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Strategies of Indonesian Learners of English  
across Individual Differences

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## ABSTRACT

Early studies of language learning strategies focused on describing the strategies employed by successful learners. In subsequent stages, the studies were directed at investigating factors affecting their use as well as how the strategies affect proficiency. The findings, however, have been inconclusive, suggesting the need to carry out similar studies with different learners.

The present study focused on the following issues: 1) the use of learning strategies; 2) how strategies correlated with one other; 3) whether the use of strategies varied in association with course status; 4) what variables of individual differences predicted the use of learning strategies; and 5) how learning strategies predicted proficiency attainment. Three hundred eighty six students from three universities, consisting of 113 males and 273 females participated in the study. The data were collected by means of an Indonesian version of the Strategy Inventory for Language Learning, Attitude/Motivation Test Battery, Modern Language Aptitude Test, the revised Eysenck Personality Questionnaire, and an English proficiency self-rating scale. In addition, nine students were selected for interview sessions. Descriptive statistics, correlation, t-test, and regression were employed for the quantitative analyses.

The descriptive analysis revealed that Indonesian learners of English were moderate users of the 50 strategies nominated in the SILL with metacognitive strategies being used the most frequently and compensation strategies being the least. Direct strategies (memory, cognitive, and compensation) were used less frequently than indirect strategies (metacognitive, affective, and social). Analyses of the intercorrelation among the six strategy categories found that they were correlated significantly with one another. Also, learners of English as a major used learning strategies more frequently than did learners of English as a minor. These findings imply that training programs need to be designed to increase the use of direct strategies, in particular for English as a minor students.

In terms of the factors contributing to the strategy use, anxiousness about English learning and attitude and learning orientation, which were extracted from

attitude/motivational attributes, were the best predictors of all of the six strategy categories. This implies that instructional activities should be carried out in a way that the students develop and maintain favourable attitudes and are highly motivated.

The factor analysis of the SILL items revealed the presence of 12 factors explaining 56.8% of strategy variance, with the factor of active use of English being the most significant. This implies that ample opportunities to practise using English in real communicative activities should be provided. When regressed against language proficiency, the twelve factors were found to be a set of significant predictors. This implies that students should be made aware of the necessity of employing a range of strategies in their learning activities.

Finally, the data obtained from interview sessions revealed some strategies not covered in the SILL, such as using dictionary, transcribing songs, and listening to radio broadcasts. This suggests that in order to elicit as many strategies as possible, other data collection instruments are needed in studies employing the SILL, so that a more comprehensive profile of strategy use is obtained.

## DECLARATION

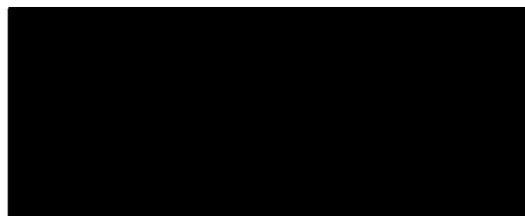
This thesis contains no materials published elsewhere or extracted from a project or thesis presented for another degree or diploma, except where due reference is made in the text of the project.

This thesis has not been submitted for the award of any other degree or diploma in any other tertiary institution. It is the sole work of the candidate and has not been written in collaboration with any other person, nor does it include, without due acknowledgement, the work of any other person.

The ethics approval for this project was obtained from the Standing Committee on Ethics in Research on Humans, Monash University, Australia, no. 99/345, 25 August 1999.

Signed

:



JUNAIIDI MISTAR

Date

: 14 January 2002

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## Chapter One

# INTRODUCTION TO THE STUDY

This chapter contains introductory information to the study and it consists of six sections. Section one, background to the study, presents a discussion of the underlying considerations that lead to the necessity of carrying out the study. Section two, assumptions, lists several assumptions on which the study was carried out. A discussion of the limitations of the study, which covers both practical and methodological issues, is presented in the next section and it is followed by a description of the significance of the study. The definition of the key terms then follows. Finally, the chapter ends with an outline of the thesis organisation.

### 1.1 Background to the Study

According to Indonesian Act 2, 1989, the Indonesian formal education system is divided into three levels: primary, secondary, and tertiary education. The secondary school level consists of two sub-levels: junior secondary and senior secondary. Attendance at primary school and junior secondary school is compulsory and it is called 'compulsory basic education'. Primary school takes six years to complete, with students starting at age six or seven years, while junior secondary school takes three years. Senior secondary school, which also takes three years, is of two types: general and vocational. The students attending the first category - general senior secondary school - are expected to continue their study to tertiary level when they have finished their schooling, whereas those attending the second category - vocational senior secondary school - are expected to be able to find jobs. In practice, some students leaving general secondary schools go to find jobs, instead of pursuing higher study. On the other hand, some students leaving their vocational senior secondary school continue their study to

tertiary level. Finally, tertiary education takes place in universities, academies, colleges, or polytechnics, in which to complete their studies students need to spend at least two years for the Diploma 2 Program, three years for the Diploma 3 Program and four years for the Undergraduate Program.

In the Indonesian education system described above, English starts to be officially introduced as a compulsory subject to students at junior secondary school level with a time allocation of four sessions of 45 minutes a week. The time allocated for English in senior secondary schools is different depending on the type of the school. At general senior secondary schools it is also taught in four sessions of 45 minutes a week for students of the first and second years. Different time allocation is then devoted to the teaching of English to students of the third year as they are divided into three departments: exact science, social science, and language depending on their performance in the first and second year. Students joining the exact science department and the social science department receive English instruction in five sessions of 45 minutes a week, while those majoring in a language department get English instruction in 11 sessions of 45 minutes a week. Meanwhile, the teaching of English at vocational senior secondary schools is generally allocated two 45 minute periods a week. Similarly, at tertiary level it is taught for about one and half-hours a week, with variations depending on the local policy of each institution, except in the Department of English Education, English Literature, and English Linguistics.

In terms of the status, English is stated to be the first foreign language and its teaching includes the four macro-skills: reading, listening, speaking, and writing. Grammar, vocabulary, pronunciation, and spelling are also taught to support the acquisition of the four language skills. The most important competence is considered to be reading comprehension, with an assumption that this will facilitate the development of advanced science, technology, culture, and arts as well as enhance international relationships (Ministry of Education and Culture, 1993).

The fact that English is introduced to students in junior secondary school indicates that students leaving their senior secondary school have learned English

for six years for between one and half-hours to six hours a week. Considering such a long period of learning, it may be possible to assume that senior high school graduates in Indonesia are fluent in communicating in English.

The reality, however, shows the reverse situation. Six years' learning does not seem to mean very much as most of the students do not acquire adequate proficiency, not even passive communicative competence, in this case reading comprehension, which is in fact the primary target. Research conducted so far indicates that the reading proficiency of learners of English in Indonesia is very low. Sadtono (1974) in his survey of the functional relationship between the teaching of English at senior high school and at university found that university lecturers' perception of their students' reading ability was relatively poor. In this study, compared to the pre-intermediate standard of reading competence, 63% of the respondents stated that the students' reading skill was inadequate, 23% of them stated adequate, and 9% poor. This condition remained unchanged over a long time as Djwandono (1982) arrived at a similar finding when he claimed that the reading competence of non-English department students at IKIP MALANG was still very low, in the sense that their reading skill was not sufficient for comprehending required textbooks. This was argued to be a direct effect of their poor reading competence before entering university (Huda, 1988). Surprisingly, a similar situation is found among lecturers. Danifil (1985) noted that lecturers of non-English departments at the University of Riau had very poor reading ability in English. This situation means that they find it difficult to keep up with advances in science in their own fields because they rely merely on textbooks written in Indonesian.

Commenting on the results of English teaching in Indonesia, Huda (1999) admits that English teaching in Indonesia in general and in secondary schools in particular is not successful. In another part of his book, Huda also acknowledges the poor situation of English teaching at tertiary education level as he states, "In general we are not quite happy with the result of the teaching of English at

universities. Not only at the *sarjana*<sup>1</sup> program level, but also at the post graduate program, in general the students have insufficient knowledge of English" (p. 151) (the explanation in the brackets is mine). As a matter of fact, adequate proficiency in English is supposed to contribute to an increase in "adroitness, professionalism and dignity of the Indonesian people" (Hamied, 2000, p. 1).

One of the reasons for the inadequate English proficiency of Indonesian students might be the limited mastery of vocabulary. Muyoto (1986) noted a very surprising finding when his study revealed that senior high school graduates in Malang, Indonesia had an average passive vocabulary of around 200 words. This number of vocabulary items is far from enough to facilitate language production activities, for which between 3,000 and 4,000 words should be mastered (Lado, 1961).

The poor results in regard to English instruction in Indonesia lead me to assume that there may be problems in the teaching-learning situation. Perhaps, the instructional process that has been implemented so far may have been ineffective. I believe that, in order to improve the situation, factors affecting the success of the teaching-learning process need to be studied.

Tarigan and Tarigan (1987) mention that the teaching-learning process is a system consisting of the following components: teacher, student, objective, material, method, media, and evaluation. In this interactive system, the teacher and the student are the actors, where the teacher teaches and the student learns. The objective is the guide directing the instruction, the material serves as the instrument to achieve it, the method functions as the way to achieve it, and the media provide supportive tools to make it easier to achieve it more efficiently. Finally, the evaluation is the instrument by which the attainment of the expected objective is assessed. Of these components, Kemp, Morisson, and Ross (1994) mention that the fundamental ones are learners, methods, objectives, and evaluation.

More specifically, in second/foreign language instruction, Baradja (1994) states that at least six factors are worth considering for evaluating whether

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<sup>1</sup> This program equals to the undergraduate program in western universities.

foreign/second language instruction is to be successful or not. They are instructional objective, learner, teacher, material, method and environment. Meanwhile, according to Sadtono (1995), success in any foreign language learning depends on two factors: linguistic and non-linguistic. Included in the first category are aspects concerned with the nature of the target language such as its phonology, morphology, and syntax. The teacher, student, material, method and environment are the non-linguistic factors as they are external to the language.

It is apparent then that the role of teachers and learners in foreign language instruction is very significant. The teachers are the ones who are responsible for arranging and managing the instructional components to function in an effective system. They are responsible for selecting the proper instructional material, setting up the instructional techniques, and conducting the appropriate evaluation procedures. That is why the issues of how teachers should teach have gained much attention among researchers during the past decades. Investigation of these matters resulted in the development of models and approaches of second/foreign language teaching.

Generally speaking, Chastain (1988) classifies the models/approaches into two categories: traditional approaches and alternative approaches. Within the first category are Grammar-Translation Approach, Audio-Lingual Approach, and Cognitive Approach. The second category includes other approaches/models such as Total Physical Response, Monitor Model, Natural Approach, Silent Way, Community Language Learning, Suggestopedia, and Communicative Language Teaching.

As one of the human components in any instructional process, however, the role of the learners cannot simply be neglected. In fact, there is no real teaching activity unless there are learners being involved in it either directly or indirectly. It is not surprising then to argue that assessment of the effectiveness of instruction should be based more on how the student learns than on how the teacher teaches. In relation to this, Rubin and Thomson (1982, p. 1) state,

You, the language learner, are the most important factor in the language-learning process. Success or failure will, in the end, be determined by what you yourself contribute. Many learners tend to blame teachers, circumstances, and teaching materials for their lack of success, when the most important reasons for their success or failure can ultimately be found in themselves.

This assertion leads to a great awareness of the significant roles the learner plays in the learning process. Therefore, a great deal of research on second/foreign language instruction has shifted its focus from the teacher to the learner.

This interest of research seems to have become more intensive as evidenced by the fact that a group of students in a foreign/second language class who experience the same instructional process from the same teacher gain different levels of success. These differences appear to be due to their individual differences. As a result, individual differences, which are supposed to affect second/foreign language learning achievement, are investigated extensively in several studies.

The areas of concern of current research in this field can be classified into four categories: a) cognitive factors, b) affective/personality factors, c) biological factors, and d) sociocultural factors. Research on the cognitive factors deals with cognitive styles in learning such as field dependence/independence (Chapelle & Roberts, 1986; Hansen & Stansfield, 1981; Jamieson, 1995), ambiguity tolerance (Chapelle & Roberts, 1986), and reflectivity and impulsivity (Jamieson, 1995). Moreover, the affective/personality factors cover problems such as inhibition and risk-taking (Ely, 1986), anxiety (Horwitz, Horwitz & Cope, 1986), empathy (Guiora, Brannon & Dull, 1972), extroversion-introversion (Busch, 1982), and motivation (Gardner & Lambert, 1972; Lukmani, 1972) and the biological factors include age (Collier, 1987; Ekstrand, 1976) and gender (Bacon, 1992). Finally, the sociocultural factors deal with matters such as social distance (Schumann, 1976) and attitudes toward the target language - the language being learned - and toward the culture of the community of the target language (Gardner & Lambert, 1972; Oller, Baca & Vigil, 1977).

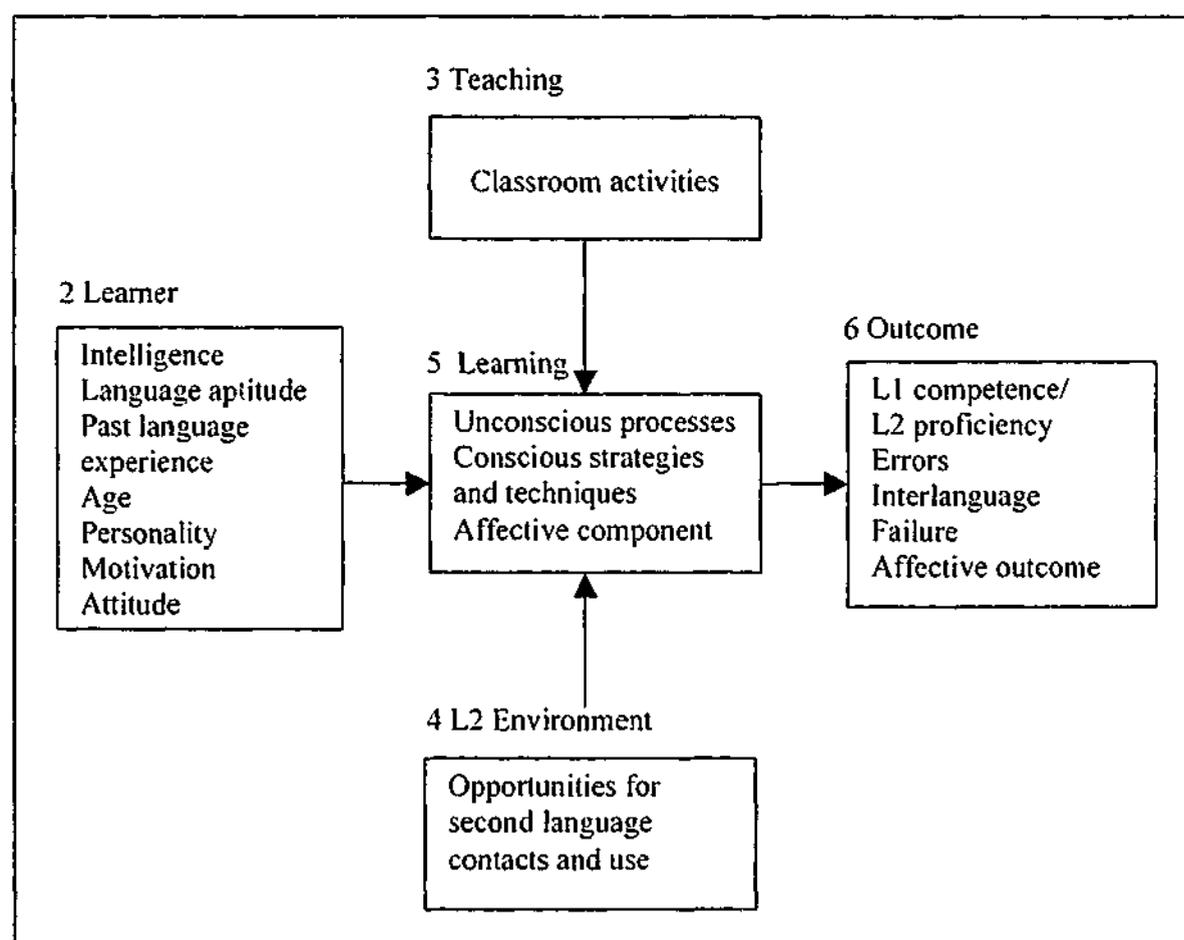
An important thing to note about many of the studies dealing with the factors above is that they take those variables as predictors of language learning success. In the area of cognitive factors Hansen and Stansfield (1981), for example, studied the relationship between field dependent/independent cognitive styles and foreign language achievement. Their findings showed that a strong relationship was found between field independence and both linguistic competences and integrative competence. In addition, field independence was also found to moderately correlate with communicative competence. Meanwhile, in the scope of personality factors, Busch (1982) found that the extroverted students tended to have higher scores than introverted students on reading and grammar components of the Standardised English Test being used. More surprisingly, extroversion was found to have a significantly negative correlation with pronunciation, which was one of the components considered in the oral interview test. Furthermore, concerning the role of age (in the area of biological factors) in predicting second/foreign language success, Ekstrand (1976) conducted a study with 2,189 learners of Swedish as a second language as the subjects. The age of these participants ranged from eight to seventeen years old. He found that older learners outperformed younger learners in measures of listening comprehension, reading, free writing, pronunciation, and speaking. Similarly, Collier (1987) found that older ESL learners of eight to eleven years of age performed better than the younger learners of five to seven years of age both in second language and content achievement as measured by the Science Research Association tests. Lastly, in terms of sociocultural variables Schumann (1976, p. 135) claims,

Social solidarity and hence a good language learning situation will exist where the 2LL (second language learning) group is non-dominant in relation to the TL (target language) group, where both groups desire assimilation for the 2LL group, where low enclosure is the goal of both groups, where the two cultures are congruent, where the 2LL group is small and non-cohesive, where both groups have a positive attitudes toward each other, and where the 2LL group intends to remain in the target language area for a long time.

While it is true that the results of the studies above contribute important information to the body of knowledge of second/foreign language learning, little explanation can be provided on how the predictor variables under study really correlate with the learning outcome. In other words, not much can be discussed on why, for example, the field independence style leads to better linguistic and integrative competence as found by Hansen and Stansfield (1981). This insufficient explanation can be overcome by identifying the mediators that bring the two variables correlated to one another (Tremblay & Gardner, 1995).

Figure 1.1 Naiman et al.'s Model of Second Language Learning

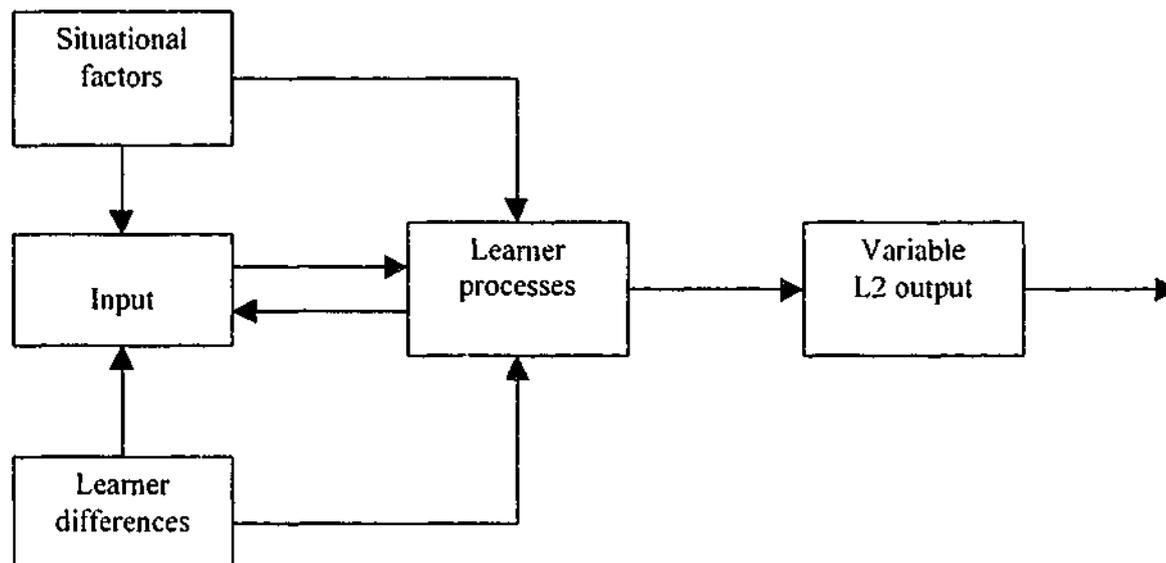
1 Context



Source: Naiman et al. (1978, p. 2)

Naiman, Fröhlich, Stern & Todesco (1978) propose a model of second language learning that consists of six components: context, learner, teaching, second language (L2) environment, learning and outcome as depicted in Figure 1.1. As the figure shows, no direct relationship as indicated by an arrow exists between learner individual differences (box 2) and learning outcome (box 6). Instead, together with deliberate teaching activities and natural L2 environment, the learner differences affect learning processes (box 5) and it is the learning processes that affect learning outcome (box 6).

Figure 1.2 Ellis' Framework of Components of Second Language Learning



Source: Ellis (1985, p. 276)

Ellis (1985) provides a similar schema accentuating a framework (Figure 1.2) for examining the components of second/foreign language learning in which five components are involved. As the model shows, situational factors influence input (e.g. the quantity of input in second language setting is likely to differ from that of input in foreign language setting) and at the same time the use of learner processes. In addition to affecting input, learner differences such as intelligence, language aptitude, motivation and personality also affect the operation of learner processes. Then, the learner processes produce output, which may in turn become subsequent input. The association between input and learner processes is

interactive, in the sense that input provides data upon which the learner processes operate, but the learner processes also determine the quantity and quality of input. Learners who actively seek opportunities to communicate in the target language, for example, tend to receive more input than their counterparts who do not.

In the two models above, it is clear that the mediating process that bridges the relationship between learner variables and learning success is the learning process. Stern (1983) maintains that learning outcomes are much influenced by the learning process, and the learning process is affected by the learners' internal characteristics and learning conditions. Earlier, Rubin (1975) had noted that a great deal of knowledge about learning process is required if we want to improve the success of the classroom teaching. Therefore, it is then interesting to investigate the effect of the individual characteristics on the learning process. As a result, research on learners' differences in their learning efforts to master the target language has begun. This has led to a further research interest in learning strategies, which is becoming a major concern nowadays.

It was Stern (1975) who probably initiated the attempts to make a list of characteristics of learners who are considered to be good language learners. The issue gained in popularity when several projects on learners' learning strategies were initiated in 1980s and it has virtually become an "explosion of activity" in recent years (Skehan, 1991, p. 285). A few research studies to mention have been conducted by Ehrman and Oxford (1989; 1990), Merrifield (1996), O'Malley and Chamot (1989), Oxford and Ehrman (1995), Oxford and Nyikos (1989), Oxford, Nyikos, and Ehrman (1988), Park (1997), Vann and Abraham (1990), and Willing (1988).

Unfortunately, despite this extensive research, the topic remains like "a fragmentary, unfinished mosaic" (Oxford, 1990b, p. 113) so that much more research still needs to be conducted especially because of its potential in predicting second/foreign language learning success.

This unfinished mosaic seems to be in part due to the fact that so far research on learning strategies simply describes what they are and how they affect language proficiency. Not very much has been carried out to discover the effect of

individually different variables on the strategy use. Skehan (1989, p. 96) states, "In the main, strategies researchers have simply gathered data. It may be, however, that there are systematic relationships between other IDs (individual differences) and a predisposition to use certain strategies". (the phrase in the brackets is mine)

In this regard, a few studies have been conducted to find factors affecting strategy choice (Ehrman & Oxford, 1989; Oxford & Nyikos, 1989). The results suggest that a number of individual differences and situational factors correlate significantly with strategy use. However, there is still weak evidence supporting a claim on the relationship between learners' emotional states, language aptitude, learning style, and personality and learning strategy use (Ellis, 1994). Ellis (1994) has also mentioned that much research on motivation has focused on the effect of motivation on achievement as he says that "little attention has been paid to the effect of motivation of the process of learning (as opposed to the product)" (p. 517). Therefore, more research is badly needed on this particular matter.

