 7, 20, 14, 6, 30, 23, 8, 35, 25, 4, 37, and 18) were found to be discipline-specific. That is, each of these individual strategies was found to have an effect on students’ proficiency in a specific discipline. For instance, item 37, *When I write a text, I use effective linking words and other cohesive devices and methods of organization in order to ensure clear and logical relationships between and among sentences in a paragraph as well as between and among paragraphs*, was one of the three major predictors of writing achievement of Vet. Medicine students (Beta=.440, P=.004). This beta value indicated that the students who employed item 37 frequently were found to improve their writing ability. This could be interpreted as a one-unit increase in the use of item 37 would lead to a 0.44 unit (44%) increase in writing proficiency of the students provided that the use of other strategies remained constant.

Furthermore, item 3, *As I go on writing, my plan or outline will be revised and modified when new ideas come to my mind*, with the highest beta weights (.700, p=<.001) of the 20 items was the best positive predictor of writing ability of Law students. Those Law students who used this strategy more frequently were found to have attained higher proficiency level than students who used it least frequently. This result is similar to the findings of Wenyu and Yang (2008), who reported that “Planning is a unique strategy that differentiates EFL writers with higher level from those with lower level” (p.65). A similar observation was made in the study on EFL Spanish university students conducted by Victor (1999), who found that the two more proficient writers gave greater attention to planning the overall organization of the text than the two less proficient writers did.

Another evidence that supports Law students as frequent users of planning can be drawn from their responses to item 2, *I spend more time on planning and organizing (outlining) the ideas I want to include in my writing*. These students reported to employ
writing achievement of Law students. Of these, item 3 explained 20% of the variance in writing achievement of the students, followed by item 6 and 1 that account for 16% and 10% respectively of the variance in writing achievement. Items 1, 31, and 37 account for 47% of the variance in writing achievement of Vet. Medicine students. Of these, item 31 explained 26% of the variance in writing achievement, followed by items 1 and 37 that account for 20% and 7% respectively of the variability in writing achievement.

Item 8 accounts for 38% of the variance in writing achievement of Psychology students, but this item was found to be a negative predictor of writing achievement as indicated by the value of beta. Two items, q15 (16%) and q4 (6%), which were positive predictors of writing achievement of English major account for 22% of the variability in writing achievement, whereas the other three items which were found to have a significant negative (inverse) relationship with writing proficiency account for 30% of the variability in writing achievement.

Some of the results of chi-square tests performed to assess the relationship between frequency of strategy use and proficiency level of students among different fields of study were further strengthened by the output of stepwise multiple regression analysis. According to the results of the chi-square tests, out of the 11 strategies that were found to have a strong correlation with the writing proficiency levels of students from different disciplines, six strategies (items 10, 27, 30, 18, 20, 4) in the stepwise regression analysis were found to be strong and significant predictors of writing achievement of students from different disciplines. The problem in comparing the results of the statistical techniques was the inconsistency of most of the strategies in showing the effects on as well as the relationship with the proficiency of students in the specific discipline. Only items 10, 18 and 27 were observed to be consistent in showing a close relationship with the writing proficiency of students from three departments (Env’t Health, Economics and Statistics). The inconsistency shown by the other strategies may be explained by the use of different types of data. For instance, in the stepwise multiple regression analysis, the dependent variables used were the proficiency test results (the actual figures i.e. 30, 50, 60...), whereas in chi-square procedure the summarized results of proficiency in writing ability levels (low, average and high achievers) were used. These might have contributed to the lack of consistency in the results of the two statistical techniques.
University. The second equally attractive approach was genre pedagogy. Strategies under this approach were also found to be used with high frequency (M=3.38). But relatively the least popular strategies were the ones under the product approach (M=2.75).

The results of strategy classification as well as the overall mean scores of strategy use coupled with the results of correlation analysis of strategies with the principles of the three approaches to writing, showed the presence of the influence of approaches to writing on the strategy choice of the subjects. Therefore, in response to research question 4, it was found that most of the strategies were found to correlate with the main principles of the three approaches to writing and the process approach was the one that dominated in teaching of writing.

5.2 Part Two: Writing behaviour of EFL students: Qualitative data

The purpose of collecting data using Questionnaire Part I and the interviews was threefold. One was to get more insight into the writing behaviour of the subjects of the study. The second was to triangulate the data collected through Part II of the close-ended writing strategy questionnaire. The third was to elicit more data on the relationship between motivation and the use of writing strategies. In this section, the data collected to meet the first and the second objectives will be discussed, whereas the data intended to meet the third objective will be discussed later in this chapter.

In the present study, the writing behaviour of the subjects was studied from two angles. Firstly, the frequency of their writing strategy use was assessed through the 38 item questionnaire and secondly, the subjects’ writing experiences and strategy knowledge were assessed through the close and open-ended questionnaire and interviews by asking the subjects to respond to questions on the following areas.