Despite the fact that the issue has been extensively and intensively investigated particularly in western countries since 1970s, either in the context of second language or foreign language, it had not been very much studied among learners of English as a foreign language in Indonesia, until the late 1990s. Lengkanawati (1997) studied the effect of learning strategies on improvement of language proficiency among Indonesian learners of English at IKIP Bandung (Indonesia) and learners of Indonesian as a foreign language at La Trobe University and Deakin University, Melbourne (Australia). Similarly, Djwandono (1998) investigated the relationship between EFL learning strategies and oral communication proficiency of students at Widya Karya University in Malang (Indonesia). Huda (1998) took a different approach. He studied the effect of differences in English proficiency on learning strategies among students majoring in Teaching English as a Foreign Language (TEFL) at IKIP Malang, Indonesia. Apart from scarcity of the studies, Sadtono (1995) predicts that most Indonesian learners probably do not use effective techniques or strategies for learning English. He notes, "They, learners, do not realise that learning a foreign language

requires perseverance, discipline, knowledge of techniques of assimilating new habits, self-evaluation, a great deal of practice and that the whole business takes a long time" (Sadtono, 1995, p. 25).

The underlying considerations in this study are based on issues arising from the prior research as well as the situation of English teaching in Indonesian context as discussed above. They are that:

- 1) the result of English teaching in Indonesia is not yet satisfactory in relation to the objectives to be achieved;
- 2) the roles of the learners' individual characteristics including their learning strategies is undoubtedly a determinant of the success in a foreign language learning;
- 3) findings of studies on learners' learning strategies remain inconclusive, partly because their connections with other individually different variables are not very much explored; and
- 4) only few studies on learning strategies of Indonesian learners of English have been conducted in Indonesia.

In light of these considerations, the major aim of this study is to investigate the strategies used by Indonesian students at university level in learning English as a foreign language. The association between the strategies with both situational and individual differences is also the target of the present study. The present study aimed at:

- 1) describing the extent of the use of learning strategies by Indonesian learners of English as a foreign language;
- 2) measuring the interrelationship among different types of learning strategies that the learners employ;
- 3) investigating if students with a different situational variable - course status - differ in the extent of the use of learning strategies;
- 4) discovering the relationship between individual differences, including language aptitude, personality traits, attitude, and motivation, and the use of learning strategies; and
- 5) examining if learning strategies correlate with language proficiency.

## 1.2 Assumptions

The present study was carried out under the following assumptions.

- a) The learners are assumed to be generally aware of the techniques they employ in approaching the task of learning English as a foreign language so that when they are asked to recall them, they are able to describe them verbally (Ellis, 1994). This assumption is taken to support the validity of the data being collected. In this way, the collected data are then considered to really represent the actual activities the students do in their attempt to master the target language.
- b) To a certain extent learners' learning strategies are assumed to be relatively stable over time. This assumption makes it possible to identify general learning strategy preferences. However, the stability will cease when they are aware of the ineffectiveness of the strategies they employ and they acquire other strategies.
- c) Although learning strategies are relatively stable over time, they are changeable through training and/or self-learning. This may have an impact on the study since it is critical to the present study's credibility, particularly in the practical sense. Therefore, under this assumption, training in effective English learning strategies will be fruitful to the learners in Indonesia. As a corollary to this assumption, it is clear that ineffective learners need to imitate successful learning strategies, which have been employed by those who achieve good proficiency.
- d) Although no learning strategies are best for all learners, it should be assumed that certain learning strategy types at certain frequency of use work better than other types for a particular group of learners. This assumption is pertinent to the necessity of conducting learning strategy training programs. Without this assumption, learning strategy instruction would not be useful for the learners.
- e) Good and less good language learners make use of more or less similar types of learning strategies, but to different extents and appropriateness. Vann and Abraham (1990, pp. 182-183) mention, "Some unsuccessful learners used relatively many strategies, and more important, the unsuccessful learners used

many of the *same* strategies as the successful learners". Thus, the present study was not directed to investigating the correlation between individual differences and the types of learning strategies being employed, but between individual differences and the extent of the use of learning strategies.

### 1.3 Scope of the Study

The limitations of the study, which are either due to practical or methodological considerations, need to be reported so that the boundaries of the scope are clear. The present study was limited by the following practical considerations. First, the study focused on the learners of English in only three universities in Indonesia, selected due to the availability, ease of bureaucracy, and accessibility. As an effect, there is no guarantee that the findings of the study are applicable to all Indonesian learners of English. In this case, the study was conducted at the Islamic University of Malang, Gajayana University, and Polytechnic of Brawijaya University. Secondly, the participants in the study were students learning English at the level of tertiary education. This means that they certainly do not represent all Indonesian learners of English, particularly those from both junior and senior secondary schools. Lastly, the subjects were only limited to students of the second, third, and four year. The reason for selecting these groups of students is that they have learned English at university level for more than a year so that they logically have applied relatively consistent learning strategies. As a result, when they are asked to recall them, they are expected not to face any difficulties.

The methodological limitations are related to the number of individual and situational differences being covered in the study. As there are so many variables, which are supposed to differ from one student to another, it is really a huge task to take them all into account in one study. Therefore, in terms of individual differences the present research was limited to only differences in language aptitude, personality traits, attitude, and motivation. Moreover, regarding the situational differences, only one variation - the status of English being learned - was covered.

The other limitations relate to the assessment of language aptitude and proficiency attainment. Carroll and Sapon (1958) devised an instrument called Modern Language Aptitude Test for assessing the extent to which an individual possesses a potential to learn a new language. Up to the present time, the test is still used in most research dealing with language aptitude; thus, it was used for the present study. However, due to the fact that not all parts of the test are translatable, only two of five parts were used. Consequently, the scores on the test might not perfectly represent the language aptitude of the subjects. In terms of the assessment of proficiency, moreover, no test was devised. Instead, the participants were asked to rate their own perception of the extent of proficiency they had acquired. As such, a tendency of underscoring or overscoring oneself was possible.

#### 1.4 Significance of the Study

The study is expected to have both theoretical and practical significance. In terms of the theory, the study aims to ascertain the validity of the role of individual differences, particularly gender, language aptitude, and personality trait in predicting foreign language learning success. As mentioned earlier, a great deal of research has been carried out to measure the relationship between several individual variables - cognitive, biological, personality, and sociocultural - and learning achievement. Most of them came to the expected finding that they are significantly correlated. However, the researchers provided little information on the nature of the relationship of the variables under study unless those individual variables are correlated to learning strategy. In other words, the present study will validate research findings such as the one that indicates that learners from different levels of language aptitude attain different levels of second/foreign language proficiency (Skehan, 1986). Also, it will validate the finding that extroverted learners gain different achievement from introverted ones in all language skills such as reading and pronunciation as found by Busch (1982).

Secondly, the study will contribute to the effort to complete the "fragmentary, unfinished mosaic" of studies in the area of learning strategies

(Oxford, 1990b, p. 67). The findings of the study will map clearly the roles of learning strategies in relation to the roles of the other individually different variables in predicting foreign language learning success.

Thirdly, the study will validate a relatively new notion, which points out factors affecting learning strategy choices. The factors, among others, are personality trait (Oxford, 1990a) and language aptitude, and attitude/motivation (Oxford & Ehrman, 1995). The effect of learning strategies on learning success is also justified by this study.

Finally, the study will enrich the body of knowledge about how people from different cultures learn a foreign language. Rubin (1975) hypothesises that the use of language learning strategies may vary from culture to culture. Similarly, Oxford (1993) lists several factors associated with strategy use, one of which is cultural/ethnic background.

Furthermore, the present study will be practically fruitful for both English teachers as well as instruction designers in Indonesia. By knowing how the students learn English the teachers will be able to adjust their teaching techniques to accord with students' learning strategies. In this way, the students will find teaching-learning activities they encounter interesting and encouraging so that they will be better motivated to learn. This is very important because teaching is "basically assisting students to learn" (Weaver & Cenci, 1960, p. 1). In addition, by knowing the way their students learn, the teachers will find it easier to set any required remedial treatment for those who are supposed to have low achievement so that they can also reach satisfactory progress. Similarly, it will be easier for them to provide any enrichment activities required for those who have good achievement.

Instruction designers will also find the present study worthwhile, as they can use the findings as significant input for designing an instructional package. Dick and Carey (1996, p. 92) state that an essential element in a systematic instructional design is understanding learners' characteristics, one of which is their general learning preferences.

Finally, it is expected that the study will significantly contribute to the attempt to improve the quality of English teaching in Indonesia. Naiman et al. (1978, p. 1) state that "all forms of language teaching could be greatly improved if we had a better understanding of the language learner and of the language learning process itself".

### 1.5 Definition of Key Terms

It is quite likely that different researchers may use the same terms to refer to different concepts. The fact necessitates a very clear definition of important terms used in any study. In other words, the key words should be operationally defined. To this purpose, the key terms of the present study are defined as follows.

#### *a. Learning Strategies*

In the present study definitions of learning strategies from cognitive psychological point of view is used. O'Malley and Chamot (1990, p. 1) define learning strategies as "special ways of processing information that enhance comprehension, learning, or retention of information". This definition is expanded by Oxford (1990a) as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (p. 8).

Oxford (1990a) mentions two broad categories of second/foreign learning strategies: direct strategies and indirect strategies. The first category refers to strategies that directly involve the target language being learned, while those in the second category do not have direct connection with the target language, but still play important roles in acquiring the language being learned. Direct learning strategies contain three types of strategies: memory, cognitive, and compensation. Memory strategies, also called mnemonic strategies, refer to strategies that learners employ for the effective storage and retrieval of new knowledge. Such strategies as grouping words based on a certain category and acting out physical movements in order to remember new words fall within this category. Cognitive strategies are strategies that learners use in their effort to comprehend linguistic

inputs or produce linguistic outputs. Examples of such strategies include taking notes, translating into first language, scanning, and skimming. Compensation strategies refer to strategies that learners employ when there is a breakdown in language use due to shortage of knowledge. As such, the strategies allow them to continue using the language despite knowledge gaps that may block language use. Such strategies as using gestures, using synonym, or even switching to the first language are examples of compensation strategies.

The indirect strategies also consist of three types of strategies: metacognitive, affective, and social. Metacognitive strategies refer to strategies that learners use in order to manage their learning activities so that effective learning process takes place. These include such strategies as making a plan for learning activities and making evaluation of the progress they make. Affective strategies include strategies that learners use for controlling emotions, motivations, and attitude toward the task of learning. Such strategies as using laughter to lower anxiety and encouraging themselves to take risks in using language belong to this category. Lastly, social strategies refer to strategies that learners use to enhance communicative interactions with other people. Such strategies as asking questions and developing cultural understanding are examples of social strategies.

#### *b. Language Aptitude*

Language aptitude is in fact a complicated concept for which several definitions have been put forward. Parry as quoted by Oxford (1990b, p. 68) defines language aptitude as "the ability to learn and understand a foreign language". Similarly, Ellis (1997) defines it as a natural ability for learning a second language. More operationally, Canale (1983) defines it as the ability to develop four aspects of communicative competence including grammatical competence, sociolinguistic competence, discourse competence, and strategic competence. These definitions indicate that language aptitude refers to an ability that predicts success in foreign language learning. Thus, a foreign language aptitude test is ideally administered prior to a course program.

In the present study, however, the measurement of language aptitude is carried out during the learning process, that is, the test is administered while the subjects are learning a foreign language (English). Therefore, to eliminate the achievement factor that may affect the validity of the data, the test, which was originally in English, was translated into Indonesian. Thus, language aptitude is then defined as cognitive abilities that concurrently and predictively relate to proficiency attainment in learning English as a foreign language.

Four indicators of language aptitude are identified (Carroll, 1981, 1990) and they are now considered as "the standard four component view of language aptitude" (Skehan, 1989 p. 26). These components are:

- 1) *Phonemic coding ability*: an ability to identify and memorise sounds of a foreign language;
- 1) *Grammatical sensitivity*: an ability to notice grammatical functions that words play in sentential contexts.
- 2) *Inductive language learning ability*: an ability to recognise the relationship between form and meaning of linguistic material.
- 3) *Rote learning ability*: an ability to memorise the association of stimuli, which are native language words, and responses, target language words. This ability is supposed to be crucial in vocabulary learning.

### *c. Attitude and Motivation*

Attitude and motivation are in fact two distinct constructs. Hornby (1974) in his Oxford Advanced Learner's Dictionary of Current English defines the former concept as a "way of feeling, thinking or behaving" toward an object (p. 50). The way one feels, thinks, or behaves toward an attitude object is a result of one's evaluation of it. It is mostly unobservable; thus, it must be inferred from one's opinions about the object. More operationally, an individual's attitude is then defined as "an evaluative reaction to some referent or attitude object, inferred on the basis of the individual's beliefs or opinions about the referent" (Gardner, 1985, p. 9). The referent or the object can be educational such as attitudes toward

English teachers and English courses, or social such as attitudes towards the community that natively speaks English (Gardner, 1985).

Stern (1983) identifies three attitudes that are crucial in second/foreign language learning. They are attitudes toward the community and people who natively speak the language, attitudes toward learning the language being learned, and attitudes toward languages and language learning in general. In the case of learning English as a foreign language, such statements as 'I am dreaming of going to England', 'Learning English is an enjoying activity', and 'I like learning foreign languages' respectively represent the three types of attitudes.

The attitudes toward an object, either positive or negative, in most cases affect motivation which, in the case of foreign language learning, is defined as "the emotions and needs that constitute the source of the drive to expend effort required to learn a foreign language learning" (Chandrasegaran, 1981, p. 7). In a similar vein, Gardner (1985) defines motivation in second/foreign language learning as "the extent to which the individual works or strives to learn the language because of a desire to do so and the satisfaction experienced in this activity" (p. 10). This definition highlights three components of motivation including effort to achieve a goal, a desire to learn the language, and satisfaction with the learning task. Thus, motivation to learn is made up when attitudes as reflected in the emotions after experiencing satisfaction in learning a new language together with needs for the language resulting in a desire to learn it coexist with the effort extended to achieve the goal.

Regarding the source of motivation, two types of motivation, extrinsic and intrinsic, are identified. Students are said to be extrinsically motivated when the drive to learn does not originate from within them, but is supplied by a source extrinsic to them. Stating that English is a compulsory subject, for instance, may arouse a learning drive and the students who are learning because of such a reason are said to possess extrinsic motivation. The emotions and needs that give rise to learning motivation may also come from within the learners themselves such as from their perception of the possible benefits that they may obtain when mastering a foreign language. In this case, intrinsic motivation plays a role.

In respect of orientation in second/foreign language learning, Gardner (1985) identifies two types of motivation: integrative and instrumental. The former occurs when the learners' orientation in learning a second/foreign language is their interest in the people and the culture represented by the target language group. As such, they want to understand the culture, participate in it, and ultimately identify themselves as part of it. Instrumental motivation, on the other hand, is related to the functional advantages that they have if the language is mastered. Career advancement and an ability to complete a certain job are just two examples of instrumental orientation in second/foreign language learning.

#### *d. Personality*

Personality is defined as "qualities that make up a person's character" (Hornby, 1974, p. 624). However, it is hard to classify a person's personality on the basis of a particular character type. For example, an individual who is generally characterised as being tolerant may on some occasions execute behaviours indicating that he or she is not a tolerant person. As such, in the present study personality is viewed as a tendency of human beings to possess certain qualities that in aggregate constitute a personal trait.

In general psychology, three broad dimensions of personality are identified: extroversion (E), neuroticism (N), and psychoticism (P) (Eysenck & Eysenck, 1975). Degrees of extroversion classify individuals as having a tendency of being extrovert or introvert. Whereas the extroverts are typified as being easy-going so that it is easy for them to get along with other people, the introverts are considered to be quiet and not to like interaction with other people. Where neuroticism or emotional stability is concerned, individuals may belong to a group of emotionally stable persons or emotionally unstable persons. People with the former personality type tend to be calm and not to worry for anything, while those with the latter type tend to worry about everything around them and thus be easily depressed. Psychoticism describes people in terms of degrees of tough-mindedness. Of these three types of personality traits, Eysenck and Eysenck (1991, p. 2) mention that extroversion and neuroticism or emotional stability best

describe personal characteristics of human beings. Thus, in the present study personality is defined as a tendency of a learner as being extrovert or introvert and as being emotionally stable or unstable.

*e. English Proficiency*

Richards, Platt and Platt (1992) define language proficiency as "the degree of skill with which a person can use a language, such as how well a person can read, write, speak, or understand language" (p. 204). In this study, English proficiency is then defined as an aggregate measure of the learners' perceptions of their own proficiency in the four English language skills of listening, reading, speaking and writing. Proficiency in listening is defined as a score on a rating scale describing the learners' own perception of how good they are at understanding spoken English discourse. Proficiency in reading is defined as a score on a rating scale describing the learners' own perception of how good they are at comprehending written English discourse. Proficiency in speaking is defined as a score on a rating scale indicating the learners' perception of how good they are at producing spoken English discourse. And, proficiency in writing is defined as a score on a rating scale indicating the learners' perception of how good they are at producing written English discourse.

*f. Second and Foreign Language*

Although in most cases, theories of second language acquisition also fit foreign language learning, sometimes the term 'second language' and 'foreign language' need to be clearly defined as they refer to different learning contexts. Learners learning a new language, other than the learners' mother tongues, are considered to be learning a second language when the language is also used as a means of communication in the social context outside the classroom. Canadian learners of French are good examples of second language learners. In contrast, learners are said to learn a foreign language when the language is merely spoken in the classrooms, like English in Indonesia.

*g. Course Status*

Course in this study is defined as a sequence of subjects and course status is defined as the relative position of the consecutive English subjects compared to other subjects in a departmental curriculum that students have to take to complete their study. Students at the English Department of the Islamic University of Malang and Gajayana University learn English as a major course. In these two institutions the students learn English and other subjects related to English much more than subjects that have nothing to do with English, which are mostly conducted in the Indonesian language. In the Accounting Department of Polytechnic of Brawijaya University, however, English stands as a minor course as the students learn subjects related to accounting much more than English subjects. The aim of English teaching in this department is at providing the students with a supplementary competence, that is competence in English communication that can be important for them in pursuing their careers in accounting upon completion of their study.

*h. Protocol Analysis*

Protocol analysis is used in the present study to refer to qualitative analysis of data gathered by means of interviews.

## 1.6 Organisation of the Thesis

This thesis consists of twelve chapters, elaborated from the five basic parts of a research report: introduction, review of literature, research methodology, research findings and discussion, and conclusion. Chapter One introduces the readers to the research project. Discussion of why the study is conducted, what for it is carried out, in what way the study is significant along with its weaknesses, and the definition of key terms are presented in this chapter.

Chapters Two to Four review some of the existing literature related to the study. In this case, Chapter Two is for the discussion of cognitive theory of second/foreign language learning, which underlies research on second/foreign language learning strategies. The development of studies in learning strategies are

traced historically and presented in Chapter Three, together with a discussion of factors affecting the use of learning strategies. The learning strategy studies are further explored in Chapter Four by classifying them into four categories based on how the strategies are treated in relation to other variables.

Chapter Five describes the methodology of the research. This includes the research questions to be answered, the hypotheses used as the tentative answers, research designs, participants of the study, instruments for the data collection, how the data are collected, and how they are analysed.

Chapters Six to Nine present the quantitative findings. Chapter Six deals with the descriptive analysis of the use of learning strategies and the intercorrelation among the strategy categories. Chapter Seven concerns the differences in the use of learning strategies in association with a difference in the status of the English course that the students are taking. The predictability of learning strategies from individual differences, including attitude/motivation, language aptitude, and personality traits is presented in Chapter Eight. Chapter Nine presents findings that are related to the correlation between learning strategies and proficiency self-ratings.

To enrich the findings, qualitative data of learning strategies were also collected through interview sessions and they were analysed separately from the quantitative data. The results of the analysis are presented in Chapter Ten.

Chapter Eleven discusses all of the findings in relation to both the existing theories of second/foreign language learning and the findings of previous studies.

Finally, Chapter Twelve concludes all of the findings and provides implications of the findings for strategy training programs as well as for English teaching learning activities. Recommendations for further studies in the area of second/foreign language learning strategies are also in this chapter.

## Chapter Two

### COGNITIVE APPROACH TO SECOND/FOREIGN LANGUAGE LEARNING

To date, at least ten theories or models have been proposed, each of which has made specific contributions to the understanding of second/foreign language learning processes. Ellis (1985) mentions seven theories, including the Acculturation Model, Accommodation Theory, Discourse Theory, Monitor Model, Variable Competence Model, Universal Hypothesis and Neurofunctional Theory. McLaughlin (1987) describes five theories, two of which are distinct from Ellis'. They are Interlanguage Theory and Cognitive Theory. Gardner (1985) describes second/foreign language learning from a social psychological point of view resulting in a model called Educational Model of Second/Foreign Language Learning.

The present chapter focuses on the cognitive theory, as this theory is considered appropriate to theoretically justify studies on language learning strategies. The discussion includes cognitive view of learning, language as a cognitive skill, application of cognitive approach to second/foreign language learning. The chapter concludes with the cognitive view of the definition of language learning strategies.

#### 2.1 Cognitive View of Learning

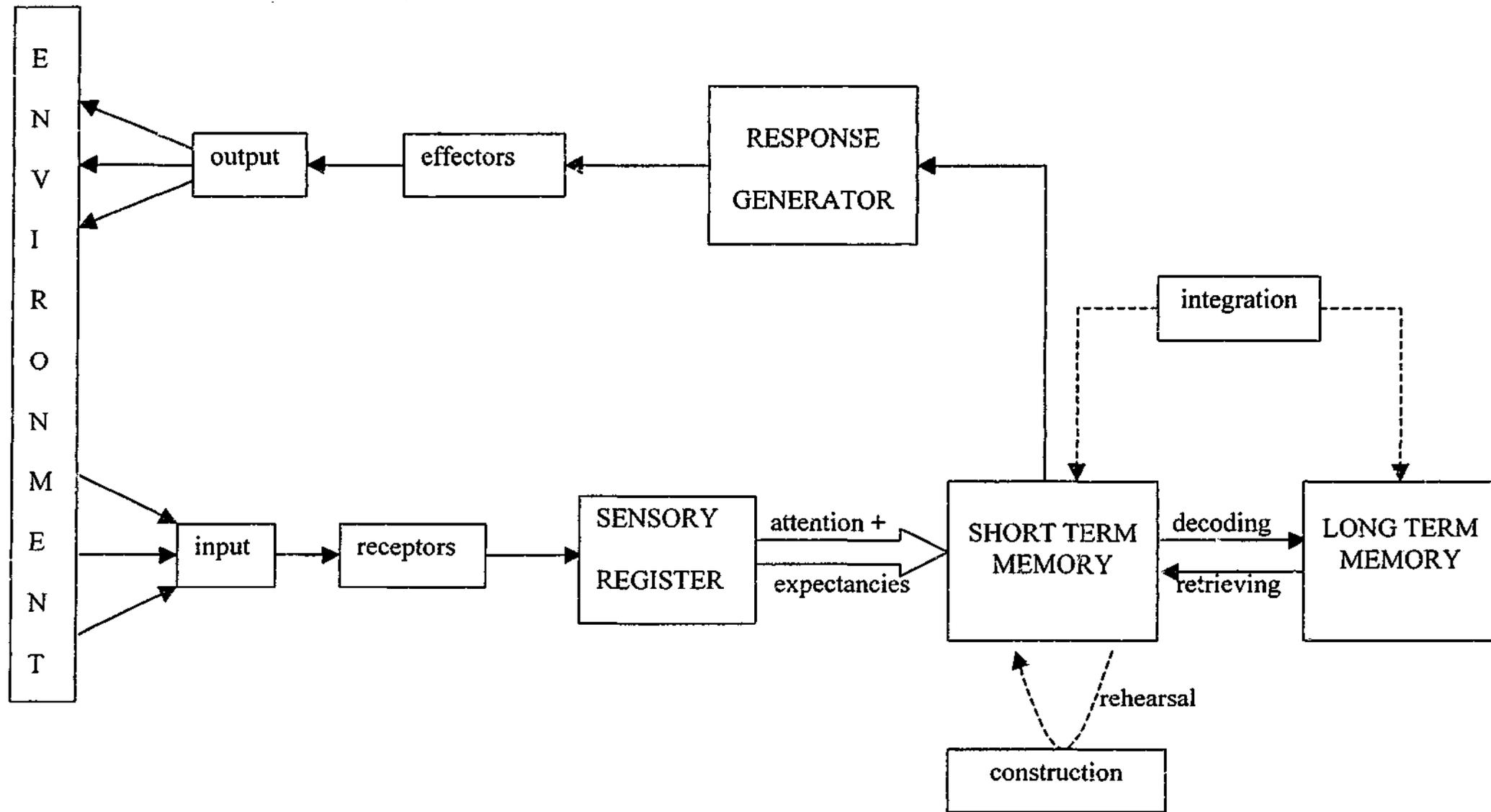
Basically, learning is defined as the process to make changes in human behaviours or the capability to use particular behaviours (Gagne, Briggs & Wager, 1992, p. 6). This definition agrees with the one proposed by Bell-Gredler (1986, p. 1) who says that learning is "the process by which human beings acquire a vast variety of competencies, skills and attitudes". From these two definitions it is clear that human beings are engaged in learning activities to enable them to acquire

different kinds of new behaviours including intellectual skills, verbal knowledge, attitudes, and values. On this point, Gagne et al. (1992) further maintain that these varieties of behaviours, commonly called "learned capabilities" (p. 12), are acquired through the cognitive processes operating in the learners' mental activity as a response to stimulation from environment, which provides input for learning. Thus, in a more formal way, learning can be defined as a set of cognitive processes that transform the stimulation from the environment into several phases of information processing required for acquiring a new capability. In short, within this framework, learning is conceived as information processing.