- Writing strategies employed to generate ideas and revise and edit written texts
- Types of text frequently written
- Ranking the aspects of good writing in order of importance
- Criteria for judging the effectiveness of writing
- Ranking difficulties faced while writing in order of severity
- Difficulties faced during writing and ways of dealing with these problems
- Useful writing strategies that contribute to the development of writing skills
- Rating the values of certain strategies
importance of planning in writing has been underlined by several researchers. For instance, in their earlier study, Hayes and Flowers (as cited in Manchon and Raca de Lorios, 2007) defined planning as a process in which writers draw “information from the task environment and from long-term memory and use it to set goals and establish a plan to guide the production of a text that will meet these goals” (p. 556).

In a recent study on the planning behaviour of EFL Spanish writers, Manchon and Raca de Lorios (2007) found that more proficient writers spent more time on planning than the less proficient writers did. It is reflected in this quote “We observed that, with increased proficiency, writers gradually devoted more time to constructing their pragmatic textual and ideational representations before putting pen to paper and were capable of activating and incorporating them into the text” (p.579).

In the present study the number of the respondents who mentioned planning as a means of generating ideas as displayed in Table 4.26 was found to increase as the proficiency level (low=32, average=48, high=56) increased. In other words, planning was mentioned more times as a strategy for generating ideas by the high achievers than by the low and average achievers.

*Free writing* represents *drafting*, which is the second stage in the process of writing. In fact, *free writing* is considered as a prewriting strategy for generating ideas by several writers (i.e., Bailey and Denstaedt, 2005; Hedge, 2005), but in this study as the statements from the respondents indicated it is considered as a means to produce a relatively longer readable text which inevitably undergoes revision. Moreover, *free writing* when constructed as a sub-category was intended to include *drafting* under it. Therefore, *free writing* is a process in which a writer produces a text quickly without facing blockage of ideas. This is clearly evident in one of the respondents’ statement, “I quickly write down the ideas come to my mind so as to produce the first draft on the topic and then I revise my writing to make the required changes”.

*Revision* as a recursive process is commonly experienced by the writers to detect problems, make changes and improvements in a piece of writing. *Revision* includes major techniques employed by writers such as *rewriting*, checking coherence and quality of the content of text, checking a text against forma/model, repeated reading, reading a text with a fresh mind, getting feedback, revising while writing, and
the global level of revision, which focuses on meaning and coherence. But the first statement which was mentioned by one of the average achievers reflects the respondent’s concern with surface level revision, which deals with the surface grammatical structure of text; content and organization issues seem to be overlooked. But surface level revision is not enough by itself to make one’s writing effective. In contrast to the first statement, the third statement mentioned by one of the high achievers seems complete for it includes both the global and the surface level revision. These are clearly signaled by the words sense and errors in the statement.

In addition to re-reading as a revision strategy, re-writing also includes activities such as transformation, addition or deletion that reflect the presence of both idea generation and revision. All these activities demand the development of required skills from the learners’ side.

Revision while writing that refers to making changes during writing, can also be used for generating ideas and revision, for it includes activities such as adding points and deleting unnecessary points while writing.

When all writing strategies outlined in Table 4.26 were closely examined, certain trends were observed in their use among the three ability groups. First, 16 writing strategies used in four stages of writing by the subjects indicate the predominant influence of the process approach to writing and the recursive nature of writing. Second, variation of writing strategy use occurs while reporting the 16 writing strategies among these groups since the figure under the heading of frequency in the Table 4.26 indicates the number of times each strategy was mentioned by each ability group. That is, the high achievers mentioned the use of 10 strategies: thinking, planning, free writing, checking coherence, rewriting, resting, feedback, checking language errors, and questioning more times than the average and the low achievers did. But in the use of certain strategies, such as reading aloud, repeated reading, the use of LI, and resourcing was mentioned more times by the average achievers than by the high and the low achievers. Only the use of checking a text against format/model was mentioned slightly more times by the low achievers than by the average and the high achievers.
reader would understand it easily. Furthermore, reporting the writing behaviour of low achievers, Zamel (1983) wrote that they edited their writing from the beginning up to the end focusing on surface level errors and paid little attention to the organization of the text. Zamel further pointed out that the successful writers were concerned about their ideas first and left the editing tasks towards the end of the process.

The study conducted by Sasaki and Horise, (1996) showed that proficient EFL writers placed more attention to the overall organization of their texts than did less proficient writers. But in the study held by Porte (1997), different findings were obtained on ranking the aspects of good writing. That is, the majority of EFL underachievers (n=56, 78.9%) ranked vocabulary as the most important aspect of good writing. The second important aspect of good writing for this group of students was found to be the content. However, in the present study the low achiever group was found to rank vocabulary and content as the third and the fourth important aspects of good writing respectively. The possible explanation for such rankings might be obtained from a study conducted by Porte (1997). Explaining the revision behaviour of underachievers, Porte mentioned that:

...there was evidence in this study that some second language underachievers consciously sought to shape their revision strategies in order to adjust to perceived teacher preferences. Hence, the possibility exists that learners in different writing contexts will themselves adapt their strategies to local teacher preferences (p.74).