The information processing model consists of four memory structures and several control processes (Anderson, 1990; Gagne et al., 1992; Lindsay & Norman, 1975; Reynold & Flagg, 1983). The memory stores are sensory register (SR), short-term memory (STM), which is also called working memory, long-term memory (LTM), and response generator (RG). The control processes are attention, expectancies, rehearsal, construction, integration, encoding, and retrieval. The interrelationship of these components is depicted in the Information Processing Model (Figure 2.1).

The simple operation of the network functions as follows. Input from the learners' outside environment activates any one or more senses of seeing, hearing, tasting, smelling, and feeling as receptors. It is then transmitted as information to the sensory register and is retained there in a very short time. The information is interpreted in the form of recognisable ideas by the learners paying attention to its particular features of interest in relation to their expectancies. It then enters STM, where the information is still apt to fade easily: thus, regular rehearsal - "a control process in which information in working memory is mentally recycled" (Carroll, 1986, p. 49) - is required. Moreover, as the capacity of STM is very limited, it is necessary that the information be constructed and integrated (Weinstein & Mayer, 1988). In the process of construction, the learners are supposed to actively build internal connections between the ideas the information contains. In the process of

Figure 2.1 Information Processing Model



integration, they have to actively search prior knowledge in LTM and transfer this knowledge to STM so that there is a match between the old and the new.

The knowledge stored in STM may be immediately needed for making responses so that it has to be immediately transferred to RG. In most cases, however, it is transferred to LTM for relatively permanent storage to be used for future reference. Its transfer from STM to LTM is called the encoding process. Once it is needed, such as when the learners encounter a question, it is dredged back up to STM and this process is called retrieval. The required knowledge is then transferred to RG to be transformed into a performance by activating the effectors (muscles). Thus, output results and it may become input for other learners.

Mayer (1988) suggests that each of the control processes above can be enhanced by the use of appropriate learning strategies. Some learning strategies assist the selection of the incoming input and strengthen the process of attention. Some other strategies influence how much and what kind of rehearsal takes place. Others affect the speed and quality of encoding. Finally, a number of other strategies also determine the success of retrieval of information from LTM.

Anderson (1990, p. 220) maintains that information stored in LTM is of two types: "declarative" and "procedural". Declarative knowledge refers to facts and things that learners know about. It is called declarative because it is the knowledge that they are aware of and can declare what it is. Procedural knowledge, on the other hand, refers to knowledge about how to do various cognitive activities. It is called procedural because it is implicitly reflected in the procedures they follow in performing cognitive tasks.

In early stages of learning there is a frequent mismatch between declarative and procedural knowledge. In other words, there are cases where learners have gained declarative knowledge of a thing but have not acquired it as procedural knowledge. For example, they may have learned the rules for conducting an experiment in their science class, but they still encounter frequent mistakes when they are asked to perform it. One reason for this case is that the

former type of knowledge is learned much more quickly than the latter. O'Malley and Chamot (1990, p. 24) jointly state,

Whereas declarative knowledge or factual information may be acquired quickly, procedural knowledge . . . is acquired gradually and only with extensive opportunities for practice.

Meanwhile, in relation to STM and LTM, McLaughlin (1987) considers human memory as a large collection of nodes, each of which contains a set of information processing elements. Most of the nodes are passive and inactive, while others are active. The interconnected system of the passive nodes forms the so-called LTM. Due to stimuli from the environment, some nodes are activated and hence constitute STM.

McLaughlin (1987) further maintains that the activation of the nodes of STM required for encoding information to LTM takes place in two processes: "automatic" (p. 134) and "controlled" (p. 135). When the activation of certain nodes in memory is done every time there is an appropriate input coming, the process is called automatic processing. This node activation process is a learned response that has been built up through consistent mapping of the same input to the same pattern of activation over many trials. This process of course occurs only if the input is a one that comes quite frequently. Therefore, once it is learned, the process takes a very short time, and is even simultaneous. Thus, it is called automatic.

The other mode of node activation, controlled processing, is not a learned response. Instead, it is a temporary activation of nodes in a sequence. This activation requires a deliberate effort as well as attention and, therefore, only one element of the information can be processed at one time without any interference. Thus, the controlled process is very limited in its capacity and takes more time to do the task. However, once it is successfully done, practice is required so that in the long run it can turn into automatic processing.

In this sense, learning new skills is interpreted as the activation of nodes in STM required for transferring information to LTM with the regulation of

controlled processes. Therefore, learning takes time, but once automatic processes are achieved, as they become routinised, the controlled processes are ready to be utilised again for other tasks. McLaughlin (1987) highlights the importance of the controlled processes as he says that the "controlled processing can be said to lay down the 'stepping stones' for automatic processing as the learner moves to more and more difficult levels" (p. 135).

In most complex cognitive skill learning, however, practice for automaticity of its sub-skills alone is not enough because the time required for acquiring it is generally related to the complexity of the skill being learned. Therefore, the learners are supposed to actively connect the newly learned sub-skills with the old ones already stored in the LTM so that the skill is restructured through integration with the already learned ones. This is what Weinstein and Mayer (1988) call construction and integration.

In relation to the problem of acquisition of cognitive skills, Anderson (1990) maintains that the procedure follows three consecutive stages: "cognitive", "associative" and "autonomous" (pp. 258-260). In the cognitive stage, learners are engaged in a conscious activity to study the rules of doing a task and to observe others performing the task. Therefore, at this stage, the acquired knowledge is declarative and the learners can describe verbally what they have acquired. He provides a good example when he was first learning to shift gears in a standard transmission car. He memorised the location of the gears and the correct sequence of engaging the clutch and moving the stick shift. He continually rehearsed this information as he performed the skill. Thus this knowledge enabled him to describe how to shift the gears. However, the knowledge acquired in this stage is not quite sufficient for skilled performance because performance at this stage is very deliberate and tends to be loaded with errors.

The second stage, the associative stage, is characterised by two main things. Firstly, errors, which are very frequent in the earlier stage, start to be gradually detected and eliminated. The learners begin to be able to identify and correct some errors they have made. In the case of Anderson's example, he slowly learned to coordinate the release of the clutch in first gear with the application of

gas in order not to kill the engine. Secondly, there is a strengthening process of connections among the various elements required for successful performance. Again, in Anderson's example, he no longer had to sit for a few seconds trying to remember how to get to second gear from first. Thus it is in this stage when the declarative knowledge is transformed into procedural knowledge. The outcome of the associative stage is a successful procedure for performing the skill.

The autonomous stage, the last one, is in fact the extension of the second. Therefore, there is no sharp distinction between the two stages. In this stage the procedure becomes more and more rapid and automatic as errors that inhibit successful performance of the skill disappear. In fact, speed and accuracy are central parameters in this stage. Thus it is in this stage where the learners fully acquire the skill as indicated by being competent performers of the learned skill.

## 2.2 Language as a Cognitive Skill

As language is considered as a cognitive skill similar to other cognitive skills, the procedure that learners follow in learning a language is similar to the one they do in learning other things. This means that learning a language also requires activation of the four memory systems as well as the control processes as represented in Figure 2.1 on page 27. Moreover, the knowledge that the learners possess about language can also be divided into declarative and procedural types. The learners' knowledge of grammatical rules of a language is in fact their declarative knowledge because they are able to verbalise what they know about them. Their ability to apply these mastered linguistic rules to generate appropriate utterances required for effective communication is their procedural knowledge of the language.

Language is also acquired in the three stages of skill acquisition as described in the previous section. In the cognitive stage language learners deliberately try to learn, perhaps by memorising, vocabulary items and grammatical structures required for forming correct sentences. This knowledge enables them to describe what words are to be used and in what order they have to be arranged in order to convey a certain message that they want to communicate

to other people. However, as in learning other cognitive skills, this knowledge is not enough to facilitate skilled performance; therefore, several errors are still present in this stage.

When they move to the associative stage, their declarative knowledge starts to turn into procedural knowledge and this is indicated by less frequent errors in both their spoken and written performances. However, their declarative knowledge is not completely lost because although they start to be fluent speakers of the language, they are still aware of the grammatical rules underlying their linguistic production. As a result, some minor mistakes are still prevalent at this stage.

When they have reached the autonomous level at last, their performance becomes automatic so that they are no longer aware of the grammatical rules they apply in their utterances. In this level, they have been able to produce linguistic performance or comprehend linguistic input with ease and with very rare minor mistakes. In other words, they have gained adequate expertise in competently performing the language skill they learn.

O'Malley & Chamot (1990) provide further evidence of the position that language is a cognitive skill and thus to learn it is to learn a cognitive skill by referring to both the process of comprehending language as well as that of producing it. These two language activities are discussed in the following sections.

### *2.2.1 Language Comprehension*

Within a cognitive framework, language comprehension is defined as "the transformation of speech or print into a mental representation of what the listener/reader thinks the speaker/writer intended" (Danks, Bohn & Fears, 1983, p. 193). This definition indicates that comprehension is an active mental process in which learners as listeners or readers do a great deal of work building meaning from sounds or prints. Three sources are useful in the meaning construction process: textual cues such as punctuation in written language or pauses in spoken

language, grammatical rules that govern how sentences are constructed, and prior knowledge already stored in long-term memory (McDonough, 1981, p. 45).

The process, particularly in spoken language comprehension, is undertaken by means of four simultaneous actions:

1. They take in the raw speech and retain a phonological representation of it in "working memory".
2. They immediately attempt to organize the phonological representation into constituents, identifying their content and function.
3. As they identify each constituent, they use it to construct underlying propositions, building continually onto a hierarchical representation of propositions.
4. Once they have identified the proposition for a constituent, they retain them in working memory and at some point purge memory of the phonological representation (Clark & Clark, 1977, p. 49).

Meanwhile, by arguing that spoken language comprehension is in fact similar to written language comprehension, O'Malley and Chamot (1990) maintain that the activity of comprehending undergoes three interrelated processes: "perceptual processing", "parsing", and "utilisation" (p. 34). In the first process, perceptual processing, attention comes into play by focussing on the sounds or printed symbols and translating them into their word representations to be kept in STM. However, as it is very limited in its capacity, the information of word representations is kept for only a few seconds and new information replaces it. In this very quick STM storage there may be initial language analyses as attention is further focused on special aspects of the information that are necessary for the task of comprehension. These selected aspects are to be transferred to LTM.

In the second process, parsing, the learners start using the word representation of the text to construct its meaningful representation. As previously noted, what is kept in LTM is not in the form of an absolute copy of the incoming input, but in the form of recognisable propositions of ideas. In this case, written or spoken words and phrases in the text are decoded and matched with their representations in the declarative knowledge stored in LTM so that a proposition of ideas is constructed. In doing so the learners attempt to predict or hypothesise

the underlying proposition of the sentences and test them. Proficient learners tend to arrive at appropriate hypotheses more quickly than less proficient ones do. Because of these hypothesis testing attempts, Goodman (1976) considers reading as a "psycholinguistic guessing game" (p. 498). Once the meaning has been constructed, verbatim record of the original sentences is forgotten. Therefore, if readers are asked to reconstruct the original sentences, it is very likely that the resulting wordings as well as syntactical arrangements are very different from the original.

When the representation of a piece of information has been constructed, it is combined and integrated with other propositions already stored in the form of schemata of declarative knowledge in LTM so that the whole text is finally understood. This makes up the final process, utilisation, which is the key to comprehension. Three types of schemata are referred to in this process: content, formal, and linguistic. The first type refers to the learners' general knowledge of the topic of the text being dealt with and the second refers to the learners' knowledge of the rhetorical organisational structures of different types of text. The last one, moreover, refers to knowledge about linguistic aspects such as letters and their corresponding sounds, strings of letters that make up words, and syntactic rules that govern the arrangement of words into meaningful phrases and sentences (Carrell & Eisterhold, 1988; James, 1987). The learners' failure to utilise appropriate schemata, content, formal, or linguistic, during reading or listening may result in various degrees of imperfect comprehension. On this point Samuels and Kamil (1984, pp. 205-206) maintain,

To the extent that there is a good match between the information coming in from the outside and the knowledge stored in memory, we are able to comprehend and make sense of the world. When there is a poor match between incoming information and stored knowledge, the incoming information seems to be incomprehensible.

One thing to note about the three processes above is that they are recursive. This means that they do not necessarily go progressively straight forward one after the other, but there are cases where the learners go back to the

previous stage, for example parsing, when in fact they have been in the utilisation stage. This indicates that language comprehension is not a linear process.

The perception, parsing, and utilisation processes that lead to comprehension occur in three levels: lexicon, sentence, and discourse (Danks et al., 1983). At first learners are engaged in the process of mental activity to understand words making up sentences the text contains. Once this is achieved, they integrate those word meanings to make up clausal meaning and in turn devise sentential meaning. Finally, they organise the representation of individual sentences into discourse structures. Therefore, the formation of discourse comprehension is in line with the comprehension at sentential level. This means that as new sentences are comprehended, a discourse structure is updated to incorporate the new sentential meaning.

### *2.2.2 Language Production*

Like language comprehension, language production also includes both spoken and written language. The product of spoken language production is in the form of speech, while that of written language is in the form of text. The two types of language production exhibit a similar process, that is a process of constructing and expressing meaning; therefore, similar steps are followed. O'Malley and Chamot (1990) mention that this activity follows three stages of production: "construction", "transformation", and "execution" (p. 38), which, like the language comprehension processes, are also recursive so that the learners go back and forth between them.

In construction, learners state the goal they want to achieve in communicating. In written language production, they first decide what topic to write on, while in spoken language production they decide what topic to speak about. This process is also called "discourse plans" (Clark & Clark, 1977, p. 224; McDonough, 1981, p. 56). Once the goal has been set, they search related information that is stored in the form of declarative knowledge in their LTM. The selected information is then structured so that the resultant production is well organised. To do so, they utilise various types of other knowledge such as

discourse knowledge as well as sociolinguistic rules. If the goal is to describe how a certain event occurred, for example, they may tend to use a chronological approach so that one event is developed one after another from the very beginning to very end. Moreover, sociolinguistic knowledge enables them to choose appropriate language style to accord to their audience or readers.

In transformation they convert the intended meaning they want to convey into observable or audible words, phrases, and sentences. Therefore, at this stage meaningful sentences or utterances have been achieved through the application of language rules although they have not been written down or spoken out. Clark and Clark (1977, p. 224) and McDonough (1981, p. 56) subdivide this stage into "sentence plans" and "constituent plans". After deciding what kind of discourse they wish to write or to tell, the learners go on to mentally work on the sentential level. In so doing, they decide what to put as a subject of the sentence and what information is to follow. Syntactic rules are referred to in this stage. They also decide whether they want to present the message by means of sentences with literal meaning or metaphors. If this has been settled, they are now ready to perform constituent plans. At this stage, appropriate words, phrases or idioms are selected and put in a grammatical order so that correct sentences result.

Finally, execution is done when they implement the planned meaningful sentences or utterances in the form of written or spoken discourse. In spoken language production, the execution follows two sub-processes: "articulatory program" and "articulation" (Clark & Clark; 1977, p. 244; McDonough, 1981, pp. 56-57). As certain words or phrases have been selected, they are stored for a while in the articulatory program or "motor command" (Carroll, 1986, p. 252) to be phonologically shaped and combined with stresses and intonation. Finally, organs of speech are activated to execute the content of the articulatory program. The speech organs produce strings of sounds representing the words and phrases used to utter the intended message.

The stages above are also recursive in nature. As a result, there may be frequent revision and evaluation during the process until the final form is obtained. In other words, the first result may not be the final one as it is still

reviewed again and again and some corrections may be added until the process of evaluation produces a satisfactory result.

In short, the cognitive view of the principles of general skill learning also applies to the case of language learning. Therefore, considering language learning in the same way as learning other cognitive skills is justifiable.

### 2.3 Applying Cognitive Approach to Second/Foreign Language Learning

O'Malley and Chamot (1990, p. 19) mention that "second language acquisition is best understood as a complex cognitive skill". They further maintain that the employment of the cognitive approach to the study of strategies in second/foreign language learning entails several advantages. First, there have been many studies on cognitive skill acquisition carried out in the disciplines of cognitive psychology as well as computer sciences. The application of the research model developed in the two disciplines provides second language acquisition researchers with a comprehensive theoretical framework that is consistent with related work. Second, the approach accounts for the "dynamic" or "process" (p. 19) oriented stages of skill acquisition, which in turns allows second language acquisition researchers a more detailed view of the process of second language acquisition than is provided by most current models of second language learning. Third, the approach will provide a mechanism for describing possible ways to increase language learning ability. Finally, and most importantly, the approach helps second language researchers identify the existence and the use of certain learning strategies to acquire language skills.

The discussion of the application of the cognitive approach to second/foreign language learning focuses on the main points drawn from cognitive views of general learning as well as language learning. The points are that:

- a) learners' knowledge of language are declarative and procedural;
- b) in acquiring language skill learners go through the cognitive, associative, and autonomous stages of skill development;

- c) the restructuring process is required to strengthen automaticity.

The first point, which concerns the distinction between declarative and procedural knowledge of the second/foreign language, implies that knowing the grammatical system of second/foreign language is not a guarantee that learners are able to use the language in functional communication. As frequently observed in foreign language classroom contexts, learners have often achieved considerable mastery of phonological, morphological, and syntactic structures of the language, yet they can not apply those structures in either their spoken or written language performances. Therefore, in order that they be able to communicate effectively, they need to empower their procedural knowledge by, for example, engaging in communicative activities that allow them to practice turning their declarative knowledge into procedural knowledge (O'Malley, Chamot & Walker, 1987).

The second point relates to the three stages of skill acquisition: cognitive, associative, and autonomous. O'Malley and Chamot (1990) point out that during the cognitive stage second/foreign language learners undertake deliberate mental efforts in order to acquire the declarative knowledge. This conscious mental activity may focus on the functional use of language, as found among learners in informal contexts, or on the formal aspects of language such as the sound system, vocabulary, and syntax, as generally observed among learners in formal classroom contexts. In the associative stage, furthermore, learners gradually begin to be familiar with the declarative knowledge they have acquired in the previous stage and begin to be able to use it procedurally. In other words, their declarative knowledge starts to turn into procedural knowledge. They are apparently able to use the language for communication despite frequent mistakes since their attention still focuses on both form and meaning. When they are producing an utterance, for example, their awareness of the linguistic rules still control their performance. That is why McLaughlin (1987) considers this circumstance as "controlled processing" (p. 135). However, when they have reached the third, or autonomous, stage, they are able to generate language production without reference to the underlying rules. At this point, their declarative knowledge has completely changed into procedural knowledge so that they can proficiently use

the language for functional communication in the same way as native speakers can. In other words, automaticity has been gained. Regarding these stages of second language learning McLaughlin emphasises,

Second language learning, like any other complex cognitive skill, involves the gradual integration of subskills as controlled processes initially predominate and then become automatic. Thus the initial stages of learning involve the slow development of skills and the gradual elimination of errors as the learner attempts to automatize aspects of performance. In later phases, there is continual restructuring as learners shift their internal representations (1987, p. 139).

McLaughlin, Rossman and McLeod (1983) provide empirical evidence on automaticity in second/foreign language learning in the case of lexical retrieval, syntactic processing and reading. Some of the studies are discussed again here. Henning (1973), for example, reported that different techniques for encoding lexical items were found among second language learners of different proficiency levels. Less advanced learners of second language tended to make word recognition errors that indicated acoustic clustering, while more advanced learners showed evidence of making errors that indicated semantic clustering. This indicated that the less advanced learners gained less automaticity in arriving at the semantic aspect of the language.

Moreover, Dornic (1979) conducted a series of research studies, using speed of processing as a measure of automaticity. It was found that automaticity in both comprehending as well as producing second language performance was in line with the subjects' experience in working with the language. The subjects, who were apparently more experienced in using the language for communication, were found to be able to encode and decode second language utterances more automatically. However, no matter how experienced they were, their competence in the second language was still inferior to their competence in the first language. This meant that words of the second language tended to be decoded more slowly than words of the first language. Similarly, they appeared to encode information in the first language much more easily than information in the second language. In

other words, even perfect bilinguals never attain the same degree of automaticity in the second language and in the first language.

In the case of syntactic processing, Rossman (1981) compared the reading recognition ability between native speakers and non-native speakers of English. Rossman noticed that the non-native speakers who had not reached automaticity in syntax processing recognised alterations of syntactic features of a sentence better than alterations of semantic features. The opposite situation was found among the native speakers of English.

Wolfe (1981) conducted a similar study with 55 English-speaking children learning French as a second language. The subjects were asked to read a short text and then were given a target sentence. What they had to do was to identify whether the target sentence was 'the same as' or 'different from' any one sentence in the text. The texts were either in English or French or contained combined sentences of the two languages. Meanwhile, the target sentences were either the same or in a different language and had either the same or a different meaning. The study found that children with better proficiency in the second language reported more 'different' sentences correctly when only the meaning was altered (and the language remained the same) than did less proficient children. Conversely, the less proficient children achieved better scores in the target sentences when the language was changed and the meaning was kept the same. The findings showed that the less proficient children had not yet gained automaticity in processing language form to the same degree as the more proficient children.

Cziko (1980) made a comparison of two groups of children in their French oral reading errors. The first groups consisted of English-speaking children and were learning French as a second language, whereas the second group were native speakers of French. The research found that children who were less proficient in French made a considerably higher proportion of substitution errors that graphically resembled the text than did advanced learners as well as native speakers of French. On the contrary, the advanced learners and the native speakers of French were found to have significantly higher errors of deletion and insertion.

This shows that less proficient second language learners have not yet attained automatic reading skills that more advanced learners have achieved.

The last point related to the application of cognitive theory to second language learning concerns the role of restructuring to reinforce automaticity. McLaughlin (1987) mentions that learning a second language is not a "linear" and "cumulative" (p. 143) process. Rather, such cases as the forgetting of mastered forms occur quite frequently. As a result, second language performances tend to increase in some cases and to decrease in other cases. This phenomenon implies that second language learning involves refinement and restructuring of the already mastered language forms in relation to the new ones encountered.

McLaughlin (1987) considers that learning strategies are in fact involved in the restructuring process. In earlier stages learners tend to simplify, regularise and even overgeneralise the linguistic patterns they are learning. In such cases, they make hypotheses and test them when they attend to linguistic input. The results, whether to reject or to accept their hypotheses, are restructured to their mastery framework and, if necessary, refinement is effected. Chamot and O'Malley (1994) state, "the potential benefit of learner and learning strategies is in the development of the students' ability to become autonomous" (p. 372).

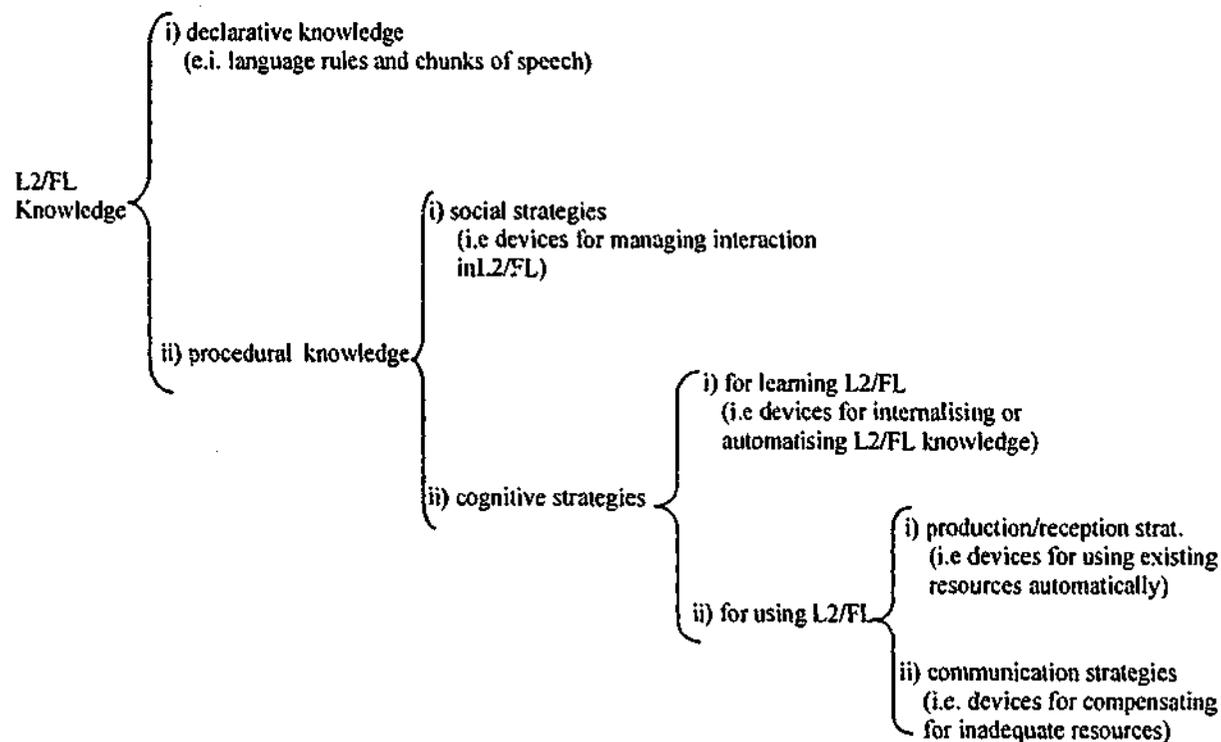
#### 2.4 Language Learning Strategies: a Cognitive View

As mentioned earlier, within a cognitive theory of learning learners' knowledge of second/foreign language is supposed to consist of two categories: declarative knowledge and procedural knowledge. The former relates to knowing what to do and the latter to knowing how to do it. Ellis (1985) mentions that the former contains memorised rules and chunks of the second/foreign language, whereas the latter contains strategies and procedures that learners use to process the target language data to be acquired and used. Thus, when one talks about what to acquire, one means declarative knowledge, while when one talks about how to acquire, one means procedural knowledge.

Ellis further maintains that procedural knowledge can be subdivided into two subcategories: social and cognitive components. The social component is

represented in the behavioural strategies employed by the learners in managing interactional opportunities to use the target language being learned. The cognitive component comprises various mental processes required for internalising and automatising the second/foreign language and in employing the knowledge in real use. Thus, this component consists of strategies for learning and strategies for using the target language. The process involved in the use of second/foreign language knowledge comprises production and/or reception strategies and communication strategies. The production/reception strategies are defined as any attempts to use available second/foreign language efficiently and effectively, whereas the communication strategies are defined as any attempts that learners of second/foreign language use when they fail to communicate their original communicative goal in the way they planned to. In such a case they are forced to use any alternative attempts to get their message comprehended.

Figure 2.2 Types of Second Language Knowledge



Source: Ellis (1985, p. 165)

The classification of second/foreign language knowledge as provided by Ellis (1985) is presented in Figure 2.2. It is important to note that the strategies

above are not particular to a certain type of learners. Both native language learners and non-native language learners use the same types of strategies, but with different intensity and efficiency.

This classification of second/foreign language knowledge colours the ways that experts define learning strategies. Holley and Dansereau (1984) define them as operations employed by the learner to aid the acquisition, storage, retrieval, and use of information. Similarly, O'Malley and Chamot (1990) mention that learning strategies are special ways of "processing information that enhance comprehension, learning, or retention of the information" (p. 1). In these two definitions learning strategies are perceived as mental processes that are taking place inside the learner's mind; thus they are mostly unobservable.

Mayer (1988), on the other hand, views learning strategies as a set of a learner's behaviours that are intended to influence how the learner processes information. Moreover, Oxford (1990a) defines them as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (p. 8). In these two definitions learning strategies are perceived as observable steps that the learners take in their learning process. In other words, the characteristic of learning strategies is that they are observable as behaviours.

Thus, in line with Ellis, it is argued here that learning strategies contain both covert mental processes and overt behaviours. The first elements may be in the form of memorising, imagining, or controlling emotions, which are unobservable in nature, whereas the second can be in the form of underlining, paraphrasing, note-taking, and the like, which are observable.

In the next chapter, the development of studies of learning strategies is discussed chronologically starting from 1975 when Stern attempted to list characteristics of good language learners until 1990s when detailed classifications of learning strategies were produced (O'Malley & Chamot, 1990; Oxford, 1990a). Factors affecting the use of learning strategies are also discussed.

## Chapter Three

# LANGUAGE LEARNING STRATEGIES AND FACTORS AFFECTING THEIR USE

In light of the cognitive theory of language learning, studies of language learning strategies themselves are also reviewed. In this chapter two main areas are addressed. Firstly, the development of studies aimed at identifying and classifying learning strategies is traced chronologically from the 1970s to the 1990s. This begins in 1975 when Stern provided a list of the characteristics of the supposedly good language learners until 1990 when Oxford came up with an impressive taxonomy of language learning strategies. Secondly, factors that have been thought to affect the use of learning strategies are also reviewed in this chapter. Several factors are covered in the discussion, especially those that are included in the present study, including cultural background, target language setting, learning stage, course status, career choice, gender, language aptitude, personality traits, and attitude/ motivation.

### 3.1 Studies to Identify and Classify Language Learning Strategies: an historical perspective

Interest in studies directed at identifying and classifying learning strategies of second/foreign language learners did not emerge until the mid 1970s. At first the attempts came mainly from literature reviews or studies in the area of second language learning, rather than foreign language learning. Stern (1975) initiated them by drawing up a list of ten strategies that he thought good learners employed in their learning. The strategies were based on three main sources: his interpretation of the concept of language competence and problems of second language acquisition, his experience as a teacher and learner, and his reading of

the available literature on language learning. Stern's strategies are summarised below.

- a. *Planning Strategy: acquiring personal learning style.* Good language learners are active in discovering techniques of learning that suit them best, willing to take advantage from strategies of other students if they think they are good, and adaptive to new learning situations.
- b. *Active Strategy: approaching learning tasks actively.* Good language learners are actively involve in the learning process, set their own learning goals and take steps to gain the goals, such as by adapting the learning activities to their goals.
- c. *Empathic Strategy: getting to be tolerant of the target language and developing empathy with its speakers.* Good language learners are constantly relaxed when learning, they do not feel afraid of making mistakes, and more importantly, they develop positive attitudes to the target language as well as its native speakers.
- d. *Formal Strategy: obtaining the technical know-how about how to tackle a language.* Good language learners progressively try to acquire adequate linguistic rules of the target language such as by analysing them in comparison with the systems of their first language.
- e. *Experimental Strategy: experimenting and planning with a view to developing the new language into an ordered system.* In their endeavour to master the target language system, good language learners make some kinds of hypotheses and test them by experimenting in use in order to discover their rules. The discrete rules are accumulated to make up a well-ordered system of their own.
- f. *Semantic Strategy: searching for meaning.* In understanding the meaning of any sentences or utterances, good language learners make use of any techniques, not necessarily relying on the linguistic rules. Such information as the context of when and where the utterance is made is utilised effectively to attend to the intended meaning.

- g. *Practice Strategy: willing to practice.* Good language learners are completely aware that the acquisition of language does not take place at once; it requires deliberate effort to practice it formally. Therefore, they always seek out opportunities to practice it.
- h. *Communication Strategy: willing to use the target language in real communication.* Good language learners realise that formal-mechanic practice provided by their teacher in the classroom is not sufficient for building up communicative competence. Thus, they engage themselves in activities that allow them to practice the language in real communication.
- i. *Monitoring Strategy: self-monitoring and being sensitive to target language use.* Good language learners are critical of the progress they make. They always monitor themselves. When they make mistakes, they try to correct them by sensitising themselves to the target language use by other speakers. In other words, they constantly learn from the mistakes they make.
- j. *Internalisation Strategy: developing the target language into a reference system and learning to think in it.* In their learning process, good language learners strive to go beyond their first language as a reference of thought, rather they build up their own system of second language. In so doing, they acquire a habit of thinking in the second, instead of the first language.

Stern, however, has mentioned that the list he made is highly speculative; therefore, it needs to be confirmed and modified.

Using Stern's list as a framework, Rubin, (1975) conducted several classroom observations on strategies of good second language learners in California and Hawaii and she also gathered complementary data from interviews with the teachers. She isolated and identified seven strategies of good language learners.

- a. Good language learners are *willing and accurate guessers*. In any circumstances, no one is able to attend to all linguistic forms that a speaker uses; thus, the listener is required to utilise any available clues to come to the intended meaning. In this case, the good language learners are able to make

use of both linguistic as well as non-linguistic clues for constructing accurate guesses of the intended message that the speaker wants to convey.

- b. Good language learners *have a strong drive to communicate or to learn from a communication*. They always search for techniques to get their message across when facing difficulties in communicating. Such things as gestures, paraphrasing, and using cognates are common among them.
- c. Good language learners *are often not inhibited*. They are willing to take the risk of producing possible mistakes in communicating, appearing foolish when the situation demands them to be so, and living with a certain amount of uncertainty in their learning process.
- d. Good language learners *are prepared to attend to form in addition to focusing on communication*. They are constantly searching for patterns of formal features of the target language by analysing and synthesising the linguistic rules, and then incorporating them into their own system.
- e. Good language learners *practice*. They practice the language such as by pronouncing words, combining words to make up sentences, seeking opportunities to speak with native speakers, or even initiate conversations with teachers or fellow learners.
- f. Good language learners *monitor their own speech and the speech of others*. They constantly consider how well they have been able to produce speech in the target language and they are willing to learn from mistakes they possibly have.
- g. Good language learners *attend to meaning*. They are fully aware that attending to the grammar of the language alone is not enough to comprehend a speech. Thus, they make use of other clues such as the relationship between participants or mood of the speakers in order to come to the closest possible interpretation of the message of a speaker's speech.

Since then, this new area of research has gained much more interest from other researchers. Naiman et al. (1978) conducted interviews with thirty-four adults who had learned second/foreign languages in the past. They identified five major strategies that are supposed to describe the overall approach to language

learning and to be important to the success of language learning. The strategies are that:

- a. *Good language learners actively involve themselves in the language learning task*, such as by utilising or even creating opportunities for learning as well as practice, searching for their own problems in learning and trying to cope with them, and utilising their non-learning activities, for example, watching films as learning activities.
- b. *Good language learners develop or exploit an awareness of language as a system*. In so doing, they do things such as referring back to their first language such as by translating or making comparisons, and analysing the language they learned so that they could formulate and test hypotheses about the system.
- c. *Good language learners develop and exploit an awareness of language as a means of communication*. They try to convey messages to others and to comprehend the messages of others in the target language. To get the chances to do so, they seek out or create opportunities for having conversations in the target language.
- d. *Good language learners realise initially or with time that they must cope with the affective demands made upon them by language learning and succeed in doing so*. They are aware that they should not be afraid of making mistakes and that they even need to laugh at their own mistakes.
- e. *Good language learners constantly revise their L2 systems*. They always evaluate their performance in the language they are learning, seek out any help to check if their hypotheses or inferences are true and make corrections when they find their hypotheses incorrect.

Then, by referring to main problems mostly found in the language learning process, Stern (1983) claimed that the language learning process is best understood by considering the learners in terms of their intellectual/cognitive, social, and affective characteristics. Accordingly, he updated his hypothesis about the language learning strategies that good language learners are thought to use and derive from these four basic sets of strategies.

- a. *Active Planning Strategy.* By this strategy good language learners are active in formulating their own learning goals, participating in the learning processes, and monitoring the development they have made.
- b. *Academic Learning Strategy.* By this strategy good language learners are willing to attend to formal features of the language, learn and practice them, and monitor their performance.
- c. *Social Learning Strategy.* This strategy includes attempts that good language learners pursue in seeking out communicative contact with target language users. When they have been in contact, they employ communication strategies to overcome the difficulties they encounter.
- d. *Affective Strategy.* Good language learners always try to cope with problems of emotion in their learning task such as language shock and stress. They build up positive attitudes toward themselves as learners, toward the learning task, and toward the society and culture of native speakers of the target language.

Later, using Rubin's categories of learning strategies as a frame of reference, supplemented by the work of others, Chesterfield and Chesterfield (1985) conducted classroom observations in order to come to a more detailed classification of learning strategies that learners really employ in the classroom. The subjects were fourteen students of Spanish learning English as a second language. The study came to a list of twelve strategies including repetition, memorisation, formulaic expression, verbal attention getting, answering in unison, talking to self, elaboration, anticipatory answer, monitoring, appealing for assistance, requesting clarification, and role playing.

From several lists of learning strategies that the language learners employ as mentioned above, G. Jones as cited by Willing (1988, pp. 92-93) summarises and lists the following as the most important general strategies for language learning:

- a. *Valuing:* good language learners value the culture, the language and its speaker.
- b. *Planning:* good language learners think about their language needs and how best to fulfil them.
- c. *Evaluating:* good language learners think about how well they are learning the language and what could be done to improve the learning process.

- d. *Monitoring: good language learners monitor all facets of their, and others' language.*
- e. *Internalising: good language learners think about what is being learnt, and incorporate it into a developing system.*
- f. *Hypothesising: good language learners consider possible manifestations of the language, test these hypotheses, and make subsequent modifications accordingly.*
- g. *Rehearsing: good language learners rehearse their speech when preparing for an interchange.*
- h. *Communicating: good language learners actively look for opportunities to communicate.*
- i. *Persisting: good language learners try again, if necessary in other ways, when there has been communication breakdown.*
- j. *Risk-taking: good language learners are willing to make mistakes, or to appear foolish in order to communicate.*
- k. *Practising: good language learners practice.*
- l. *Inferencing: good language learners are far-ranging and accurate guessers.*
- m. *Attending to Meaning: good language learners search for meaning.*
- n. *Attending to Form: good language learners pay attention to the patterns in the language that express the meanings.*
- o. *Absorbing: good language learners immerse themselves in the language.*

While the attempts to classify learning strategies of good language learners are very fruitful, a serious weakness is present because those categorisations do not seem to have a consistent theoretical foundation. They are merely intended to compile inventories of learning strategies that learners are observed to use or reported using. Consequently, overlaps seem to appear in the lists of learning strategies that the experts provide. In the list provided by both Stern (1975) and Rubin (1975), for example, it is mentioned that one of the characteristics of good language learners is that they practice. They realise that seeking out opportunities to practice the language is a requirement to build up proficiency. However, another characteristic described is that they communicate. They use the language in real communication with peers, teachers, or even native speakers of the language they learn. The use of language in real communication is in fact a manifestation of their attempt to practice the language.

O'Malley and his colleagues have attempted to conduct several studies on language learning strategies using a cognitive psychology paradigm. The selection of this framework allows them to apply the cognitive-metacognitive learning

strategies distinction as the basis of the study. To these two distinctions of learning strategies, they add one more type, called socioaffective strategies. Using a descriptive design, O'Malley, Chamot, Stewnwe-Manzanas, Russo, and Küpper (1985a), for example, studied the use of strategies by learners of English as a second language. Chamot and Küpper (1989) used a longitudinal design to study strategies by learners of Spanish and Russian as foreign languages. The two studies have a common primary objective, that is, among others, to identify and classify the strategies that the two groups of learners employ in their learning activities.

In general the studies revealed at least two similar findings. The first one was that the learning strategies that both second and foreign learners employ fell within three major categories: cognitive, metacognitive, and social strategies. Cognitive strategies refers to "steps or operations used in problem-solving that require direct analysis, transformation or synthesis of learning materials" (Ellis, 1994, p. 536). Among the cognitive strategies listed by O'Malley et al. (1985a) are repetition, inferencing, and translation. Metacognitive strategies refer to steps to "make use of knowledge about cognitive processes and constitute an attempt to regulate language learning by means of planning, monitoring, and evaluating" (Ellis, 1994, p. 538). Among the metacognitive strategies listed by O'Malley et al. (1985a) are advance organisers, selective attention, self-monitoring, and self-evaluation. Social/affective strategies relate to "the ways in which learners elect to interact with other learners or native speakers' of the target language" (Ellis, 1994, p. 538). Among the social/affective strategies listed by O'Malley et al. (1985a) are cooperation and questioning for clarification. Detailed classifications and definitions of the learning strategies of second language learners are presented in Table 3.1. The second similar finding was that both second and foreign language learners employed cognitive strategies more than they did metacognitive strategies.

Table 3.1 Learning Strategies Employed by Second Language Learners

<i>Learning Strategy</i>	<i>Description</i>
<b>A. Metacognitive Strategies</b>	
Advance Organisers	Making a general but comprehensive preview of the organising concept or principle in an anticipated learning activity
Directed Attention	Deciding in advance to attend in general to a learning task and to ignore irrelevant distractors
Selective Attention	Deciding in advance to attend to specific aspects of input or situational details that will cue the retention of language input
Self-Management	Understanding the conditions that help one learn and arranging for the presence of those conditions
Functional Planning	Planning for and rehearsing linguistic components necessary to carry out an upcoming language task
Self-Monitoring	Correcting one's speech for accuracy in pronunciation, grammar, vocabulary, or for appropriateness related to the setting or to the people who are present
Delayed Production	Consciously deciding to postpone speaking in order to learn initially through listening comprehension
Self-Evaluation	Checking the outcomes of one's own language learning against an internal measure of completeness and accuracy
<b>B. Cognitive Strategies</b>	
Repetition	Imitating a language model, including overt practice and silent rehearsal
Resourcing	Using target language reference materials
Translation	Using the first language as a base for understanding and/or producing the second language
Grouping	Reordering or reclassifying words, and perhaps labelling, the material to be learned, based on common attributes
Note taking	Writing down the main idea, important points, outline, or summary of information presented orally or in writing
Deductions	Consciously applying rules to produce or understand the second language
Recombination	Constructing a meaningful sentence or larger language sequence by combining known elements in a new way
Imagery	Relating new information to visual concepts in memory via familiar, easily retrievable visualisations, phrases, or locations
Auditory Representation	Retention of the sound or a similar sound for a word, phrase, or longer language sequence
Keyword	Remembering a new word in the second language by: (1) identifying a familiar word in the first language that sounds like or otherwise resembles the new word, and (2) generating easily recalled images of some relationship the new word and the familiar word
Contextualisation	Placing a word or phrase in a meaningful language sequence
Elaboration	Relating new information to other concepts in memory
Transfer	Using previously acquired linguistic and/or conceptual knowledge to facilitate a new language learning task
Inferencing	Using available information to guess meaning of new items, predict outcomes, or fill in missing information
<b>C. Social Mediation</b>	
Cooperation	Working with one or more peers to obtain feedback, pool information, or model a language activity
Question for Clarification	Asking a teacher or other native speaker for repetition, paraphrasing, explanation, and/or examples

Source: O'Malley et al. (1985a, pp. 582-584).

The classifications and definitions of learning strategies obtained from the longitudinal study on foreign language learners are presented in Table 3.2. The strategies are also under three categories but Chamot and Küpper (1989) labelled the third as Social and Affective Strategies, not Social Mediation.

Table 3.2 Learning Strategies Employed by Foreign Language Learners

**Metacognitive strategies** involve thinking about the learning process, planning for learning, monitoring the learning task, and evaluating how well one has learned.

1. *Planning*: Previewing the organising concept or principle of an anticipated learning task ("advance organisation"); proposing strategies for handling an upcoming task; generating a plan for the parts, sequence, main ideas, or language functions to be used in handling a task
2. *Directed attention*: Deciding in advance to attend in general to a learning task and to ignore irrelevant distractors; maintaining attention during task execution.
3. *Selective attention*: Deciding in advance to attend to specific aspects of language input or situational details that assist in performance of a task; attending to specific aspects of language inputs during task execution.
4. *Self-management*: Understanding the conditions that help one successfully accomplish language tasks and arranging for the presence of those conditions; controlling one's language performance to maximise use of what is already known.
5. *Self-monitoring*: Checking, verifying, or correcting one's comprehension or performance in the course of a language task. This has been coded in the think-aloud in the following ways:
  - a. *Comprehension monitoring*: checking, verifying, or correcting one's understanding.
  - b. *Production monitoring*: checking, verifying, or correcting one's language production.
  - c. *Auditory monitoring*: using one's "ear" for the language (how something sounds) to make decisions.
  - d. *Visual monitoring*: using one's "eye" for the language (how something looks) to make decisions.
  - e. *Style monitoring*: checking, verifying, or correcting based on an internal stylistic register.
  - f. *Strategy monitoring*: tracking use of how well a strategy is working.
  - g. *Plan monitoring*: tracking use of how well a plan is working.
  - h. *Double-check monitoring*: tracking, across the task, previously undertaken acts or possibilities considered.
6. *Problem identification*: Explicitly identifying the central point needing resolution in a task, or identifying an aspect of the task that hinders its successful completion.
7. *Self-evaluation*: Checking the outcomes of one's own language performance against an internal measure of completeness and accuracy; checking one's language repertoire, strategy use, or ability to perform the task at hand. This has been coded in the think-aloud as:
  - a. *Production evaluation*: checking one's work when the task is finished.
  - b. *Performance evaluation*: judging one's overall execution of the task.
  - c. *Ability evaluation*: judging one's ability to perform the task.
  - d. *Strategy evaluation*: judging one's strategy use when the task is completed.
  - e. *Language repertoire evaluation*: judging how much one knows of the L2, at the word, phrase, sentence or concept level.

**Cognitive Strategies** involve interacting with the material to be learned, manipulating the material mentally or physically, or applying a specific technique to a learning task.

1. *Repetition*: Repeating a chunk of language (a word or phrase) in the course of performing a language task.
2. *Resourcing*: Using available reference sources of information about the target language, including dictionaries, textbooks, and prior work.
3. *Grouping*: Ordering, classifying, or labelling material used in a language task based on common attributes; recalling information based on grouping previously done.

Table 3.2 (continued)

4. *Note taking*: Writing down key words and concepts in abbreviated verbal, graphic, or numerical form to assist performance of a language task.
5. *Deduction/Induction*: Consciously applying learned or self-developed rules to produce or understand the target language.
6. *Substitution*: Selecting alternative approaches, revised plans, or different words or phrases to accomplish a language task.
7. *Elaboration*: Relating new information to prior knowledge; relating different parts of information to each other; making meaningful personal associations to information presented. This has been coded in the think-aloud data in the following ways:
  - a. *Personal elaboration*: Making judgements about or reacting personally to the material presented.
  - b. *Word elaboration*: Using knowledge gained from experience in the world.
  - c. *Academic elaboration*: Using knowledge gained in academic situations.
  - d. *Between parts elaboration*: Relating parts of the task to each other.
  - e. *Questioning elaboration*: Using a combination of questions and world knowledge to brainstorm logical solutions to a task.
  - f. *Self-evaluative elaboration*: Judging self in relation to materials.
  - g. *Creative elaboration*: Making up a story line, or adopting a clever perspective.
  - h. *Imagery*: Using mental or actual pictures or visuals to represent information; coded as a separate category, but viewed as a form of elaboration.
8. *Summarisation*: Making a mental or written summary of language and information presented in a task.
9. *Translation*: Rendering ideas from one language to another in a relatively verbatim manner.
10. *Transfer*: Using previously acquired linguistic knowledge to facilitate a language task.
11. *Inferencing*: Using available information to guess the meaning or usage of unfamiliar language items associated with a language task, to predict outcomes, or to fill in missing information.

**Social and affective strategies** involve interacting with another person to assist learning or using effective control to assist a learning task.

1. *Questioning*: Asking for explanation, verification, rephrasing, or examples about the material; asking for clarification or verification about the task; posing questions to the self.
2. *Cooperation*: Working together with peers to solve a problem, pool information, check a learning task, model a language activity, or get feedback on oral or written performance.
3. *Self-talk*: Reducing anxiety by using mental techniques that make one feel competent to do the learning task.
4. *Self-reinforcement*: Providing personal motivation by arranging rewards for oneself when a language learning activity has been successfully completed.