This reason might be applied to the difference observed in ranking aspects of good writing by the low achievers in the present study, who might be influenced by the teacher’s preferred aspects of writing.

Furthermore, in the present study the other difference observed in Table 4.31 was in ranking content. Content was the second most important aspect of writing for the high achievers but for the average and the low achievers, it was the fourth important aspect of good writing. In support of higher achievers’ ranking, Ur (1991) pointed out that “The purpose of writing, in principle, is the expression of ideas, the conveying of a message to the reader; so as the ideas themselves should arguably be seen as the most important aspect of the writing”(p.163). In line with this assumption, Sanders (2000)
is, the results obtained from the open-ended questions, apart from the five aspects of good writing, include one additional criterion, *clarity and readability* that was mentioned 157 times. Examples of statements that reflect this criterion mentioned by some of the average and the high achiever group are presented below.

Any piece of writing should be written by taking into account the readers to meet its objective (High achiever).

Does it attract the reader? (Average achiever).

Does it have clarity, neatness and beauty? (Average achiever).

The writing should have clear purpose, the topic should be attractive and the points should be relevant (High achiever).

Is the information understandable by the audience? (Average achiever).

It should clearly and adequately express what is intended by the writer and must be enjoyable and informative for the reader (High achiever).

All these examples of responses from the respondents illustrate their awareness of audience and purposes. These respondents see writing as a means of transmitting and exchanging information to readers without posing difficulties for understanding the information. A study by Flower et al. (as cited by Soles, 2006) reported similar findings that proficient writers had a clear purpose to produce texts and they exerted their efforts to attain that goal. The responses also reflect the influences of the genre approaches on writing, which see writing as a purposeful socially directed means of communication.

However, these aspects were not mentioned by the majority of the low achievers when compared to the responses given by the average and the high achievers. The possible explanation for this might be that the majority of the low achievers may overlook these aspects, for they may not have been aware of the importance of paying attention to the purpose and audience in the process of producing effective writing. The high and the average achievers, on the other hand, seemed to pay greater attention to their purpose and target audience so as to achieve their goals.

**5.2.5 Ranking difficulties faced in writing in order of severity**

As the results of the responses to prioritizing difficulties faced in writing in Questionnaire Part I revealed, all the three groups considered shortage of vocabulary as most pressing. It is expected that EFL writers experience *vocabulary* problems among
In conclusion, the use of the strategies above in different contexts clearly shows respondents’ writing strategy knowledge and practice.

5.2.7 Useful writing strategies that contribute to the development of writing skills

As observed in Table 4.36, the respondents during the interviews reported 19 writing strategies to be useful for developing their writing skills. Of these strategies, reading widely was the one which received the highest frequency count (33/46). This indicates that this strategy has been recognized as one of the important strategies required for the development of students’ writing competence. The second strategy which has got the next highest frequency count was practicing writing (25/46) and the third strategy was personal effort (16/46). These strategies are some of the most important writing strategies recommended for the learners in order to improve their writing ability. Nevertheless, what is surprising in this finding is that all these three writing strategies were found to be employed by the high and the low achievers. But the low achievers may not employ these strategies effectively, for they may lack determination to do so. In other words, the possible explanation for having inadequate skills of writing among low achievers was that these students may not be persistent in applying these strategies in order to improve their writing skills. This is evident in one of the respondents’ statement: “I did not exert conscious efforts to develop my writing skills; I have just begun to think about the development of my writing skills lately at the university” (low achiever).

This statement also signals that the effect of not receiving early orientation on the benefits of writing may hinder the exertion of the required efforts on developing writing skills. Additionally, it indicates the change of behaviour in writing that emerged as a result of orientation. That is, the respondents seem to be motivated to take action on developing his/her writing ability. In other words, this statement reflects the dynamic nature of motivation based on the findings of Dornyei’s research (2001).

As outlined in Table 4.36, among the 19 writing strategies identified in the interviews, the following four were not included in Part II of the writing strategy questionnaire.

- Vocabulary building through extensive reading and note taking is crucial for the development of writing ability
use to generate ideas to be developed or included in your essay? What techniques or ways of revision and edition do you use frequently to improve the quality of your essay?, as seen from Table 4.24, reveal that 14 of the 16 writing strategies were the ones which the respondents reported to employ with different frequency counts. In fact, here the number of strategies reported from open-ended questions was not the same as that of the number of strategies reported in Questionnaire Part II. This discrepancy was on account of clustering some strategies. For instance, concept mapping, outlining, brainstorming were clustered around planning in the report of strategies from open-ended questionnaire, whereas each of these three appeared as an individual strategy in Questionnaire Part II. Therefore, it is possible to conclude that the respondents employed most of the writing strategies included in Questionnaire Part II.

The other triangulation made was on identification of the most and the least popular writing strategies based on the analysis made on the responses collected from Part II of the writing strategy questionnaire. The quantitative analysis of the individual strategies shows that items 14 and 15 were the most preferred strategies among the participants. To compare this to the analysis of the data obtained from the interviews, the interview group was asked to rate the importance they attached to certain selected strategies. The results of this rating presented in Table 4.37 revealed that, the two important strategies with the highest mean values were items, q14, and q15. These were also the highest two ranked strategies by all the subjects (see Table 4.2). Item 27 which was the least important strategy based on the rating given by the interview group was also one of the five least ranked strategies by all the subjects.

Furthermore, the responses given to item 35, *I write a variety of text types that include essays, reports, letters, emails, notes, messages, term papers, articles, notices or stories* were validated. This item received a mean of 2.99, Sd=1.10 from all the participants. And for the low and the high achievers the average frequency scores of it’s use were 3.07 and 3.08 respectively. This implies the responses of the participants clustered around the midpoint of the 5-piont scale used. This means that the respondents sometimes write different types of text.

To triangulate this finding, two types of questions were addressed to respondents. With regard to the first question, respondents were asked to list the types of text they often write. As shown in Figure 4.3, the respondents reported to have written nine types of texts which are the same as types of text listed under item 35. Of
5.3 Discussion on results of research question 5

The relationships between motivational variables and the frequency of writing strategy use were assessed using both quantitative and qualitative approaches.

5.3.1 Discussion on analysis of findings: Quantitative data

5.3.1.1 Correlation of motivational variables with writing strategy use

The descriptive analysis of the data on five motivational variables yielded valuable findings that show the correlation between motivational variables and writing strategy use. For instance, of the five motivational variables, level of enjoyment received the highest mean value. This indicates that the responses given to the level of enjoyment in writing were clustered around enjoyment. This means that, in general, the respondents tend to enjoy writing. But when the level of enjoyment of the respondents was correlated with the frequency of their strategy use, it was found that the respondents with the highest level of enjoyment were also found to be the most frequent users of writing strategies.

Similarly, the respondents whose perceived ability rating was 4 out of 5 (Good), were found to be medium strategy users (M=3.40), but those with the highest rating of their perception of ability in writing were found to be high strategy users (M=3.64).

The positive correlation of higher motivational rating with higher strategy use was demonstrated not only by the two variables, level of enjoyment and ability in essay writing, but also by level of confidence in essay writing. Those respondents whose level of perception of confidence in writing rated 4 and 5 were found to be high writing strategy users (M=3.45 and 3.72 respectively).

More data on the relationship between motivation and writing strategy use were obtained from the results of ranking seven identified reasons in order of priority by the respondents. The results of the ranking revealed that among the seven reasons, To express my thoughts and feelings was ranked first by 40% of the respondents. This implies that the majority of the respondents were intrinsically motivated while learning writing. However, if the nature of the other six reasons is examined, all of them refer to the instrumental motivation and the response rate for them accounts for 60%. Therefore, it is possible to conclude that the majority of respondents’ dominant reason
5.3.1.2 The effect of motivational variables on writing strategy use

The effects of motivational variables on writing strategy use were further examined by conducting multivariate analysis of variance. As shown in Table 4.41, the main effect of item 38 (perceived confidence) was significant on all the writing strategies as one variable and five categories of writing strategies. This was evidenced by the results of Wilks’ Lambda, extensively employed multivariate test (Lambda (24.1435) =2.28, p<0.001). The main effect of item pq2 (level of enjoyment) was significant (Lambda (24.1435) =1.98, p=.003) on all the variables except on two categories (social/affective and other). But the main effect of item pql (perceived ability) was significant only on two variables: metacognitive and cognitive categories of writing strategies (Lambda (24.1435) =1.50, p=.056).

5.3.2 Discussion on attitudinal variables: Qualitative data

5.3.2.1 Attitude towards writing

One of the attitudinal variables which has a close relationship with the use of writing strategies is the attitude of the learners. Learners’ attitude is generally believed to play a central role in the process of learning a language. This is because “it assumes that attitudes to language learning condition language learning behaviour” (Gan, Humphreys and Lyons, 2004). That is, learners’ attitude either enhances or inhibits learning. For instance, positive attitudes to learning a language are acknowledged as influential factors on making a decision to learn that language and to continue learning it (Williams and Burden, 1997). For instance, this was evidenced empirically in the study conducted by Liu (2007), who reported that the students with greater positive attitudes towards learning English, were found to demonstrate more motivation in learning that language (r=.867, p.=0.001).

According to Wenden (as cited in Gan, 2004) attitudes consist of three aspects. The first is a cognitive aspect which encompasses beliefs or perceptions about the objects or situations. In this case, it refers to the beliefs that the learners have towards the native speakers of English and their own culture. The second is an evaluative aspect which refers to either liking or disliking the objects or the situations related to the attitudes. The third is a behavioural component; that is, the attitude may dispose learners to exhibit or adopt a particular learning behaviour. In line with the second aspect, 35 of the 46 respondents of the present study reported that they had positive
responses might be different because the high achievers might be ambitious to reach the highest achievement and in order to meet this objective, they expect more practice because they believe that success in achievement is mainly attributed to hard work. The problem of the high achievers in having the negative attitude may also emanate from the anxiety they experienced during writing. This is evident in this statement: “When I start writing I am worried about my ideas” (high achiever).