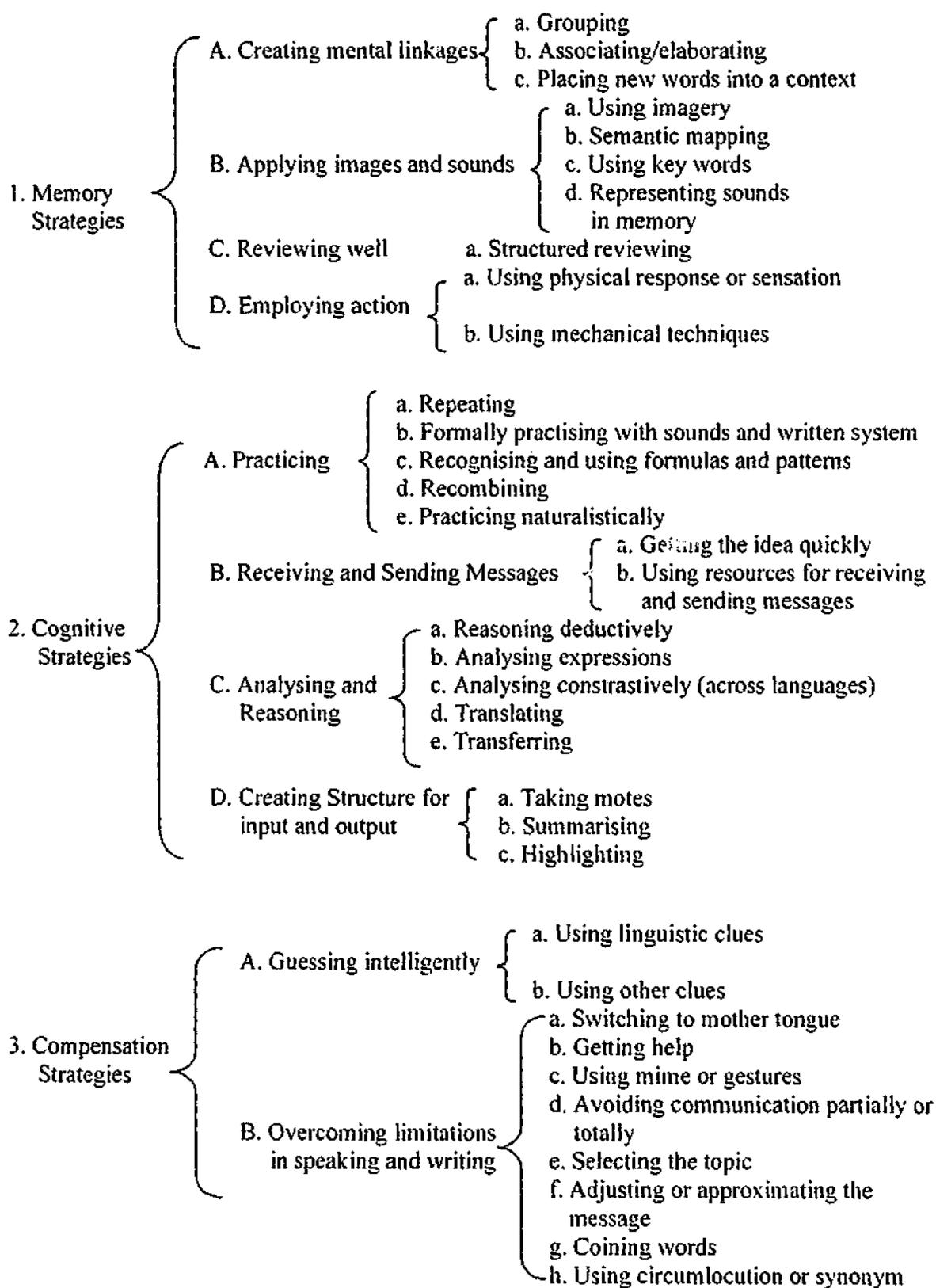
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Source: Chamot and Küpper (1989, pp. 15-16)

Another detailed classification of language learning strategies is proposed by Oxford (1990a), who classifies them into two general categories, each of which contains several subcategories. The first category is called direct strategies because they directly involve the target language and it contains subcategories of memory strategies, cognitive strategies and compensation strategies. The other one is called indirect strategies because they do not directly involve the target language, but they do support language learning. This category also contains three subcategories: metacognitive strategies, affective strategies, and social strategies.

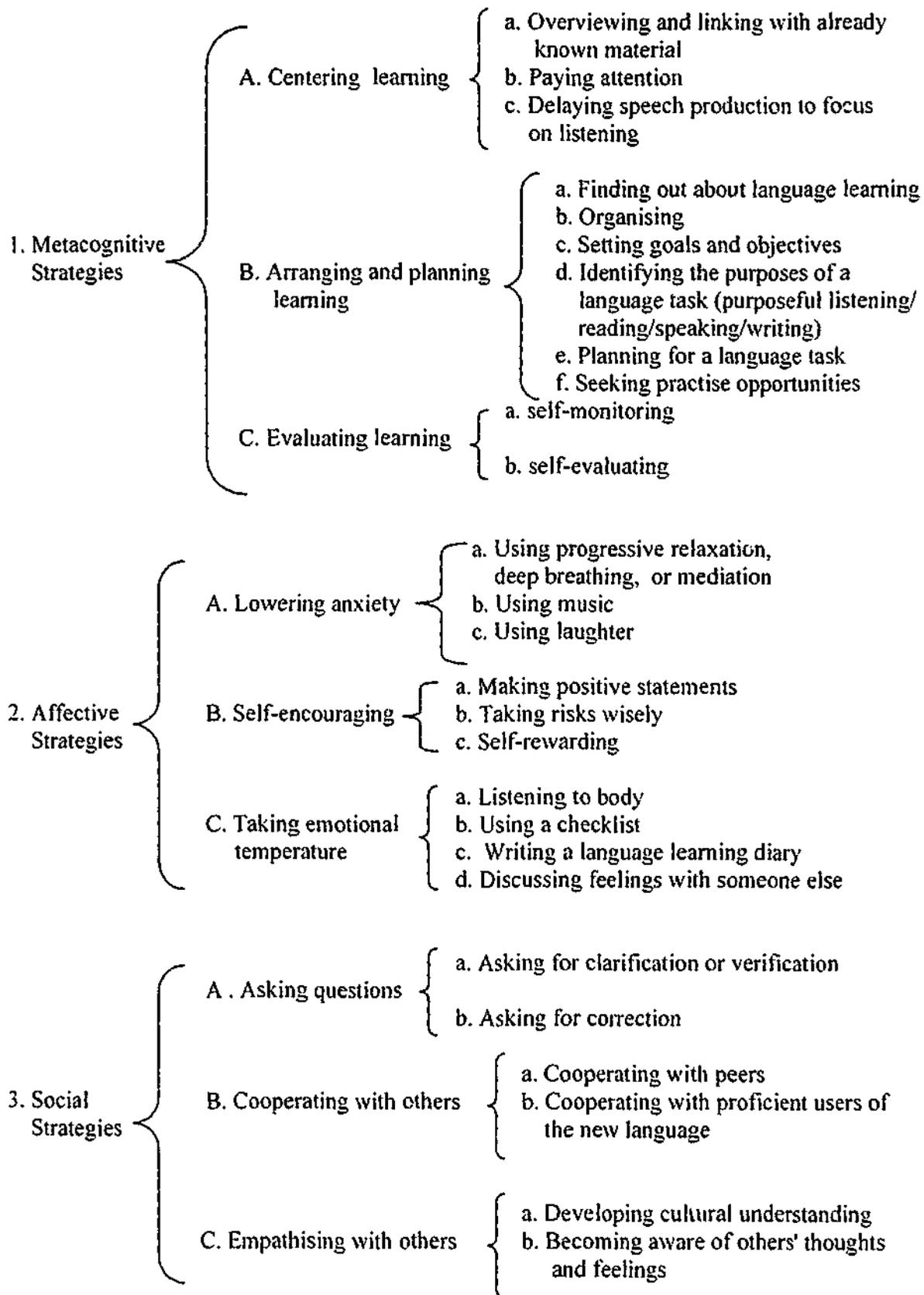
Detailed classifications of both direct and indirect strategies are presented in diagrams as in Figure 3.1 and 3.2 respectively.

Figure 3.1 Oxford's Classification of Direct Learning Strategies



Source: Oxford (1990a, pp. 38-39, 44, 48).

Figure 3.2 Oxford's Classification of Indirect Learning Strategies



Source: Oxford (1990a, pp. 136-137, 141, 145)

Despite the fact that the two classifications as proposed by O'Malley and his colleagues (O'Malley et al., 1985; Chamot and Küpper, 1989) and Oxford (1990a) share a "a considerable degree of common ground" (Lunt, 2000, p. 17), Oxford's taxonomy seems to be more comprehensive, as it covers all strategies that has already appeared in the literature. O'Malley and Chamot (1990) commented, "What Oxford apparently tried to do was to subsume within her classification virtually every strategy that had previously been cited in the literature on learning strategies" (p. 103). In their view, however, this technique of compiling strategies entailed several weaknesses,

The problem with this approach, so far as a taxonomy of strategies is concerned, is that this extended listing is far removed from any underlying cognitive theory, fails to prioritize which strategies are most important to learning, and generates subcategories that appear to overlap (p. 103).

As far as the third weakness is concerned, Oxford (1990a) has actually mentioned that overlaps unavoidably take place in her taxonomy,

A large overlap naturally exists among the strategy groups in the system presented here. For instance, the metacognitive category helps students to regulate their own cognition by assessing how they are learning and by planning for future language tasks, but metacognitive self-assessment and planning often require reasoning, which is itself a cognitive strategy! (p. 16)

The inclusion of compensation strategies - strategies taken when communication breakdowns take place - is also claimed to be a weakness of the taxonomy (Ellis, 1994) as Oxford departs from already existing literature. Other researchers consider such strategies as communication strategies - strategies directed at using a language - distinct from learning strategies (Tarone, 1983, Brown, 1987). On this point, however, Rubin (1987) stated, "The relationship of communication strategies to learning strategies is not always clear since in the process of clarifying meaning, learners may uncover new information which they

then store in their language learning system" (p. 26). That is why the two terms have often been used interchangeably to refer to the same construct (Huda, 1999).

However, apart from the weaknesses of the taxonomy, Ellis (1994) mentioned that "the organisation of specific strategies into a hierarchy of levels and the breadth of the taxonomy is impressive" (p. 539). And, more importantly, this categorisation of language learning strategies has been converted into two sets of questionnaires called the Strategy Inventory for Language Learning (SILL) that can readily be used by other researchers for collection of data on learners' learning strategies. The first one is to be used with second/foreign language learners whose first language is English, and the other one is to be used with speakers of other languages who learn English as a second/foreign language. The questionnaires have been used extensively in a great number of studies around the world as documented in Oxford and Burry-Stock (1995) and Oxford (1996a). The second version of the questionnaire, in particular, has now been translated into other languages such as Arabic, French, Chinese, Japanese, Korean, Russian, Spanish, Thai and Ukrainian (for the purpose of this study, into Indonesian with permission from the author).

In these two types of questionnaire, the learners are provided with statements about learning strategies, to each of which they are required to select a response represented by a number from 1 to 5 indicating how frequently they use the given strategy. Scale 1 means that the learners never or almost never use it, 2 rarely use it, 3 sometimes use it, 4 generally use it, and 5 always or almost always use it.

### 3.2 Factors Affecting the Use of Learning Strategies

Gillette (1987) has claimed that learning strategies are symptoms of individual predispositions, which may be motivational, socio-cultural, or cognitive in nature. This suggests that a number of factors are associated with learning strategy use and the effect can be in terms of the number, type, or frequency of use. Some of the factors are discussed in this section.

### *3.2.1 Cultural Background*

The effect of cultural background on the use of learning strategies was probably first studied by Politzer and McGroarty (1985), who administered a questionnaire of presumed good language learning behaviours to 17 Asian students and 18 Hispanic students. They were enrolled in an eight-week intensive course in English as a second language in the United States. The study found that the two groups of students exhibited three categories of learning behaviours, classroom, individual study, and interaction, at significantly different frequency levels. Classroom behaviours such as correcting fellow students, asking the teacher, volunteering in class and social interaction behaviours such as asking for help, asking others to repeat, and asking for confirmation were used significantly less often by the Asian students than by the Hispanic students. The Asian students, on the other hand, were found to prefer memorisation more strongly than the Hispanic students.

LoCastro's (1994) study supported the finding reported above. After interviewing Japanese learners of English, he concluded that the main learning strategy of Japanese learners was memorisation. However, Asian learners of Japanese as studied by Grainger (1997) revealed a contradictory finding when he compared the use of strategies in learning Japanese by students with English speaking background, European background, and Asian background. The students with Asian background were found to prefer compensation and social strategies the most. Memory strategies were rated the least preferred strategies. Lengkanawati (1997), who studied the use of strategies by Indonesian learners of English at the Institute of Teacher Training and Education, Bandung, Indonesia came up with a similar finding that memory strategies were used the least frequently.

One probable cause that leads to the different findings regarding the use of memory strategies by Asian learners is the too broad category of Asian culture. There are lots of cultures in Asia and to an extent they are different to one another. Japanese culture, for example, may differ in their approaches to learning from Indonesian culture. Even, in Indonesia alone, there are around 500 subcultures as

indicated in the fact that around 500 local languages with even thousands of dialectical varieties are spoken as first languages (Nababan, 1982). Consequently, it seems to be an overgeneralisation to claim that Asians are in favour of memory strategies more than other types of strategies, particularly if the claim is based on one culture origin only.

Levine, Reves and Leaver (1996) reported a study that compared the use of strategies between immigrants from the former Soviet Union to Israel and people who have lived in Israel for at least five years. The former group was found to use rote memorisation more frequently than the latter group, especially in the area of grammar, like learning grammatical rules and examples by heart, and vocabulary, like learning lists of translation. The latter group, on the other hand, was found to use strategies of stimulating work and paraphrasing rules more often than the first group.

Cultural background, however, was also found not to affect the use of learning strategies in some studies. Setiyadi (1999) studied the difference in the use of cognitive and metacognitive strategies by Javanese and Sumatran (both are sub-ethnic groups of Indonesians) learners of English and found that the two groups did not show any significant differences in the use of these two types of learning strategies. Lunt (2000) investigated the strategies used for learning English by students at Adult Multicultural Education Service (AMES), Australia. Analysing the difference in the use of four strategy categories including memory, cognitive, metacognitive, and social strategies by twelve groups of participants based on their first language, she found that there were no significant differences in the use of these four strategy categories by these groups of participants. The study, however, found that the participants with European first language groups such as Italian, Spanish, Polish and Former Yugoslavia reported higher frequency of use than those with Asian first language group, who were mostly Chinese.

### *3.2.2 Target Language Setting*

The setting where the language is learned either as a second language or a foreign language proved to be a factor of variation in the use of learning strategies. Second language learners - those learning a language in a context where it is required for meaningful daily communication - typically use learning strategies more often than their counterparts learning a foreign language - a context where the language being learned is not the everyday means of communication (Oxford & Ehrman, 1995). Green and Oxford (1995) mentioned that, on average, the typical second language learners reported frequent use of 3.7 of the six strategy categories, while the typical foreign language learners less than one. They further maintained that this tendency is due to the fact that the learners in the second language setting obtain constant exposure to the target language and the communicative demand from the environment is high. The learners in the foreign language setting, on the other hand, obtain limited exposure to the target language and the communicative demand from the environment is relatively low.

Wharton (2000) supported the assertion of higher use of strategies by second language learners than by foreign language learners. In his study dealing with Singaporean learners of Japanese and French as foreign languages he found that his participants turned out to use learning strategies at a lower frequency level than did students in the second language setting. Rossi-Le's study as cited by Oxford and Burry-Stock (1995) revealed a high frequency of use of most strategy types by English as a second language learners in two community colleges in the United States. These strategies covered social strategies, authentic language strategies, visualisation strategies, formal practice strategies, metacognitive strategies, memory strategies, and affective strategies.

O'Malley and Chamot (1990) found that students of Russian and Spanish as foreign languages reported using some strategies which were not in the O'Malley et al.'s (1985a) list of strategies obtained from learners of English as a second language. These strategies were rehearsal, translation, note taking, substitution, and contextualisation. The students of English as a second language,

on the other hand, reported using key words as a cognitive strategy, while the foreign language students reported not using it at all.

### *3.2.3 Course Status*

The status of the language being learned, either elective or required, is also a source of variations in the use of strategies. Oxford and Nyikos (1989) found students who electively learned a foreign language used functional practice strategies and general study strategies significantly more often than did their counterparts who learned it simply as an academic requirement for graduation.

### *3.2.4 Career Orientation*

Career orientation or field specialisation has also been found to be a source of variation in the use of learning strategies. Politzer and McGraorty (1985), for example, compared the use of English learning strategies between students majoring in Engineering/Physical Science and those majoring in Social Science/Humanities. Their findings indicated that the students of social science/humanities came up with higher scores in all three learning behaviour scales including classroom behaviour, individual study behaviour, and interaction behaviour. Of these three differences, only the difference in the use of individual study behaviours was found to be significant. The researchers, however, warned about the possibility of misinterpreting the findings since the Engineering/physical science versus social science/humanities distinction they made was similar to and to a large extent overlapped with the Asian/Hispanic contrast as reviewed in the previous section.

Ehrman and Oxford (1989) studied the difference in the use of learning strategies by three groups of participants having different professions: professional language trainers, teachers, and students. The study found that professional trainers used a wider range of strategies than the other two groups of participants in four out of ten strategies, including authentic language use, searching for communicative meaning, formal model building, and affective

strategies. Teachers were not found to use any one of the strategies to a greater extent than did professional trainers, but they used strategies of authentic language use more often than did students. And, relative to both professional trainers and teachers, students used all of the strategy types less frequently.

### *3.2.5 Learning Stage*

Learning stage is also considered to affect the use of learning strategies. Gardner and MacIntyre (1992, p. 217) claims that "more proficient students employ strategies that are different from those used by less proficient learners", in the sense that better learners use a wider variety of strategies. In a similar vein, McLaughlin (1990, p. 170) states, "More experienced language learners are more able to switch strategies when the task calls for such flexibility".

Findings of some studies, in which learning stage is usually operationally defined as learners' course level or proficiency level, support the claim that more proficient learners used a wider range of strategies than less proficient learners. Green and Oxford's (1995) study of 374 students of prebasic, basic, and intermediate levels of English in Puerto Rico revealed that students in the higher course level reported using cognitive, compensation, metacognitive, and affective strategies significantly more frequently than students in the lower course level. A further analysis of the 50 individual strategies found that students with higher course level used 22 strategies significantly more frequently than did students with lower course level. Wharton (2000) came up with a similar finding, when he studied Singaporean learners of Japanese and French. Students with good and fair proficiency used strategies in general significantly more often than did those with poor proficiency.

O'Malley, Chamot, Stewner-Manzanares, Küpper, and Russo (1985b), however, found that beginning level students were able to identify more strategies than intermediate level students. The former group of students reported almost twice as many cognitive strategies as the latter group. Huda (1998) found a similar finding that good learners reportedly used fewer strategies than did fair learners.

Meanwhile, Vann and Abraham's (1990) study revealed that unsuccessful learners also turned out to be active users of learning strategies, although they sometimes used them inappropriately. They also used many of the same strategies as the successful learners did.

### *3.2.6 Gender*

In a number of studies, males and females have also been found to use strategies of learning with a different degree of frequency, with females showing greater use than males, as reported by Oxford, Nyikos and Ehrman (1988). In another study, Ehrman and Oxford (1989) also found that females reported significantly more frequent use than males of four strategy factors, including general strategies, authentic language use, searching for and communicating meaning, and self-management strategies. Green and Oxford's (1995) findings supported the presence of the effect of gender difference. Females were found to be significantly more often in the use of four out of six strategy categories, including memory, metacognitive, affective, and social strategies. Kaylani's (1996) findings also revealed that females used more strategies than males. In her study involving 255 high school students in Jordan, she found that female students used significantly more memory, cognitive, compensation, and affective strategies than male students. Oxford, Park-Oh, Ito and Sumrall (1993) also found that females learners of Japanese by Satellite reported higher use of cognitive, social, affective, memory and metacognitive strategies, with the difference in the use of the first three strategy categories being close to statistical significance.

Different findings, however, were obtained in other studies. Lunt's (2000) study, for example, revealed no significant differences in the use of memory, cognitive, metacognitive, and social strategies between males and females. Meanwhile, Wharton (2000) found only 23 out of 80 strategy items used at significantly different frequency by males and females. Interestingly enough, thirteen of these strategies, such as planning learning objectives, paying attention to feeling, and connecting known words to new words, were reportedly used more

frequently by males than by females. The other ten strategies, such as not translating word-for-word, using rhymes to remember words, and skimming then reading carefully, were used significantly more often by females.

### *3.2.7 Language Aptitude*

Aptitude has shown to be a good predictor of achievement (Bialystok & Fröhlich, 1978; Gardner & Lambert, 1972; Naiman et. al., 1978). In this regard, Gardner and MacIntyre (1992, p.215) comment, "Research makes it clear that in the long run language aptitude is probably the single best predictor of achievement in a second language". Unfortunately, research trying to correlate language aptitude and learning strategies has been scarce. The few studies available so far show that strategy use seems not to be strongly related to language aptitude. Bialystok and Fröhlich (1978) conducted a multiple correlation between aptitude, strategy use, attitude, and field independence and found that the correlation between aptitude and strategy use was not significant. Politzer (1983), however, accentuated the possible relationship between language aptitude and strategy choice.

Oxford and Ehrman (1995) reported that cognitive strategies were significantly related to number learning, one measure of aptitude covered in the Modern Language Aptitude Test (Carroll & Sapon, 1958). Compensation strategies were negatively correlated with total score on language aptitude test, suggesting that low aptitude students used more strategies than high aptitude students did.

As evidence of the relationship between aptitude and strategy use was still weak (Ellis, 1994), much research was undoubtedly required on this issue. Oxford (1990b, p. 108) has also mentioned the need for this type of study as she says, "Relationships between strategies and aptitude have hardly been studied, because researchers have not adopted a conceptual framework linking these variables".

### *3.2.8 Personality*

A common assumption says that more successful language learners are those with out-going, talkative personalities (McDonough, 1981). In her list of the characteristics of a good language learner, Rubin (1975) mentions that he/she is not inhibited, willing to appear foolish and to live with uncertainty in their learning process. These two assertions imply that students with different personality characteristics employ different learning strategies.

Oxford (1990a) reported that personality characteristics, such as competitiveness and strong emotionality, influence the use of learning strategies. Regarding the extrovert/introvert dimensions of personality, some unexpected findings have come up. Ehrman and Oxford (1989) found that extroverts preferred visualisation strategies better than did introverts. Introverts, on the other hand, reported more frequent use of strategies for searching for and communicating meaning. These findings were surprising as Strong (1983) concluded that extroversion was an advantage for developing communicative skills. In another study (Ehrman & Oxford, 1990), however, extroverts were found to use social strategies more consistently than introverts.

McDonough (1981) comments that the association between personality traits and language learning strategies is to be regarded as inconclusive. Even, Ellis (1994, p. 543) states, "If there are important links between personality and strategy choice, they remain to be demonstrated".

### *3.2.9 Attitude/Motivation*

Gardner and his associates are researchers who have devoted most of their studies to the role of motivation in second/foreign language learning (Clément, Smythe & Gardner, 1978; Gardner, 1985; Gardner & Lambert, 1972, Gardner & MacIntyre, 1992, 1993; Gardner, Tremblay & Masgoret, 1997), which is defined as "individual's attitudes, desire, and effort to learn" (Gardner et al., 1997, p. 345). Gardner (1985) mentions that motivation covers four aspects, including a goal, effort, desire to achieve the goal, and attitude. He further maintains that the role of

motivation is that it determines how well learners will involve themselves in language learning activities, which can be inferred from both "perseverance in language study and classroom behaviour" (p. 56). Krashen (1981) has also asserted that high motivation drives learners to engage in interactive communication with native speakers, which in turn increases the amount of input they receive.