5.3.2.2 Satisfaction with the writing course result and the ways of teaching writing

In line with the components of Gardner’s Attitude/Motivation Test Battery (AMTB), the two attitudinal variables related to the course and the teacher’s evaluation, selected and used in the present study, were satisfaction of the subjects with their writing course results and the ways of teaching the course. Dornyei’s (1994) model also encompasses the two areas in its third level, Learning Situation.

5.3.2.3 Satisfaction with the writing course results

As the results of the qualitative data on satisfaction with the writing course results show in Table 4.47, of the 5 major factors that reveal the respondents’ dissatisfaction with the exam results, the first and the second most frequently mentioned factors were student related problems (72 times) and grade related problems (63 times) respectively. Of the 31 individual factors, the most frequently mentioned as the major source of dissatisfaction was obtaining unexpected grade (33 times).

Here are examples of student related causes for dissatisfaction with the outcomes of the courses:

- I did not prepare myself for the exam (average achiever).
- I did not have adequate knowledge of grammar and vocabulary (low achiever).
- When I was in high school I did not learn about writing and when I was taught at the University I was very confused (average achiever).
- I did not get opportunities to practice writing and develop my writing skills (low achiever).

Each of the above statements indicates the respondent’s realization of his shortcomings.

On the other hand, as shown in Table 4.47, of the 9 major motives that indicate the positive attitude of the respondents, the first and the second most frequently...
From the two bipolar sets of responses it can be inferred that the presence or the absence of this variable can affect one’s attitude positively or negatively. This indicates that the learners give high priority to their knowledge and skills of writing development. So, teachers need to give great attention to students’ development of knowledge and skills in order to motivate them towards writing.

Relevance, which is one of the components of Dornyei’s course specific category, is considered as an important motivational variable for the development of positive attitude. For example, one respondent mentioned that: “The course is essential to get prepared to meet the demands of writing in academic and work place settings and also to be able to express ideas in a good manner” (average achiever).

The motivation derived from perceiving the value of the course, enables learners to exert the necessary effort persistently to acquire knowledge and develop skills of writing useful to them in their career.

5.3.2.5 Relationship between attitudinal variables and writing strategy use

The relationship between level of satisfaction evidenced by the positive and the negative responses to the ways of teaching writing and writing strategy use indicated by the overall means of strategy use have shown the existence of a difference in strategy use between the two groups. That is, the mean writing strategy use of the respondents who were happy with the ways they were taught writing (M=3.50, SD=.56) was significantly higher (t=4.14, df=285.6, p<.001) than that of the respondents who were unhappy (M=3.17, SD=.53).

On the other hand, the mean difference of writing strategy use between the respondents who were satisfied with their course results (M=3.38, SD=.58) and the ones who were dissatisfied (M=3.31, SD=.54) was found to be insignificant (t=1.26, df=425.9, p =.210). This implies that there might not be a significant relationship between writing strategy use and the positive or negative attitude towards course results, for both the groups of respondents were found to be medium strategy users (Yes=M= 3.35 and No= M= 3.31).
writing skills while I was in the lower grades (high achiever).

Teachers (6): I was encouraged to develop my writing skills by my high school teachers, but I did not exert any effort to do so (low achievers).

Friends (1): I was informed about the importance of writing by my friend (low achiever).

These quotes show that motivated students tend to use different writing strategies to achieve their writing goals (i.e., letter writing, reading different materials, and summarizing). The sources of their motivation were the significant others who represent external factors that support the social constructive view of motivation (Williams and Burden, 1997). In addition to this, the responses of the high and the low achievers further revealed that the low achievers lack determination to exert sufficient effort in order to develop their writing skills: “I was encouraged to develop my writing skills by my high school teachers, but I did not exert any effort to do so” (low achievers), whereas the high achievers were committed to continue developing their writing skills using different writing strategies (see the 1st statement above under family members, as an example). The other interesting finding that can be inferred from these responses was that the high achievers reported to have begun to become aware of the importance of writing skills while they were in the lower grades. Such findings support the importance of the significant others in language learning as confirmed by several researchers, for example, Lunt (2000); Williams and Burden (1997) to mention a few.

5.3.2.6.2 Personal effort

This motivational factor was mentioned 16 times by 12 high achievers and 4 low achievers during the interview session. These respondents believed the development of writing skills is mainly attributed to personal effort. But the low achievers were less committed to exert effort to achieve their goal. Unlike these, the high achievers were found to have exerted the required effort for developing their writing skills. This difference in the amount of effort exerted by the two groups is evident in the following statements:

Personal effort is needed to develop one’s writing ability (high achievers).
The statements also illustrate that the high and the low achievers equally value effective teaching.

5.3.2.6.5 Usefulness

This factor was mentioned two times by the high and the low achievers.

- Since English is an international language, I can exchange information in writing with people from different parts of the world (high achiever).
- I did not know the importance of writing while I was in the lower grades (low achiever).

The response of the low achiever indicates that he was not aware of the value of writing while he was in the lower grades but later, at the university level, he realized its importance. This instance substantiates the dynamic nature of motivation which was discussed by Shoaiib and Dornyei (2004). Motivation changes over time and this shows that, as they mature, students develop interest in a particular activity when they realize that it is important to them. The response of the high achiever indicates that his positive attitude towards English, as an international language, enables him to communicate with people from all over the world. This conforms to 'International posture' identified as one of the motivational variables in learning English in an EFL context by Kormos and Csizer (2008).

5.3.2.6.6 Confidence

This motivational variable was mentioned 3 times. But surprisingly, it was mentioned only by the high achievers. The low achievers did not mention any thing about their confidence in their writing ability.

- I am more confident in my writing ability than my speaking ability (high achievers).
- I always feel at ease when I write something (high achievers).

The above six factors were mentioned by the respondents as the main sources of motivation that initiated and sustained their efforts to develop their writing skills.
of which items 14 and 15 were the two most popular writing strategies among the participants. In contrast to these, of the 38 items, only item 31 was the least popular writing strategy among the participants. This identification of the most and the least frequently used strategies was based on Green and Oxford’s (1995) method of classification and descriptive analysis techniques.

The quantitative analysis of the overall strategy use as shown in Table 4.1 also revealed that the subjects were found to use 15 writing strategies in high frequency range, 22 writing strategies in the medium frequency range and 1 strategy in the low frequency range. Therefore, in general these groups of students are high-medium users of writing strategies.

6.1.1 Qualitative data analysis on writing behaviour of undergraduate students

In the present study, the writing behaviour of the subjects was studied not only using the 38 item questionnaire but also using the open-ended questionnaire and the interviews. A combination of these instruments was used to assess the subjects’ writing experiences and strategy knowledge and yielded a number of interesting findings as briefly discussed here under.

Firstly, based on the qualitative analysis of data obtained from both the open-ended questionnaire and the interview questions, 20 writing strategies were found to be employed by the subjects. Based on these findings and the findings obtained from 38 item writing strategy questionnaire analyses, it is possible to conclude that the subjects were found to be various writing strategy users. Again, as the quantitative data analysis shows, of all the writing strategies employed, two writing strategies, items 14 and 15 were found to be the most preferred ones by the respondents to the writing strategy questionnaire and the interview questions. Moreover, of all the writing strategies identified from the interviews, three strategies: reading widely, exerting personal effort and practicing writing were strongly recommended by the respondents of the interview group as useful strategies in the development of writing competence.

Secondly, the qualitative analysis of data obtained from the respondents of the open-ended questionnaire and the interview questions revealed that the subjects were found to have employed six writing strategies which are not included in the list of 38 items used in the writing strategy questionnaire, which has been used as the main instrument for the present study. The newly identified writing strategies include:
groups had. This in turn might be one of the factors contributing to the discrepancy in the achievement of the writing proficiency between the high achievers and the low achievers. In fact, one can argue why the low and the average achievers who reported they had experience in writing letters did not improve their writing competence. The possible explanation for this could be their lack of consistency and commitment to writing letters. In other words, the learners may write letters rarely, but their skills of writing can only be developed through consistent practice. Or else they may lack clear objective during writing letters. Otherwise letter writing seems realistic and important for the students in establishing and maintaining real communication with their friends.

With regard to ranking the five aspects of good writing, based on the major differences seen in ranking in Table 4.30, it is possible to infer that the high achievers, who prioritized organization and content as the first and the second most important aspects of writing achieved better writing performance than did low achievers, who made grammatical correctness as their first priority.

For judging the effectiveness of writing, six criteria were identified from the open-ended questionnaire. Of these, clarity and readability was not included in the close-ended questions of Questionnaire Part I. But it was mentioned by a significant number of respondents (n=157) as the most important criterion for judging the effectiveness of a piece of writing.

In relation to the perceived difficulties in writing, as seen in Table 4.28, inadequate vocabulary knowledge has received the lowest mean rating, M=2.05 on a scale of 4. This shows that of the four writing problems, the respondents have found vocabulary problems as the most difficult to them. Lack of skills in organizing ideas has been ranked to be the second most difficult problem (M=2.24). Similarly, the results of interviews showed that the majority of the respondents, 37/46 (80.4%) reported that they faced shortage of vocabulary. But a noticeable difference was observed between the results obtained from the close-ended questionnaire and the interview questions; regarding prioritizing the second major problem area, that is, the outcome of the former refers to lack of organization skills, whereas the latter refers to inadequate knowledge of grammar. This difference seems to have emanated from the smaller number of respondents who participated in the interview session. The other difference was that the responses to interview questions yielded lack of experience as
strategies frequently were found to have better writing performance than those who used them less frequently.