Thus, if motivation is correlated to learning strategies, an intuitive expectation is that the more motivated learners will tend to use more varied strategies than less motivated learners. Politzer and McGroarty (1985) have made the point that learners' goals in learning a new language are likely to determine the use of strategies. Oxford and Nyikos (1989) came up with a finding that the degree of expressed motivation to learn the language was the most powerful influence of strategy choice. Motivation was found to be extremely significantly correlated to the use of formal rule-related practice strategies, functional practice strategies, general study strategies, and conversational input elicitation strategies. Although not significant, motivation was also found to affect the use of resourceful, independent strategies. Oxford and Ehrman (1995) reported a similar finding that the overall use of learning strategies was linked with motivational elements, especially intrinsic motivation and desire to use the language outside class. For learners of Japanese and French in Singapore Wharton (2000) also found that the degree of motivation provided the most significant main effect on the use of learning strategies.

Schmidt, Boraine and Kassabgy (1996) reported their findings of the correlation between motivation and learning strategies. A factors analysis of their data regarding motivation resulted in nine factors, including determination, anxiety, instrumental motivation, sociability, attitudes to culture, foreign residence, intrinsic motivation, beliefs about failure, and enjoyment. A factor analysis of learning strategies revealed five factors, including active involvement, organising learning, recourse management, coping strategies, and time management. The correlational analyses found factor 1 of motivation (determination) was significantly linked with active involvement, organising

learning, resource management, and coping strategies. Factor 3 (instrumental motivation) was found to correlate with active involvement, and factor 4 (sociability) was related to active involvement and organising learning.

In summary, factors of cultural background, target language setting, course status, career orientation, learning stage, gender, language aptitude, personality traits, and attitude/motivation have been found to determine the use of language learning strategies in some studies. In the next chapter, studies that deal with the use of learning strategies, some of which have been briefly touched upon previously, are reviewed in detail.

## Chapter Four

### STUDIES OF STRATEGIES IN SECOND/FOREIGN LANGUAGE LEARNING

As discussed earlier, in the beginning stages research in the area of language learning strategies focused on the secret of success of good language learners. Such studies have resulted in the identification of strategies of good language learners (Naiman, Fröhlich & Todesco, 1975; Naiman et al., 1978; Rubin 1975; Stern, 1975). Further studies have investigated the strategies of not only good language learners, but also less effective language learners. These studies have produced classifications of learning strategies under certain categories (O'Malley & Chamot, 1990; Oxford, 1990a). Once theoretically and empirically valid classifications of learning strategies had been obtained, studies in this new field of research began to mushroom. Skehan (1991, p. 285) characterised the period as one of an explosion activity.

In fact, studies that dealt with language learners' learning strategies can be classified into four general categories. The first are descriptive studies that explore the use of learning strategies by certain groups of learners. The second are studies that consider learning strategy as a predictor of other variables such as proficiency, learning achievement, or learning rate. The third are studies that treat learning strategy as a criterion variable. And the last are studies that deal with learning strategy in association with other variables disregarding whether it stands as a predictor or a criterion variable. In this case, learning strategies are studied as one of several components of a model. This chapter is devoted to the review of studies within these four categories. The findings of some of the studies, however, may have been touched upon in the preceding chapters.

#### 4.1 Descriptive Studies of Learning Strategy Use

Several studies aiming at describing the application of learning strategies by second/foreign language learners have been conducted. Some studies do not use Oxford's (1990a) strategy inventory, while some others do. One of the studies, which does not use SILL as the instrument for the collection of data of learning strategies, was carried out by O'Malley et al. (1985a). The researchers investigated the application of the metacognitive, cognitive and socioaffective strategies by 70 high school students learning English as a second language. They were from both beginning level and intermediate level. In addition, 22 teachers who provided instruction to these students were also included as subjects of the study. The instruments used for collecting data were an observation guide and an interview guide. Fifty-three classroom observations and individual interviews with teachers were conducted. In addition, students were also interviewed in 19 small groups of 3 to 5 students.

The results indicated that 638 instances of learning strategies were found, 30 percent of which were metacognitive strategies, 53% were cognitive strategies and the remaining 17% were socioaffective strategies. Among the metacognitive strategies, the two groups of learners were reported to use self-management and advance preparation the most frequently. Self-management accounted for 19.6% of all metacognitive strategy occurrences for learners of beginning level and 22.5% for learners of intermediate level. However, beginning-level learners relied more on selective attention (22.3%) than intermediate-level learners (16.3%).

In the case of cognitive strategies, the two groups of learners were found to use imagery, note taking and repetition more frequently than other types of cognitive strategies. The percentages of use were 12.5, 18.7, and 19.6 respectively. Finally, in terms of socioaffective strategies, the two groups were found to use questions for clarification more than cooperation. The proportion was 52.8% and 47.2% for beginning level and 51.4% and 48.6% for intermediate level.

These findings suggest that learners of English as a second language tend to use cognitive strategies more than both metacognitive and socioaffective

strategies. In this case, they prefer imitating a new language model either aloud or silently. Toward the incoming language model, they take at least two actions. One is that they put it on the paper by taking notes and the other one is that they keep it in their mind in the form of visual images so that it can be better understood or more easily remembered. Moreover, in terms of metacognitive actions, learners of English as a second language, particularly those in the beginning level, do not pay attention to all language input coming to them. Instead, they select certain aspects to focus on. When the language aspects have been decided, they preview them so that the basic principles are understood. To support this effort, they try to understand conditions that help them learn and acquire the selected language aspects. Lastly, in terms of socioaffective strategies, to solve problems they like eliciting additional explanation or the like from their teacher or peers better than from group-work.

One non SILL study carried out in Indonesia is Sugeng's (1997) research, which studied the use of strategies by Indonesian primary school students who learned English as a local content subject in the school curriculum. Sugeng used four classifications of strategies: metacognitive, cognitive, affective, and social strategies and found that the students favoured cognitive strategies the most (63.31%) with strategies of *asking for clarification from the teacher* and *asking questions to the teacher* being the most frequently used. Meanwhile, the percentages of use of the other three categories were found to be 23.79, 9.05, and 3.85 for the affective, social, and metacognitive strategies respectively. Sugeng acknowledged that his finding of the low use of the social and metacognitive strategies is "not reflective of typical language classes in other contexts" (p. 93).

Among studies employing the SILL inventory, Oxford and Ehrman (1995) conducted a study which was, among others, intended to investigate the use of learning strategies by adult learners at the Foreign Service Institute (FSI), the training branch of the U.S. Department of State. As a large project, the overall sample consisted of 520 people, 99% of whom were native speakers of English. They were highly experienced language learners. A quarter of them had learned three or more foreign languages previously, 30% had learned two foreign

languages previously, 31% had learned one foreign language previously, and only 16% had no prior experience in learning any foreign language. Of these subjects, however, only 268 people were asked to complete the SILL instrument.

The result demonstrated that the overall use of learning strategies was moderate (mean 2.44 of a possible 5). Moreover, no strategy categories were reported to be 'always or almost always used' and that none strategy categories were reported to be 'never or almost never used'. The most frequently used strategies category was compensation strategies such as guessing and paraphrasing (mean 3.16), immediately followed by social strategies (mean 3.15) and cognitive strategies (mean 3.10). Unfortunately, the mean scores of the use of these three categories of language learning seem to have been misinterpreted by Oxford and Ehrman. They reported that the three types of strategy categories above were already in the 'generally used' range, while in fact, they were still in the range of 'sometimes used' (see Oxford, 1990b, p. 291 on Key to Understanding Averages). Other strategy categories that were also reported as 'sometimes used' were metacognitive strategies (mean 2.91) and memory strategies (mean 2.56). And, the least frequently used strategy type was affective strategies (mean 2.34). Again, there seems another misinterpretation of the mean of this last strategy category. The researchers mentioned that the mean score was still in the 'sometimes used' range, while in fact it was already in the 'generally not used' range.

Apart from some misinterpretations of the mean scores, these findings showed that the FSI learners typically used strategies at a medium level. Even, the researchers claimed that the group of learners in this study employed learning strategies more frequently than other groups of learners they have investigated. Two reasons were offered to account for this relatively higher strategy use. On the one hand, the FSI learners were generally experienced learners who already knew a great deal about how to learn. On the other hand, they were receiving intensive training so that the learning situation was more like a second language learning environment than a foreign language learning environment.

Merrifield (1996) also conducted a study that examined the language learning strategies used by upper-intermediate level adult French learners of English. The subjects were four executives of thirty and forty years of age and worked for insurance company. Their learning activities took place in their company at La Defence, a business centre on the outskirts of Paris. She also employed the Strategy Inventory for Language Learning (Oxford, 1990a) as the instrument for the data collection. To avoid misunderstanding, subjects were advised to stop when they faced difficulties in comprehending questions. Help was provided so that they could fully understand what a question meant.

Similar to the result of a study by Oxford and Ehrman (1995) as reviewed above, Merrifield's study also found that the overall use of learning strategy was moderate (mean 2.88). In addition, no strategy category was reported as 'always or almost always used'. Surprisingly, the affective strategy was found to be 'generally not used' or 'never or almost never used'. The most frequently used category of strategies was that of compensation strategies - strategies employed when encountering knowledge barriers - (mean 3.20) and this was followed immediately by metacognitive strategies (mean 3.19) and cognitive strategies (mean 3.11). Next were social strategies with a mean of 2.94. These four categories of learning strategies - compensation, metacognitive, cognitive, and social strategies - were still in the range of 'sometimes used'. The strategy categories that fell within the 'generally not used' range were memory strategies (mean 2.46) and affective strategies (mean 2.14).

In Australia, Lunt (2000) investigated the use of learning strategies by learners of English as a second language at the Adult Migrant Education Service (AMES). The number of subjects participating in the study was 154 consisting of 63 males and 91 females. They were from different ethnic backgrounds with substantial number being Chinese (47), Former Yugoslavia (19), Khmer (12), Spanish (12), Farsi (10), Serbian (10), Vietnamese (10), Arabic (8) and Polish (7). The data regarding learning strategies were also collected using the SILL. However, affective and compensation strategy categories were excluded from her

study as the two categories were found to have low reliability indexes when Cronbach values were measured.

Although she did not report the overall mean score of the use of the four strategy categories, it could be said that the students at AMES were moderate to high users of learning strategies. This interpretation was made as, of the four strategy categories, two categories - memory and cognitive - were used at a moderate frequency and the other two categories - social and metacognitive - at a high frequency. In this case, memory strategies were used at the lowest frequency (mean 3.12) and social strategies were used at the highest frequency (mean 3.82). The mean scores of the other two categories were 3.38 and 3.76 for cognitive and metacognitive strategies respectively.

In Singapore Wharton (2000) conducted a study with 678 university students learning French and Japanese as foreign languages. These subjects were either bilingual or multilingual. In terms of the mother tongue, 93% mentioned it was Chinese, 2% Malay/Indonesian, 2% Indian languages, 2% English. In addition another 2% reported two languages, Chinese and English, as their mother tongues. The data of learning strategies were gathered using the SILL of version 5.1 (Oxford, 1990) which consisted of 80 items.

The study found that all of the six strategy categories were used at the medium level of frequency, with social strategies being used at the highest frequency level (mean 3.16) and affective strategies being used at the lowest frequency level (mean 2.67). The ranking of the other four categories was compensation strategies (mean 3.14), metacognitive strategies (mean 2.96), cognitive strategies (mean 2.94), and memory strategies (mean 2.77).

In the context of Indonesian learners, Lengkanawati (1997) carried out a study that also contained a description of learning strategies. Her study actually dealt with two groups of subjects - Indonesian learners of English as a foreign language and Australian learners of Indonesian as a foreign language - and it was ultimately directed at investigating the effect of learning strategies on proficiency level. In this section, however, only the descriptive component of the study is reviewed, particularly the one concerned with the use of strategies by Indonesian

learners of English. As many as 114 students at the English Department, IKIP Bandung (Indonesia) participated in the study. Data of learning strategies were also collected using Oxford's (1990a) SILL. However, Lengkanawati modified the responses to the SILL as she used a four-point scale. Scale 1 indicated that the students never or almost never used the strategy, 2 rarely used it, 3 often used it, and 4 always or almost always used it. The criteria to interpret the mean score of use were that a mean of 1.00 - 1.48 indicated very low usage, 1.49 - 2.49 low, 2.50 - 3.50 high, and 3.51 - 4.00 very high.

The study found that the overall mean score of use of English learning strategies was 2.58, which, according to the researcher's criteria, indicated a high frequency of use. In terms of the six strategy categories, two categories - memory and social strategies - were used at a low frequency with mean scores of use being 2.30 and 2.36 respectively. The other four categories, on the other hand, were used at a high frequency with mean scores of use being 2.66 for metacognitive and cognitive strategies, 2.67 for affective strategies, and 2.81 for compensation strategies. Thus, her study found the strategy category used at the lowest frequency was memory strategies and the one used at the highest frequency was compensation strategies.

The studies using the SILL above showed that no strategy categories under Oxford's classification had been reported as 'always or almost always' used as no mean scores of use were reported above 4.5. Likewise, no strategy categories were reported as 'never or almost never' used as no mean scores were reported below 1.5. This indicates that all strategy categories are used at different frequency levels ranging from 'generally not used' to 'generally used'.

In general the learners of different groups as represented in the five studies above were found to be moderate users of learning strategies. Among the six strategy categories, compensation strategies and social strategies were the most popular. Compensation strategies were found to be the most popular in both Oxford and Ehrman's study and Merrifield's study. Social strategies, moreover, were used at the highest frequency in the other three studies.

Rubin (1975) hypothesises that learning strategy use is different from culture to culture. Oxford (1993) mentions national origin as a possible source of variation in the use of learning strategies. Therefore, despite the fact that the use of learning strategies has been very much explored, similar studies using different groups of subjects are still needed to add more information to the existing body of literature. It is partly for this purpose that the present study was carried out.

#### 4.2 Learning Strategies as Predictor Variables

Once it was found that successful language learners employed different rate of strategies from the unsuccessful learners, it was then suspected that learning strategies might determine language learning success. Therefore, several studies were conducted to correlate learning strategies with measures of success such as achievement and proficiency attainment. In other words, learning strategies were used as predictor variables of learning progress in such studies.

In fact, before a sophisticated classification of learning strategies was obtained, Bialystok and Fröhlich (1978) had already tried to correlate learning strategies and classroom achievement in second language learning. In their study, 157 students of French as a second language from grades 10 and 12 in Toronto were used as the sample. Bialystok and Fröhlich developed a questionnaire to measure how often individual students used three types of learning strategies, practicing, inferencing and monitoring. The achievement was assessed in four measures of reading, listening, writing, and grammar. The study found that learning strategies use correlated significantly with three out of four measures of achievement. In this case, the students who reported using learning strategies frequently tended to have high achievement in reading, listening, and grammar, but not writing.

Using the term learning behaviours, Politzer (1983) studied the relationship between three scales of learning behaviours - general behaviours, classroom behaviours, and interaction behaviours - and the grades for language achievement of 90 undergraduate students who were learning French, Spanish and

German. In addition, the three scales of learning behaviours were also correlated with teachers' evaluation of the students' progress, effort, and participation. The study found that both classroom behaviours and interaction behaviours significantly correlated with both grades and teachers' evaluations. The relationships between general behaviour scale and grades as well as teachers' evaluation, however, were not found to be significant.

A later study by Politzer and McGroarty (1985) yielded even more striking findings when they correlated the three learning behaviour scales with proficiency gains. In this study, instead of using the term general behaviour, the term individual study behaviours was used as the behaviours within this category reflect learning behaviours that the students used when they learned the language by themselves outside the classroom. Four proficiency measures were used including the Plaister Aural Comprehension Test (PACT), the Comprehensive English Language Test (CELT), Discrete-Point Communicative Competence test (Discrete-Point CC), and Global Communicative Competence test (Global CC). The tests were administered twice - before the course and after the course - so that the gains from the two administrations were obtained. The data were collected from 37 students enrolled in an eight-week intensive course of English as a second language in the United States. Out of the twelve correlation coefficients (three behaviour scales times four proficiency measures), only one was significant at .05 level. It was the correlation between interaction behaviours and global CC. The rest were not significant. Even, both individual study behaviours and classroom behaviours were negatively correlated with gains in CELT.

This type of study, which correlated learning strategies and measures of success in language learning, became even more popular with a more sophisticated classification of learning strategies. Findings from a study by Oxford and Ehrman (1995) though were surprisingly different from what was expected. As described in the previous section, the overall sample for the project consisted of 520 adult learners at the Foreign Service Institute, United States. However, only 268 people were asked to complete the Strategy Inventory for Language Learning (SILL). One of the questions to be answered was whether the

strategy use correlated significantly with proficiency ratings. The proficiency assessments of speaking and reading were conducted at the end of the training sessions that lasted 3 to 44 weeks. The analysis unexpectedly came to a conclusion that only cognitive strategies correlated significantly with both speaking and reading proficiency. The researchers admitted that their finding was different from what was expected and therefore further evidence was still required.

Dreyer and Oxford (1996) jointly conducted a study on learning strategies and other predictors of proficiency in English as a second language among Afrikaans speakers in South Africa. One of the questions to be answered was whether there was a statistically significant relationship between learning strategy use and proficiency in English as a second language. In this study, 305 first-year African learners (age 18-21 years) at the Potchefstroom University were used as the subjects of the study. They consisted of 175 females and 126 males. The instrument for collecting data on learning strategy use was Oxford's SILL (Strategy Inventory for Language Learning), while the one used for collecting data on English proficiency was the Test of English as a Foreign Language (TOEFL). Although correlational analysis does not necessarily indicate causal relationship, the study employed this analysis treating the strategy use as the predictor variable and TOEFL score as the criterion variable.

In general, the analysis found that the correlations between strategy use - all the SILL categories were taken as one set of variables - and proficiency - all the TOEFL sections were taken as a set of variables too - were positive and highly significant. When categories of learning strategies and sections of TOEFL were considered as separate variables, the strongest significant relationship was between metacognitive strategies and TOEFL Section 3 (reading/vocabulary). This was followed by the relationship between metacognitive strategies and total TOEFL score, metacognitive strategies and TOEFL Section 1 (listening) and metacognitive strategies and TOEFL Section 2 (structures). Cognitive strategies were found to correlate significantly with the total TOEFL score and compensation strategies correlated significantly with total TOEFL score, TOEFL

Section 1, TOEFL Section 3. Lastly, lower correlations were found between affective strategies and TOEFL Section 2, TOEFL Section 3, and total TOEFL. In short, the study supported the claim that learning strategies were good predictors of learning success.

Park (1997) carried out a similar study with 332 students in two Korean universities. The data on learning strategies were also collected by means of the SILL and the data regarding students' proficiency were also collected by means of a TOEFL. Using a regression analysis the study found that the linear combination of the six strategy categories of the SILL correlated significantly with proficiency as the multiple correlation coefficient (R Square) was .14. This coefficient proved to be significant as the F-value was 8.40 ( $p < .01$ ). Of the six strategy categories, cognitive and social strategies were the best predictors of English proficiency as measured by the TOEFL scores.

Two studies of this kind in the Indonesian context were reviewed. Djiwandono (1998) investigated the predictability of oral communication proficiency from learning strategies and degrees of extroversion. The use of learning strategies was assessed in terms of three dimensions - consistency, diversity, and purposefulness -, while the degrees of extroversion were assessed in terms of seven indicators - sociability, responsibility, activity, expressiveness, reflectiveness, and risk-taking. Fifty secretarial students at the University of Widya Karya, Malang, Indonesia were used as the subjects. The study found that diversity, one dimension of strategy use, and expressiveness, one indicator of extroversion, turned out to be the best predictors of oral communication proficiency. These two predictors explained 48% of the total variance of the dependent variable.

Lengkenawati (1997) also carried out a similar study, the descriptive part of which was reviewed in the earlier section. She also investigated the predictability of proficiency from learning strategies. As mentioned earlier, 114 students at the English Department, IKIP Bandung (Indonesia) participated in the study and the data on learning strategies were collected by means of the Oxford's SILL. The data on proficiency, on the other hand, were measured by means of a

TOEFL, which consists of items on listening, structure, and reading comprehension. In general, when the students' total TOEFL scores were regressed against the six categories of learning strategies, a multiple correlation coefficient (R Square) of .0485 was obtained, suggesting that the independent variables and the dependent variables shared a common variance of only 5%. An analysis of the significance of this coefficient resulted in an F-value of .911, which was found to be not significant. In other words, the study found that the six learning strategy categories did not significantly affect proficiency in learning English. This finding of insignificant correlation was consistent when detailed analyses were carried out to see the effect of learning strategies on the use of the three components of TOEFL: Listening Comprehension, Structure and Written Expression, and Reading and Vocabulary.

Other studies that are also worth reviewing in this section are those that employed experimental designs. Thomson and Rubin (1996) carried out an experimental study to investigate the effect of strategy training on listening comprehension. Thirty-six students learning the Russian language at The George Washington University were randomly assigned to either an experimental group or a control group. Four metacognitive strategies, including planning, defining goals, monitoring, and evaluating, and five cognitive strategies, including predicting content, listening to the known, listening for redundancies, listening to tone of voice and intonation, and resourcing were taught to the experimental group. No such strategies, on the other hand, were introduced to the students in the control group. Both groups used the same instructional materials and followed the same syllabus. Three meetings of 50 minutes each were devoted for the experiment in a week for two years.

The study found that the students who received strategy instruction improved their video comprehension significantly better than those who did not receive such training. At least twice as many students in the experimental group showed at least 10% improvement on the video comprehension as those in the control group. The students in the experimental group were also found to show a better improvement in audio comprehension, although the difference was not

significant. Thus, systematic instruction in the use of strategies resulted in the improvement of listening skills.

In the case of reading comprehension skill, Song (1998) carried out strategy training for reading in a Korean university. The subjects consisted of 68 first year students who engaged in a 42-hour-long-training program over a period of fourteen weeks. A reading proficiency test was administered prior to the training and after the training. The results of the two administrations were compared and the gains were compared across students of low, intermediate, and high level.

The results of the analyses suggest that reading strategy training significantly improved students' reading ability. The effect was even greatest among students with low initial reading ability, followed by those with moderate initial reading ability. Thus, the effect was weakest among those with high initial reading ability.

The studies reviewed above indicate that the contribution of learning strategies toward learning success is still debatable since no consistent findings have been obtained. While studies that employed experimental designs were successful in proving the significant contribution of learning strategies to improve language proficiency, other studies using correlational designs resulted in different findings. Thus, further studies are still needed to arrive at a more convincing conclusion on the power of learning strategies to predict learning success. The present study is expected to provide more evidence regarding the predictive power of learning strategies for learning success.

#### 4.3 Learning Strategies as Criterion Variables

Learning strategies are also treated as criterion variables in some studies. In this case, they are predicted using other variables as predictors. Again, although correlation analyses do not necessarily indicate cause-effect relationships, they are used in this group of studies. In addition, comparisons among certain groups of learners are also made to see the effect of grouping category on strategy use.

Oxford and Nyikos (1989) who jointly investigated the effect of motivation, self-proficiency rating, course status, sex, and years of study on learning strategies use provided an example of studies within this category. More than 1,200 undergraduate students of 17 to 23 years of age participated in the study. They were almost all (95%) native speakers of English and were learning a total of five different languages: French (40% of the sample), Spanish (28%), German (27%), Russian (2%), and Italian (2%). The old version of the Strategy Inventory of Language Learning (Oxford, 1986) was used for collection of data on learners' learning strategies. The SILL consisted of five factors: 1) formal rule-related practice strategies, 2) functional practice strategies, 3) resourceful, independent strategies, 4) general study strategies, and 5) conversational input elicitation strategies. Moreover, learners' perceptions of their own motivation and proficiency rating, course status, years of study, and sex were obtained from a background questionnaire.

The analyses found that learning motivation was the single most powerful influence on the choice of language learning strategies. It had extremely significant effects on four of the five factors (factors 1, 2, 4 and 5) and a nearly significant effect on factor 3. Language proficiency self-ratings also significantly affected the use of learning strategies. Speaking proficiency ratings were found to highly significantly affect the use of strategies of factors 2, 3, 4 and 5 and almost significantly affect the use of strategies of factor 1. Reading proficiency ratings had very highly significant effects on factors 1, 2, 4 and 5, whereas listening proficiency ratings correlated significantly with the use of strategies of factors 3 and 4.