Furthermore, as the results of multiple regression analysis indicated that of the seven strategies closely related to high writing proficiency, three strategies, namely q2, q4, and q37 were found to be positive predictors of writing proficiency. Moreover, based on the results of chi-square analyses, two writing strategies, q4 and q20 were also found to be positively associated with students’ writing proficiency levels. Based on these findings, it might be possible to conclude that all writing strategies may not have significant influence on writing performance. Thus, teachers should select the strategies with a strong and desirable impact on improving the learners’ writing proficiency.

6.3 Research question 3: Do the students from different disciplines use different writing strategies?

In response to this research question, the comparison of the writing strategy use of the undergraduate students among twelve disciplines was made on the basis of the overall strategy use, strategy category use, and individual strategy use, the relationship of strategies with proficiency and the effects of strategies on writing achievement. The result of the comparison indicated that in all these areas, with the exception of overall strategy use which showed a minimum difference, significant differences in writing strategy use were found among the students across disciplines. The summary of these differences is presented as follows.

6.3.1 Differences in the overall writing strategy use

In respect to the difference in the overall writing strategy use, the study found that Statistics and Chemistry students were high writing strategy users while students from other disciplines were medium writing strategy users.

6.3.2 Differences in writing category use

Noticeable differences in the use of writing strategy categories were found among the students of certain disciplines. For example, Statistics students were found to be higher users of metacognitive and rhetorical strategies and a higher degree of use of both cognitive and social/affective strategy categories was observed among Chemistry students than among students in other disciplines. Furthermore, Business
Oxford, (1995), they are indicative of the presence of some kind of relationship with writing proficiency levels of the students from the respective disciplines.

For instance item 9, *I read English newspapers, magazines, or fiction for pleasure*, which was one of the items with mixed variation pattern was found to be significantly associated with writing proficiency level of students from English department (p=.047). The presence of a close relationship between reading for pleasure and developing writing skills is consistent with the findings of previous studies undertaken by Janopoulos, (1986), Krashen, (1993) and Tsang, (1996). More importantly, the relationship between free reading and writing ability was studied recently by Lee (2005) where she found that free reading was a solitary predictor and facilitator of writing performance. Based on this finding, Lee recommended that “free reading should be emphasized as a part of developing writing ability” (p.365).

**6.3.5 Differences in effects of strategies on writing proficiency**

Based on the stepwise multiple linear regression analysis, 21 writing strategies were found to have a strong effect on the writing proficiency of students from different disciplines. Of these, 12 writing strategies (items 1, 3, 4, 6, 7, 14, 15, 23, 31, 32, 33, 37) were found to be positive predictors of writing achievement. That is the higher use of these strategies has a linear relationship with higher writing proficiency.

Of the 12 writing strategies which were positive predictors of writing achievement, 2 items (q3 and q33) were found to be significant positive predictors of writing proficiency of the students from two different departments. That is, item 3 was the best predictor of writing ability of Law and Economics students and item 33 was a significant predictor of writing ability of Electrical Engineering and Chemistry students.

The remaining 10 items which were positive predictors of writing achievement were found to be discipline specific. That is, each of these individual strategies was found to have an effect on students’ proficiency in a specific discipline. Among these, those with highest beta weights are briefly discussed here under.

Items 37 and 31, the major predictors of writing achievement of Vet. Medicine students, were found to be employed more frequently by the high achievers than by the low achievers. Another item with the highest beta weight and that was the best predictor of writing ability of English major students was item 15. Those students who
6.4 Research question 4: Are students’ writing strategies associated with certain approaches to writing?

The classification of the items into three approaches to writing showed that 25 items of the 37 items were categorized into the process approach, 6 items into the product approach and the remaining 6 items into the genre approach. This indicated that, of the three approaches to writing, the process approach enables the subjects to employ many strategies.

In respect to frequency of strategy use of the approaches, the strategies under the process approach are relatively the most frequently used (M=3.42). This implies that the process approach to teaching writing has attracted attention of the undergraduate students in Jimma University. The second equally attractive approach was genre pedagogy. Strategies under this approach were also found to be frequently used (M=3.38). But relatively the least popular strategies were the ones under the product approach (M=2.75).

To conclude, the results of strategy classification, the overall mean scores of strategy use, the correlation of strategies with the principles of the three approaches to writing showed the influence of approaches to writing over strategy choice of the subjects. In short, most of the strategies used in writing were found to correlate with the main principles of the three approaches to writing. It was also learned that the process approach was the one that was predominantly used in teaching of writing.

In fact, each of the three approaches has a role to play in enhancing the writing skills of the students. This is clearly discussed in the literature review section by way of comparing the strengths and the weaknesses of each approach. Therefore, based on the findings obtained from secondary resources and the present study, it can be concluded that sticking to only one approach, for example, the process approach, even if it is popular, may not be useful for teaching writing. Instead, focusing on the use of other approaches to writing could offer potential benefits in relation to the selection of effective strategies that can be used to develop writing competence of the learners. After all, writing should not be seen as something mysterious; instead, it can be seen as a skill that can be taught and acquired systematically. For instance, researchers like Flower and Hayes (1980) regard writing as a “strategic action where writers employ
(perceived confidence) was significant on all the strategies put together as one variable and the five categories of writing strategies. But the main effect of item pq2 (perceived level of enjoyment) was not significant on the two categories (social/affective and other). Moreover, the main effect of item pq1 (perceived ability) was significant only on the two variables, namely metacognitive and cognitive categories. A significant main effect of these variables on the writing strategy use indicated that there was a linear relationship between the respondents’ measurement results on the variables and the writing strategy use.

The results obtained from the quantitative analysis undertaken on the relationship between the writing strategy use and the level of satisfaction with the ways of teaching writing indicated that the respondents who were happy with the ways of teaching writing were found to have employed writing strategies more frequently than those students who were unhappy. From the results obtained from the analysis done on the relationship between writing strategy use of an individual and his or her attitude towards ways of teaching, it can be concluded that an individual with positive attitude is likely to employ writing strategies frequently to accomplish writing tasks.

6.5.3 Motivational variables and writing strategy use: Results of qualitative data analysis
Qualitative data analysis techniques were used to analyze data obtained from the respondents on the attitude towards writing, the level of satisfaction with the course results and the ways of teaching writing. The frequency and percentage analysis of the responses of interviewed group to attitude question revealed that the majority of both the high and the low achievers had positive attitudes towards writing. From these results, it was difficult to conclude on the influence of attitudes on writing strategy use, for no significant difference in the mean of writing strategy use was observed between respondents with positive and negative attitudes towards writing. This goes contrary to the original assumption that positive attitudes lead learners to employ writing strategies more frequently than those with negative attitudes.

The analysis made on the responses given regarding the relationship between the level of satisfaction with the course results and the attitudes revealed that 31 factors contributed to the development of negative attitudes towards writing, whereas 9 major factors did to the development of positive attitudes. On the other front, in both the sets of the variables influencing the development of negative and positive attitudes,
Motivational variables considered during the study can be the major sources of influence of writing strategy use in an EFL context.

The study also revealed that the majority of the undergraduate students were instrumentally motivated when learning writing. This motive has been found to be one of the main driving forces in developing writing skills of learners in the EFL context.

Writing strategy use is individual to students and is dependent on the desire of the individual to learn writing including the effort exerted until the desired goal is achieved.

6.6 Implications of the study for writing strategy use and study

The results of the study have two major implications on the use of writing strategies by the learners. These are presented as follows.

6.6.1 Implications pertaining to writing strategy study

As the conclusions of previous studies conducted and the present study show, the use of quantitative data alone cannot be sufficient to substantiate the role and impact of different factors, variables, approaches used in determining the outcomes of a study on the use of writing strategies. For optimum and convincing results, it needs to be complimented by qualitative data. This is quite evident in the following quote: “the qualitative investigative approach may add a vital dimension to the understanding of the complexities of language learning experiences and effects” (Gan, Humphreys and Lyons, 2004).

6.6.2 Implications related to the teaching-learning environment

In view of improving the teaching-learning process taking place during the instruction of the course of writing strategy, the following recommendations could be made

- The 38 writing strategies used in the questionnaire with reliability coefficients of .88 can be accessible to the teachers and the learners alike who would like to employ them in classrooms or workshops related to teaching of writing strategies.
- The four categories of writing strategies: cognitive, metacognitive, rhetorical, and social/affective were established based on sound theoretical, empirical and statistical framework and these can be used for research, or teaching and learning purposes.
also on a close examination of the relative advantage of that specific approach over the others in terms of enhancing the learning process.

- Teachers should concentrate on the learners’ motivation by providing opportunities to practise writing on the topics of interest to learners (see a sample of lesson plan in Appendices G and H).

6.7 Further research

To obtain more reliable data and make generalization about writing strategy use of undergraduate students, a more comprehensive study with a large sample size should be replicated using both quantitative and qualitative approaches.

To ensure the use of effective writing strategies, appropriate training needs to be organized and conducted for students in different disciplines for a longer period of time in order to generalize the usefulness of these strategies to EFL students.

Furthermore, the writing proficiency of the subjects was assessed using both the writing proficiency test and the perceived rating of writing ability level using close-ended questions. Although all the necessary measures were taken on writing proficiency test designing and rating, the results obtained from this instrument did not match the results obtained from self-rating questionnaire (perceived rating). However, this requires further research to identify the underlying reasons for the discrepancy between the results obtained from the two instruments used for testing. Due to some cultural and social factors, the instrument used for self rating may have limitations in bringing about the desired outcome in the Ethiopian context.

Further research is also required to verify why students from Chemistry and Statistics field of studies tend to be high strategy users.

6.8 Limitations of the study

This study has a number of limitations. The first limitation relates to the inability of using equal number of subjects representing each discipline because some of them were not willing to come to classroom prepared for completing questionnaires and taking the proficiency test. The fact that the questionnaire and the proficiency test were time consuming resulted in disinterest towards accomplishing the task as per expected standards. For instance, the writing proficiency test was administered for the duration of 70 minutes and the completion of Questionnaire Part I and II for another 30 minutes.