Furthermore, it was also found that students who elected to learn the language (elective status) used strategies of factors 2 and 4 much more often than students who learned the language as an academic requirement (required status). Years of learning the language were other factors that significantly affected the frequency of use of learning strategies. Learners with longer learning experience employed communicative-oriented factors of strategies (factors 2 and 5) more often than did learners with less experience. Lastly, profoundly significant

differences of strategy use were found between males and females. Females were reported to use more strategies from factors 1, 4 and 5 than males did.

Ehrman and Oxford (1989) also conducted a study to measure the effects of sex differences, career choice, cognitive styles, and aspects of personality. Seventy-eight subjects at the Foreign Service Institute (FSI) took part in the study. They consisted of three groups: students (30), instructors (26), and professional language trainers (22). The required data were collected by means of two sets of paper-pencil questionnaires. Data on aspects of personality were collected by means of the Myers-Briggs Type Indicator (MBTI), which consisted of 126 items and described 4 dimensions: 1) extroversion vs. introversion, 2) sensing vs. intuition, 3) thinking vs. feeling, and 4) judging vs. perceiving. Data on learning strategies were collected by means of the SILL, which consisted of 121 items derived from 10 factors. They were 1) general learning strategies, 2) authentic language use, 3) searching for and communicating meaning, 4) independent strategies, 5) memory strategies (mnemonics), 6) social strategies, 7) affective strategies, 8) self-management, 9) visualisation strategies, and 10) formal-model building.

The study found that females showed significantly greater strategy use than males in four strategy factors (factors 1, 2, 3, and 8). Moreover, career choice was found to significantly affect the use of learning strategies. Professional language trainers reported to use four learning strategies (factors 2, 3, 7, and 10) significantly more frequently than teachers and students. Teachers reported greater use than did students for only one strategy factor (factor 2). Students reported less use of all types of learning strategies than both teachers and professional trainers.

In terms of personality factors, the study found that extroverts made significantly greater use of visual and affective strategies, but introverts favoured the use of searching for or communicating meaning strategies. Intuition was reported to have greater effects than sensing on the use of strategies for searching for and communicating meaning, affective strategies, authentic language use, and formal-model building. Notably, it was also found that sensing had no significant

correlation with any SILL factors. Relative to thinkers, feelers were found to perform social strategies significantly more often suggesting that feelers tend to be people-oriented and therefore use strategies that cause them to be in contact with other people. Lastly, judgers were found to use significantly greater general study strategies than perceivers, but the latter showed greater preference for searching for and communicating meaning.

Ehrman and Oxford (1990) also conducted a similar study that investigated the effect of psychological types on language learning strategies. As a part of a larger project, the so-called sub-sample of the study consisted of 20 learners at the Foreign Service Institute, United States. Learners' psychological types were measured by means of the Myers-Briggs Type Indicator (MBTI), while learners' learning strategies were measured by the Strategy Inventory for Language Learning (SILL). Unstructured interviews were conducted as a continuous process during the long-term intensive training.

The study indicated that extroverts and introverts reported using social strategies quite consistently, while introverts tried to avoid such strategies. Instead, introverts applied metacognitive strategies more than did extroverts. Furthermore, sensing learners were found to strongly prefer memory strategies, while intuitive learners made extensive use of compensation strategies and some use of affective strategies. Compared to feelers, moreover, thinkers reported strong preference for cognitive strategies, while feelers rejected all cognitive strategies. Lastly, judgers indicated clear preference for metacognitive strategies, which perceivers typically rejected. On the contrary, perceivers preferred compensation strategies, which were strongly rejected by judgers.

A still more recent extensive research study by the same researchers (Oxford & Ehrman, 1995) investigated factors that affected the use of language learning strategies also at the Foreign Service Institute, United States. The study involved descriptive and predictive elements as presented in earlier sections. In terms of the factors that might affect strategy use, they investigated the roles of teacher perceptions, gender, educational background, previous languages, weeks

of training, language difficulty, general learning and study strategies, aptitude, learning styles, personality type, ego boundaries, and motivation and anxiety.

The study found that cognitive strategy use was significantly correlated with teachers' ratings of being an effective learner and of having high aptitude for language learning. Only compensation strategies were linked to gender with females appearing to use these strategies significantly higher than males. It was also found that cognitive and metacognitive strategies correlated significantly with educational background and the number of languages previously learned. In terms of the correlation between language learning strategies and general learning and study strategies, it was found out that the greatest correlation occurred for metacognitive strategies, cognitive strategies, and social strategies.

Other findings of the study were that the cognitive strategies significantly correlated with Part I (number learning) of the MLAT. Surprisingly, significant negative correlations were found between compensation strategies and Part V (paired associates), and between affective strategies and Part IV (grammatical sensitivity in sentences) of the MLAT. Persistence as a type of learning style correlated significantly with a number of SILL factors: metacognitive, social, cognitive, affective, and memory strategies. In relation to personality types, the use of cognitive strategies mildly related to preference for intellectual vs. pragmatic approaches to learning new things. Metacognitive strategies significantly correlated with three sub-scales related to judging/perceiving: planful, systematic, and methodical. Moreover, learners who reported using social strategies frequently tended to report themselves as expressive and realistic.

In relation to ego boundaries, moreover, compensation strategies were found to correlate significantly with internal ego boundaries. This suggests that learners who use compensation strategies a lot tend to be flexible and sensitive. Metacognitive strategies, on the other hand, were negatively correlated with the thinness of the interface between the individual and the outer world. This indicates that learners who use metacognitive strategies a lot tend to like neatness and prefer an orderly environment. Lastly, in terms of the relationship between learning strategies and motivation and anxiety, it was found that positively

significant correlations appeared between cognitive and metacognitive strategies on the one hand and anxiety about classroom speaking, intrinsic motivation, and positive belief about oneself on the other. Compensation strategies correlated positively with the desire to use the language outside the class and correlated negatively with anxiety about outcomes. These results indicate that learners with cognitive strategies and metacognitive strategies tend to be internally motivated and self-confident. It appears that learners with high use of compensation strategies tend use the language outside the classroom to a great extent.

In Indonesia, Huda (1998) conducted a study with 30 students at the English Department, IKIP Malang, Indonesia. One of the purposes of the study was to examine differences and similarities in the use of learning strategies by learners with good English proficiency and those with fair English proficiency. The required data regarding learning strategies were collected by means of a questionnaire consisting of 17-open-ended questions asking about strategies to perform tasks related to speaking courses, difficulties found in performing the tasks, and strategies to overcome the problems.

Contradictory to findings of other studies, the study found that good learners used fewer strategies than fair learners, as 70 strategies were noted from the former group and 50 strategies were noted from the latter group. In addition, the two groups were found to share a considerable number of strategies (46 strategies). Among the noted strategies, eight strategies including rule search, self-diagnosis, regularity, main idea, clipping strategy, wait time, performance, and lively situationalism were used only by the good language learners. On the contrary, the fair learners noted 24 strategies which were not used by the good learners. Contrastive analysis, silent rehearsal with delayed production, selective attention, positive self-talk, physical response, and self-gestures were a few of them. The strategies most frequently used by the two groups of learners were situationalism, repetition, list making, inference and related text strategies, production techniques, working with one or more people, whole guessing, rule exercises, making opportunities for practicing, and using second language reference materials.

Despite the finding that the choice of learning strategies seems to be associated with a number of factors, further studies are still required. These are needed particularly to provide more evidence on the relationship between learners' affective states such as language aptitude and personality traits on the one hand and learning strategy use on the other hand because the evidence available so far is still weak (Ellis, 1994). Oxford (1990b) has also mentioned the need for research to find the relationship between aptitude and learning strategies,

Relationships between strategies and aptitude have hardly been studied, because researchers have not adopted a conceptual framework linking these variables. Results of the very few studies relating strategies and aptitude are inconsistent (p. 108).

It is clear that further studies need to be conducted to provide more evidence on the relationship between learning strategies and language aptitude and personality traits.

In the present study, the effects of language aptitude, personality traits, and attitude and motivational attributes on the use of learning strategies were investigated. In addition, the variation in the use of learning strategies due to a situational difference - course status - was also explored.

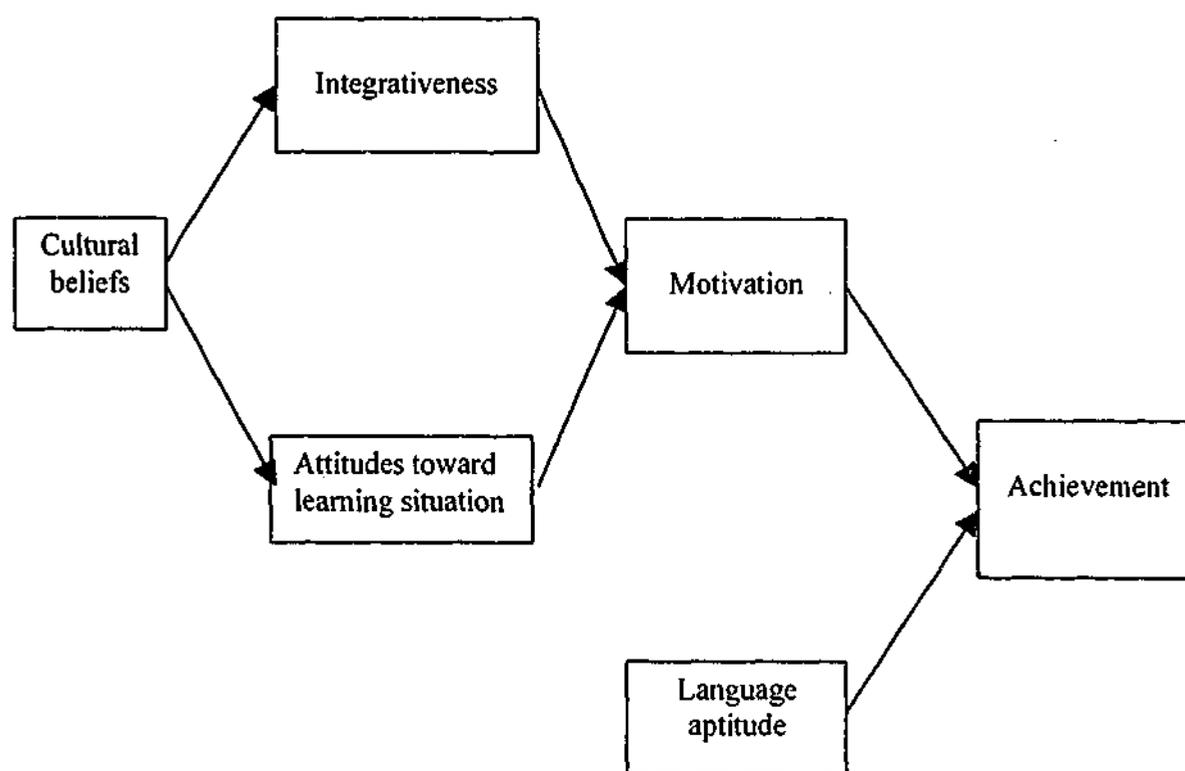
#### 4.4 Learning Strategies in Association with Other Variables

To the best of my knowledge, the only study that deals with learning strategies in which the researcher studies the association of learning strategies with other variables without regarding them as either dependent or independent variables is the one carried out by Gardner et al. (1997). In fact, the study is a further investigation of the Socio-educational Model of second language learning as proposed by Gardner (1985).

In the early version of the socio-educational model, Gardner (1985) emphasises the role of motivation and language aptitude in determining success of second language learning. Motivation consists of two chief components,

integrativeness and attitudes toward learning situations, which are supposed to emerge from cultural beliefs of the society in which the learner lives. These beliefs concern the relative importance of learning the target language and the degree of expected skill development. The attitudinal component of motivation refers to attitudes toward the teacher and the course. In a simplified form, the model is depicted in Figure 4.1. As the model shows, cultural beliefs shape learners' integrativeness and attitudes toward learning situations, which then make up motivation. Together with aptitude, motivation leads to success in second language learning. Put simply, Gardner proposes that success as indicated by achievement in second language learning is dependent upon motivation and aptitude and the degree of motivation is determined by integrativeness and attitudes toward the learning situation.

Figure 4.1 Gardner's Socio-educational Model of Second Language Learning

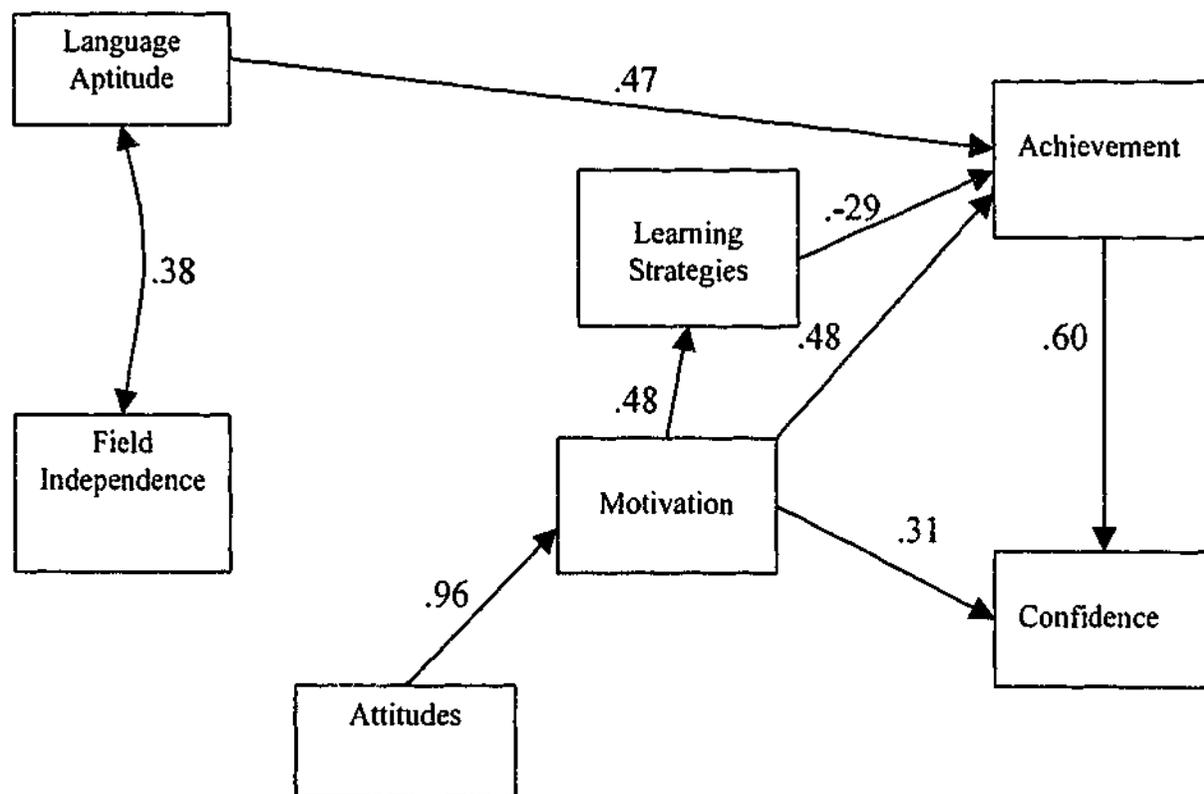


Source: Adapted from Gardner (1985, p. 153)

Gardner et al. (1997) carried out another research project to further develop the model by incorporating several other variables that were hypothesised to relate to success in second/foreign language learning, including learning strategies, field dependence/independence and self-confidence. The participants of the study consisted of 82 female and 20 male university students enrolled in introductory French. They were reported to have studied French for 11.37 years on average and 55% of them had spent at least one month in a French speaking country.

The data were collected by means of a questionnaire containing measures of attitudes, motivation, achievement, self-rating scales of French proficiency, anxiety, learning strategies, aptitude, and field dependence/independence. The causal modelling technique was used with seven latent variables including field independence, aptitude, attitude, learning strategies, motivation, achievement and confidence. This technique permits the researcher to trace the causal relationship among the investigated variables. The model is presented in Figure 4.2.

Figure 4.2 Causal Model of Field Independence, Language Aptitude, Attitudes, Motivation, Learning Strategies, Achievement, and Confidence



Source: Gardner et al. (1997, p. 354)

As the model suggests, language attitudes strongly influence motivation, motivation further impacts on learning strategies, and learning strategies together with language aptitude lead to achievement. In addition, there is also a direct causal relationship between motivation and achievement. Achievement further leads to confidence, which is also affected by motivation. Meanwhile, language aptitude correlates with field independence. Thus, motivation plays central roles as it affects learning strategies and achievement as well as confidence.

What is striking about the above model is the causal relationship between learning strategies and achievement, which appears to be negative. This suggests that while an increase in motivation leads to an increase in the use of learning strategies, which is consistent with previous studies (Oxford & Nyikos, 1989), the increase in learning strategy use leads to poorer achievement. This contradicts other findings on the relationship between learning strategies and measures of achievement, which found either a positive significance (Bialystok & Fröhlich, 1978; Djwandono, 1997; Dreyer & Oxford, 1996; Park, 1997; Song, 1998; Thomson & Rubin, 1996) or no significance at all (Lengkanawati, 1997; Oxford & Ehrman, 1995; Politzer & McGroarty, 1985). This necessitates a further study in order to arrive at a more logically and scientifically acceptable relationship between learning strategies and measures of learning success.

In relation to the studies already reviewed under the four categories above, the present study was then carried out to add more information to the already existing literature of the use of learning strategies. It focuses on another group of learners, that is, Indonesian university learners of English. In addition, it sought more information concerning the effect of individual and situational differences on the use of learning strategies. Finally, the predictive power of learning strategies upon learning success was also investigated. (see Chapters Six to Ten)

In order to explain what the present study look like, the next chapter is devoted to the discussion regarding the methodology of the study. The discussion focuses on the research questions, hypotheses, research design, subjects of the study, instruments for data collection, data collection procedures and data analysis.

## Chapter Five

### DESCRIPTION OF THE STUDY

This chapter is devoted to the description of the study. To begin with, research questions are derived from the aims of the study, which have been presented in Chapter One and again in detail in Chapter Four. As tentative answers to the research questions, hypotheses are proposed including both the working hypotheses and the null hypotheses. In order to provide a clear idea of how the study was carried out to find the answers to the research questions, the research methods are also discussed in this chapter. The discussion covers such things as the research design, participants of the study, instruments for data collection, data collection procedures, and data analysis.

#### 5.1 Research Questions

As previously mentioned, the present study dealt with the exploration and description of strategies for learning used by Indonesian learners of English as a foreign language. The strategies were classified into categories proposed by Oxford (1990a): memory, cognitive, compensation, metacognitive, affective, and social strategies. Moreover, the interrelationship among the six strategy categories was investigated. Next, the study explored the variation in the use of learning strategies in association with one situational difference, that is, course status. The predictability of learning strategies from individual factors including language aptitude, personality traits, attitude, and motivation was also ascertained. Finally, the relationship between strategy use and language proficiency attainment was also investigated.

The points of focus as described above are expressed in a series of research questions as follows:

- 1) To what extent do Indonesian learners of English as a foreign language use memory, cognitive, compensation, metacognitive, affective, and social strategies?
- 2) Do the six categories of learning strategies correlate with each other?
- 3) Do students who learn English as a major use different frequencies of learning strategies from those who learn it as a minor?
- 4) Are language aptitude, personality traits, attitude, and motivation significant predictors of learning strategies? Which of the four variables are the best predictors?
- 5) Are learning strategies significant predictors of language proficiency attainment? And, which types of strategies are the best predictors?

## 5.2 Research Hypotheses

McMillan and Schumacher (1989) define a research hypothesis as "a tentative statement of the expected relationship between two or more variables" (p. 89). This definition provides a primary characteristic of a good research hypothesis, that is, it should state the expected relationship or difference between two or more variables. They further maintain that "a hypothesis should offer a tentative explanation based on theory or previous research" (p. 90). Therefore, hypotheses should come after existing theory and previous studies related to the study at hand have been reviewed.

The first question provided in section 5.1 above does not seek any relationship or differences between variables; thus, it does not need a hypothesis. Therefore, hypotheses are presented for questions 2 to 5 only. In accordance with some studies already reviewed earlier in Chapters Three and Four, the following hypotheses were used in the present study:

- 1) The six strategy categories - memory, cognitive, compensation, metacognitive, affective, and social - correlate significantly with one another.
- 2) Students who learn English as a major use learning strategies at different levels of frequency from those who learn it as a minor.

- 3) The linear combination of language aptitude, personality traits, attitude, and motivation is a significant predictor of the strategy use.
- 4) Language learning strategies are significant predictors of language proficiency attainment.

### 5.3 Research Design

In conducting research, two broad categories of approaches are available, quantitative and qualitative. The prime characteristics of quantitative research are that the data have to be in the form of numbers. The analysis is carried out deductively when data collection has been completed. The analysis is intended to see if differences among groups on a particular measure or correlation of two measures are significant, that is, they do not happen by chance and therefore can be generalised to larger groups (Tarone, 1987). The qualitative approach, on the other hand, is characterised by the fact that the data are presented in a narrative form (McMillan & Schumacher, 1989). These two approaches, however, should not be opposed one to the other as they are mutually dependent (Reichardt & Cook, 1979).

Considering the characteristics of the two approaches as well as the nature of the research questions mentioned above, the present study was more strongly inclined toward a quantitative approach than toward a qualitative one.

Within the quantitative category are several research designs such as experimental design, quasi-experimental design, ex-post facto design, correlational design, and survey design. Ary, Jacobs and Razavieh (2002) mention three basic characteristics of an experiment: "(1) an independent variable is manipulated; (2) all other variables that might affect the dependent variable are held constant; and (3) the effect of the manipulation of the independent variable on the dependent variable is observed" (pp. 276-277). Moreover, random assignment of subjects into groups is also a prominent feature of experimental design. In most educational cases, however, randomisation is not always possible, so pre-existing groups are used instead. In such a case, quasi-experimental design is preferred. Ex-post facto design is characterised by the fact that the differences

in the independent variable have already taken place, as it is an attribute variable, so that no manipulation can be carried out. The researcher is faced with the problem of investigating the antecedents of the observed consequence (Ary et al., 2002). Correlational design is employed when the researcher is interested in finding the extent of the relationship between variables. It enables the researcher to ascertain the extent to which variations in one variable are associated with variations in another variable. The magnitude of the relationship is measured by means of a quantitative index called "the coefficient of correlation" (Ary et al., 2002, p. 354). Finally, survey design is employed when the researcher is more interested in gathering information about the current status of variables under study, than in finding relationships between variables.

Of these quantitative research designs, three were applicable to the present study: survey design, correlational design, and ex-post facto design. Survey design was employed for the research question related to what types of learning strategies Indonesian learners of English employ in their attempt to master the language and to what extent they are employed. More straightforwardly the design was used to see to what extent the learners employ the memory, cognitive, compensation, metacognitive, affective, and social strategies and how frequently they employ them. The correlational design was used for the research question related to whether the types of learning strategies that the learners employ correlate with one another. This design is also used to measure the predictability of learning strategies from individual differences including attitude, motivation, personality traits and language aptitude. The significance of the predictive power of learning strategies on proficiency was also carried out using the correlational research design. The ex-post facto design was used to discover whether students with different status of English course use different frequencies of learning strategies.

Although the present study inclined more to a quantitative approach, it also contained qualitative elements to support findings obtained from the quantitative approach. The qualitative approach was used particularly in dealing

with the first purpose of the study, that is, to describe the strategies of learning English by Indonesians. Green and Oxford (1995) state,

Because quantitative and qualitative methods each have their strengths and limitations, both kinds of research are necessary if we are to develop multifaceted insights that are at once broadly applicable and rich in observed detail. Both traditions can add immensely to our understanding of how students learn languages. Neither tradition will give the whole answer, but both together can provide a clearer picture of the processes of language teaching and learning (p. 293).

#### 5.4 Participants in the Study and Their Study Contexts

The participants in the present study were selected based on research purposes, ease of bureaucratic procedures, and availability for research. Such considerations led me to decide to select students in three institutions as the accessible population. First were students at the English Department of the Islamic University of Malang commonly known as UNISMA (*Universitas Islam Malang*). They were chosen to represent those majoring in English and learning it in a teacher-training department. Second were students at the English Department of Gajayana University commonly abbreviated as UNIGA (*Universitas Gajayana*). They were selected to represent those learning English as a major in a non-teacher training department. The third were students at the Accounting Department, Polytechnic of Brawijaya University commonly known as UNIBRAW (*Universitas Brawijaya*). They were to represent those learning English as a minor course. In the first two institutions, students of the second, third, and fourth years were taken for the study, while in the third institution, students of the second and third years only were available. Students of the first year were excluded from the study because at the time of data collection, they had learned English at the university for between just one to two months so that they were assumed not to have acquired persistent learning strategies at the tertiary education level.

The English Department of the Islamic University of Malang (UNISMA) offers an undergraduate program that takes a minimum of four years to complete.

This department is within the Faculty of Teacher Training and Education. The primary objective of this department is to prepare the students to be teachers of English at either junior or senior secondary schools. Thus, in addition to learning English, the students also learn things that deal with teaching methodology as well as other subjects prescribed by the Indonesian national curriculum for tertiary education.

According to the course guide of the UNISMA (Islamic University of Malang, 1999), the subjects are classified into five categories including basic general subjects, basic educational subjects, professional subjects (group I), professional subjects (group II), and supplementary subjects. The basic general subjects are prescribed by the national curriculum; thus they are more or less the same across universities throughout the country. They are taught in the Indonesian language and they carry 16 credits that contain subjects dealing with religion, citizenship, and basic knowledge of science. Such subjects as Islam Education, Pancasila (The Five Principles of Indonesia) Education, and Basic Natural Science are in this category. The basic educational subjects, some of which are also taught in Indonesian, load 13 credits and they contain subjects that deal with basic knowledge for teachers and educators such as Introduction to Education, Psychology of Learner Development, and Counselling in Education. Professional subjects (group I) consist of 85 credits and they contain subjects that deal with skills and knowledge of English language. The skill is taught discretely in the forms of Structure, Vocabulary, Listening, Speaking, Reading, and Writing. Other subjects that deal with theories of English language such as English Phonology, English Morphology, English Syntax and Semantics and with literature including prose, poetry and drama also belong to this category. Professional subjects (group II) carry 16 credits and they contain subjects that are concerned with knowledge and skill in English teaching. Such subjects as Teaching Planning, Curriculum and Material Development, Teaching English as a Foreign Language, Language Testing, Micro Teaching and Practice Teaching are in this category. Lastly, the supplementary subjects are offered to provide the students with basic alternative competencies other than English teaching. Seven subjects belong to this category

including Tourism, Business Correspondence and Mandarin. Thus, in total the students at the English Department of the UNISMA have to complete 150 credits to obtain the qualification. Details of the list of subjects are found in Appendix A.

The English Department of the Gajayana University (UNIGA) also offers an undergraduate program, which takes a minimum of four years to complete. To be exact the department is called the Department of English Language and Literature and it is located within the Faculty of Letters. Upon completion of the study, the students are expected to be competent users of English both in spoken and written form. In addition, they are also expected to be familiar with English literature, hence the core subjects are mostly related to the English language, literature and culture.

According to the course guide of the UNIGA (Gajayana University, 1996), in general the subjects are divided into four categories: basic general subjects, basic professional subjects, compulsory professional subjects, and supplementary subjects. The first category, the basic general subjects, carries 10 credits and contains subjects that are relatively the same as those in the English Department of the UNISMA because they are the subjects prescribed in the national curriculum. The basic professional subjects load 27 credits and mainly contain subjects that deal with the Indonesian language as well as its culture, consequently the Indonesian language is used as a medium of instruction. Such subjects as History of Indonesian Culture, Indonesians and Their Culture, and Indonesian Arts and Society are within this category. The compulsory professional subjects carry 111 credits consisting of subjects that deal with English language and literature. Similar to what is applied in the English Department of the UNISMA, the English skill is also taught discretely in this department in terms of Structure, Speaking, Listening, Reading, and Writing. The linguistics of English is taught in subjects such as Phonology, Morphology, Syntax and Semantics. Other subjects such as English cultural Background, History of England, Prose, Poetry, and Drama also belong to this category. The supplementary subjects are offered mainly to provide the students with competence in another foreign language, or with competence in using English for specific purposes such as banking, tourism,

or office management. Thirteen elective subjects of 26 credits are offered and the students are required to complete 12 credits. Thus, in total the students are required to complete 156 credits to finish their study. Details of the subjects are found in Appendix B.

The Accounting Department of the Polytechnic of the Brawijaya University (UNIBRAW), Malang, is a Diploma 3 program, which takes at least 3 years for the students to complete. In this department, the System of Credit Semester is not applied so that no credit loading is assigned to any subject. As the students are actually majoring in Accounting, they get English only as a minor course. According to its course guide (Polytechnic of Brawijaya University, 1997) English is offered in six sessions, out of the total of 38 sessions, per week, each of which lasts for 50 minutes. In semesters one and two, structure, speaking, and reading skills are the major objectives of English teaching. In semesters three and four, structure is no longer an emphasis. Instead, writing and listening skills are taught in addition to speaking and reading. In semesters five and six, English for Business is taught.

Table 5.1 Participants of the Study

Institution	2 <sup>nd</sup> Year		3 <sup>rd</sup> Year		4 <sup>th</sup> Year		Total
	Male	Female	Male	Female	Male	Female	
English Dept., UNISMA	16	34	9	25	7	33	124
English Dept. UNIGA	18	30	11	24	16	27	126
Accounting Dept. Polytechnic, UNIBRAW	15	52	21	48	-	-	136
Total	49	116	41	97	23	60	386

From the three institutions above, the number of participants that signed the Consent Form to take part in the study was 421 out of 480 potential students. Of the 421 students, 386 students (see Table 5.1), consisting of 113 males and 273 females provided complete quantitative data for analysis. After a consultation with the local lecturers, three students from each institution were selected for interview sessions. One was expected to represent the students with poor proficiency,

another with moderate proficiency, and the other with good proficiency. In total nine students were interviewed.

In regard to the age of the participants, the youngest was 18 years ( $n = 4$ ) and the oldest was 30 years ( $n = 1$ ), whereas the majority were between 19 and 23 years ( $n = 368$ ). Fourteen participants were between 24 and 29 years of age. In terms of their perception of the importance of being proficient in English, most of them (78.5%,  $n = 303$ ) thought it very important and 21.2% ( $n = 82$ ) thought it important, while only .3% ( $n = 1$ ) considered it not so important. Moreover, only 32.9% ( $n = 127$ ) reported that English was the only foreign language they had studied or were studying, while the other 67.1% ( $n = 259$ ) reported that they had studied or were studying one or more other foreign languages such as Arabic, Mandarin, France, or Japanese.

Another important feature of the participants is the fact the Indonesian language is not the first language for most of them. About three quarters of the them (74.4%) mentioned that their first language was their local language such as Javanese and Madurese and only 13.5% ( $n = 52$ ) stated that Indonesian was their first language. Moreover, 10.9% ( $n = 42$ ) described themselves as being bilingual with a local language and Indonesian and 1.3% ( $n = 5$ ) mentioned themselves as being multilingual since childhood.

## 5.5 Research Instruments

The instruments employed for data collection were a) a language aptitude test; b) questionnaires about personal background, personality traits, attitude and motivation in English learning, and English learning strategies; c) a proficiency rating scale; and d) an interview guide. In conducting the interviews a cassette recorder was used.

### 5.5.1 Instrument for Measuring Language Aptitude

Two instruments have commonly been used in the area of research on language aptitude: The Modern Language Aptitude Test (MLAT) (Carroll & Sapon, 1958) and The Pimsleur Language Aptitude Battery (PLAB) (Pimsleur,

1966). While the former was designed particularly for adult learners, the latter has mainly been used in the junior high school. In the present study, the MLAT was preferred, as the subjects were university students.

As mentioned in Chapter One (Section 1.5), four traits are indicators of language aptitude: phonetic coding ability, grammatical sensitivity, inductive language learning ability, and rote learning ability. The MLAT, which was designed to measure these four traits, consists of five parts:

Part I: *Number Learning*. This part is believed to measure auditory alertness as well as memory component of foreign language aptitude. In this case, the test takers are required, on tape, to learn the Kurdish number system from 1 to 4, plus the 'tens' and 'hundreds' forms, then tested by listening to the combinations of these numbers such as 402, 132, 241, 34, etc.

Part II: *Phonetic Script*. This part aims at measuring the sound-symbol association ability in which the students learn phonetic notation of some English phonemes, then are tested, also on tape, on their learning. For example, they have to identify whether they hear: tis, tiys, tiz, or tyiz.

Part III: *Spelling Clues*. This is a highly speeded test aiming at measuring phonemic coding ability. In this case the students are provided with clues to the pronunciation of a word such as 'rgumni' for 'argument', then asked to choose the synonym of that word from a list of five alternatives.

Part IV: *Words in Sentences*. This part, which is believed to measure grammatical sensitivity, presents the students with a key sentence in which one of its words is written in capital letters and underlined. In addition, another sentence is typically provided with five words underlined. The students are asked to find the underlined word of the second sentence that serves the same function as the underlined word of the first sentence. For example, the key sentence says, 'Mary is cutting the APPLE' and the response sentence is 'My brother (A) John (B) is beating his (C) dog (D) with a big stick (E).

Part V: *Paired Associates*. This test measures an ability in memorising new words of a foreign language. In this case, the students are provided with a list of

24 Kurdish-English vocabulary and asked to recognise them in two minutes. Then, they are tested by means of multiple-choice items.

The test is originally designed and validated for native or near native speakers of English, so it is not applicable to be used for Indonesian learners of English unless it is first translated. Therefore, the translated version was used instead of the original one. Moreover, due to practical reasons, only parts IV (Words in Sentences) and V (Paired Associates) of the MLAT Form A (Carroll & Sapon, 1958) were translated and used for this study. As such, some modifications could not be avoided to adjust to Indonesian syntax for the 'Words in Sentences' and a list of Kurdish-Indonesian vocabulary was used instead of Kurdish-English for 'Paired Associates'. The test as well as the guidelines for its administration can be found in Appendix C.

As the test is supposed to have the power to predict success in second/foreign language learning, predictive validity is a major concern. Carroll and Sapon (1959) provide the predictive validity coefficients of the long and short forms of the MLAT using several criterion measures among students of grades 9-11, college students, and adult learners of intensive language courses. In general, the students' scores of the MLAT significantly correlated with the criterion measures such as course grades and final examination grades, indicating that the MLAT scores possess sufficient predictive validity. In the present study, when the subjects' scores ( $N = 386$ ) on the two parts of the aptitude test were correlated with their perceived proficiency attainment as measured using a perceived proficiency attainment scale, a correlation coefficient of .163 ( $p < .01$ ) was obtained. This suggests that the translated version of the test as used in the present study also meets the requirement of possessing a predictive validity.

In regard to reliability measures, when administered to college students, the odd-even reliability coefficients of the two parts of the test were found to be .94 for both male and female subjects (Carroll & Sapon, 1959, p. 17). Thus, it can be argued that the items included in the two parts significantly contribute to the measurement of the intended traits.

### 5.5.2 Instrument for Measuring Personality Traits

The short scale of the revised Eysenck Personality Questionnaire (EPQ-R), as devised by Eysenck and Eysenck (1991), was used for measuring personality traits. As the instrument is originally in English, it was translated into the Indonesian language to enhance its readability.

Similar to the long scale of the EPQ-R, the short scale of EPQ-R measures three personality traits including:

- a) tough-mindedness or psychoticism denoted by P,
- b) extroversion denoted by E,
- c) emotional stability or neuroticism denoted by N.

In addition to the three personality traits above, a measure of degrees of dissimulation (lie scale, denoted by L) is included to measure any tendency of the subjects to 'fake good'. Each of these traits and the lie scale is measured in 12 items, resulting in a total of 48 items, as found in Appendix D. In addition to the question sheet, a scoring key for all scales and the manual for the questionnaire are provided.

Subjects having high scores on different scales reveal different personality characteristics. Eysenck and Eysenck (1991) mentioned that a high P scorer is typically characterised as

being solitary, not caring for people; he is often troublesome, not fitting in anywhere. He may be cruel and inhumane, lacking in feeling and empathy, and altogether insensitive. He is hostile to others, even his own kith and kin, and aggressive, even to loved ones. He has a liking for odd and unusual things, and a disregard for dangers; he likes to make fools of other people, and to upset them (p. 5).

A high E scorer is described to be an extrovert and he/she

is sociable, likes parties, has many friends, needs to have people to talk to, and does not like reading or studying by himself. He craves excitement, takes chances, often sticks his neck out, acts on the spur of the moment, and is generally an impulsive individual. ... He prefers to keep moving and doing things, tends to be aggressive and lose his temper quickly; altogether his feelings are not kept under tight control, and he is not always a reliable person (p. 4).

A typical high N scorer is described as

being an anxious, worrying individual, moody and frequently depressed. ... He is overly emotional, reacting too strongly to all sorts of stimuli, and finds it difficult to get back on an even keel after each emotionally arousing experience (p. 4).

Finally, a high L scorer is characterised as having a tendency to behave or speak in a way to hide the real feelings and thoughts.

For the sake of the present study, however, only measures of extroversion (E) and emotional stability or neuroticism (N) were used since only these two traits were thought to play roles in language learning. Eysenck and Eysenck (1991) also mentioned that these two dimensions contribute more to the description of personality than any other traits outside the cognitive field. Thus, the subjects' scores on the P and L sections were not used.

The internal reliability of the scale is measured by administering to subjects of different age groups (16 to 70 years of age). The coefficients are found to be .62, .88, .84, .77 for the P, E, N, and L respectively for the males and .61, .84, .80, and .73 for the females (Eysenck & Eysenck, 1991, p. 23). In the present study, the coefficients were found to be .70 and .63 for the extroversion (E) and emotional stability or neuroticism (N) sub-scales respectively. These figures are within acceptable range of reliability coefficients for personality measures. Thus, it is logical to suggest that the items in each sub-scale have measured a similar trait.

### *5.5.3 Instrument for Measuring Attitude/Motivation*

The attributes of attitudes/motivation in foreign language learning were measured by using the Attitude/Motivation Test Battery (Gardner et al., 1997), also known as the AMTB. The original formulations of the major concepts as well as the original items of the AMTB were developed by Gardner and Lambert (1972). Gardner (1985) made further development of it and provided more recent evidence of its validity and reliability. In fact, the items were originally devised for the Canadian context and for English speaking Canadians learning French as a

second language in elementary and secondary school. In its latest development, however, Gardner et al. (1997) made some modifications to suit the instrument for use with Canadian-university students learning French as a second language.

This instrument measures attitudinal and motivational attributes proved to be associated with second language learning. These attributes can be grouped into five categories: (1) integrativeness, (2) attitudes toward learning situation, (3) motivation, (4) language anxiety, and (5) other attributes. Integrativeness deals with the learner's willingness to interact socially with members of the second language community. It is assessed in three scales: (1) attitudes toward the target language group, (2) interest in foreign languages, and (3) integrative orientation toward learning the target language. Attitudes toward the learning situation reflect learners' evaluation of formal instruction and are measured by two scales: attitudes toward the teacher and attitudes toward the course. Motivation refers to learner's desires and effort to learn a second language and is measured by three scales: (1) attitudes toward learning the language, (2) desire to learn the language, and (3) motivational intensity. Language anxiety deals with learners' apprehension in the language class and in settings where the target language is used. This is assessed in two scales: French class anxiety and French use anxiety. The category of other attributes deals with any variables that have been mentioned in studies, but which do not belong to the four categories above. The AMTB includes one such a variable, that is, instrumental orientation scale.

For the sake of the present study, the latest version of AMTB (Gardner et al., 1997) was adapted and used. In this version, the second category, attitudes toward the learning situation, is not included, resulting in nine attributes being measured. They are attitude toward French Canadian, attitudes toward learning French, desire to learn French, French class anxiety, French use anxiety, interest in foreign languages, instrumental orientation, integrative orientation, and motivational intensity. The reliability indexes, as indicated by the internal consistency indexes, are reported to be .78, .86, .78, .88, .88, .75, .63, .73, and .76 respectively.

Since the present study deals with Indonesian learners of English, alterations of the items had to be made to make it applicable for the target subjects. Any statement dealing with French such as the French language and the French Canadian people were changed to refer to the English language and native speakers of English respectively. For example, if the original item was "I get nervous and confused when I am speaking in my French class", it was changed into "I get nervous and confused when I am speaking in my English class". If the original item was "French Canadian are very sociable, warm-hearted and creative people", it was altered into "Native speakers of English are very sociable, warm-hearted and creative people".

To avoid misunderstanding, the Indonesian translation version was used. In this version, two items of the Attitudes toward French Canadians - translated into Attitudes toward Native Speakers of English - were considered not appropriate. The items said:

- a. If Canada should lose the French culture of Quebec, it would indeed be a great loss.
- b. French Canadians deserve no preferential treatment because of the way they treat minority.

Each of the nine attributes, except attitude toward native speakers of English, instrumental orientation and integrative orientation, are assessed in ten items, five positively keyed and the other five negatively keyed. Attitude toward native speakers of English is assessed in eight items, four positively keyed and the other four negatively keyed. Instrumental orientation and integrative orientation are measured in eight items, four for each. In total, the instrument comprises 76 items, as found in Appendix E.

The subjects are required to provide a response to each statement by stating the extent of their agreement or disagreement. The scale is of Likert type consisting of seven points: strongly disagree, moderately disagree, slightly disagree, neutral, slightly agree, moderately agree, and strongly agree.

The reliability coefficient of the modified version of the instrument as used in the present study was found to be .91, thus, generally speaking the items in the

instrument significantly contributed to the measurement of the intended measures. When the coefficients were calculated for each of the nine attributes, however, indexes of .49, .72, .61, .74, .83, .57, .51, .59, and .70 were found respectively. These lower reliability coefficients for each section were obtained due to a decrease in the number of items involved in the computation. McMillan and Schumacher (1993) give a warning regarding the interpretation of a reliability coefficient by stating "The more items there are in the instrument, the higher the reliability" (p. 230).

#### *5.5.4 Instrument for Assessing Learning Strategies*

Several techniques have been devised to gather information on how learners approach their task of learning. While classroom observation can record observable behaviours such as the physical actions of students - be these nods of head, smiles, eye movements - or anything students say in the classroom, in most cases the approach fails to reveal mental processes that are mostly unobservable in nature (Cohen, 1987). Individual interviews may also be devised to overcome the limitations of observation in revealing unobservable learning strategies, but these are often impractical and time consuming particularly when the research deals with a large number of subjects. Group interviews may be conducted to substantially reduce the amount of time, but full information on individual learning strategies, which are in fact very significant, is difficult to obtain (Oxford & Burry-Stock, 1995). Therefore, despite the limitation that it imposes a rigid structure to the range of answers the students are likely to give (Nunan, 1992), a questionnaire was preferred for the present study to assess students' English learning strategies.

The questionnaire used for assessing learning strategies in the present study was the Strategy Inventory for Language Learning (SILL) developed by Oxford (1990a) and appended in Appendix F. The questionnaire is developed based on the classification of learning strategies that she proposes, which consists of two general categories, direct strategies and indirect strategies.

Oxford (1990a) defines direct strategies as strategies "that directly involve the target language" (p. 37), whereas indirect strategies are strategies that "support and manage language learning without (in many instances) directly involving the target language" (Oxford, 1990a, p. 135). The direct strategies consist of three sub-categories of strategies, memory, cognitive, and compensation. Similarly, the indirect strategies also contain three sub-categories, metacognitive, affective, and social. These learning strategy types are further described in terms of specific learning actions or behaviours and these specific learning behaviours are converted into a set of questionnaire for assessment of learning strategy use.

The questionnaire is of two versions, version 5.1 to be used for English speakers learning a new language and version 7.0 to be used for speakers of other languages learning English. So far, however, no explanation has been found on the rationale for using 5.1 and 7.0 as the coding numbers. For the purpose of the present study, version 7.0 was employed because the subjects were Indonesians learning English as a foreign language. In its administration, the subjects are required to give a response to each statement by considering whether it is true of them or not. Five options are provided: never or almost never true of me, usually not true of me, sometimes true of me, usually true of me, and always or almost always true of me.

In total, the questionnaire contains fifty items developed from six measures representing the six categories of learning strategies. They are:

### 1. *Memory Strategies*

This measure contains nine items and assesses the extent to which students employ various strategies to remember more effectively such as grouping, using imagery and sounds, and reviewing in a structured way.

### 2. *Cognitive Strategies*

This measure consists of fourteen items assessing to what extent students use mental processing strategies such as repeating, practicing with sounds and writing systems, skimming and scanning, and reasoning deductively.

### 3. *Compensation Strategies*

This measure consists of six items assessing the extent to which students compensate for missing information by using such strategies as trying to understand the overall meaning, and finding ways to communicate in speaking or writing despite limited knowledge of the language.

### 4. *Metacognitive Strategies*

This measure is represented in nine items determining to what extent students organise and evaluate their learning. Included in this category are strategies such as over-viewing and linking with previously known material, setting goals and objectives, learning from errors, and evaluating progress.

### 5. *Affective Strategies*

This measure consists of six items measuring the extent to which students manage their emotion in learning such as lowering anxiety, taking risks, rewarding themselves, and talking to someone about feelings and attitudes.

### 6. *Social Strategies*

This measure contains six items assessing how frequently students learn the language with others such as their peers and proficient users of the target language.

The reliability of the instrument has been found to be high when measured from different groups of samples in Asia as well as other parts of the world. Oxford and Burry-Stock (1995) reported that Cronbach alphas were .94 when using the Chinese translation with a sample of 590 Taiwanese university EFL learners and .92 using the Japanese translation with a sample of 255 Japanese university and college EFL learners. Reliability indexes of .91 and .93 were obtained when using the Korean translation with a sample of 59 Korean university EFL learners and the researcher-revised Korean translation with a sample of 332 Korean university EFL learners respectively. A study using the Puerto Rican

Spanish translation with a sample of 374 EFL learners in the island of Puerto Rico resulted in a reliability index of .91.

In the present study, the reliability index was found to be .92. When the reliability coefficient was calculated for each strategy type, indexes of .74, .80, .66, .85, .61, and .72 were found for memory, cognitive, compensation, metacognitive, social, and affective strategies respectively. These figures suggest that the items of each section of the instrument measure a homogenous trait. In other words, they measure a similar trait.

#### *5.5.5 Instrument for Assessing English Proficiency*

No test was devised to measure students' proficiency in English. Instead, a rating scale was used in which the students were asked to score the extent to which they perceive their proficiency level. The scale, which consisted of four sections, each measuring one of the language skills - listening, speaking, reading, and writing, was adapted from one developed by Chandrasegaran (1981) with two modifications. Firstly, the original scale had a four-point rating, but it was modified into a seven-point rating to provide a wider range of scores. A score of 0 means no proficiency at all being acquired and 7 means very good proficiency. Descriptions were provided for points 1, 4, and 7. Secondly, as the original version of the instrument was devised for Malaysian learners of English, it was then modified to suit Indonesian learners of English. This instrument appears in Appendix G.

#### *5.5.6 Instrument for Identifying Participants' Background*

To provide more detailed information about the characteristics of the students participating in the present study, information on their demographic background was also collected. Another questionnaire was then developed, mainly based on the background questionnaire proposed by Oxford (1990a) as appended to her SILL. The questionnaire consisted of 9 items requesting the subjects to provide information about:

- personal background including age and gender,
- their first language, language(s) they speak at home,
- what year they are at university,
- perception of the difficulty of learning English,
- perception of the importance of English,
- other foreign languages previously or currently studied.

This instrument is found in Appendix H.

### *5.5.7 Interview Protocol and Tape Recorder*

In addition to the use of the learning strategy inventory as described in 5.5.4 above, interviews were carried out to collect more qualitative data on learning strategies. To conduct these, an interview protocol, which was adapted from one used by Naiman et al. (1978), was used and it contained mainly open questions to be proposed to the subjects in the interview sessions. The questions, as set out in Appendix I, were intended to gather data on strategies in:

- learning new grammatical points,
- learning new words,
- learning the sound system of English,
- developing each of the four macro-skills, including listening, speaking, reading and writing.

In addition, questions concerning the students' learning motivation and learning potential were also included in the protocol. In the implementation of the interviews, a tape recorder was prepared to enhance the flow of the interview process and to enable the interviewer to focus on the exchange rather than have to write the subjects' responses.

## **5.6 Procedures of Data Collection**

Prior to data collection, permission to conduct the research was sought from the deans/heads of the faculties where the subjects were studying and ethics clearance was sought from the Standing Committee on Ethics in Research on Humans (SCERH), Monash University. When the letters of permission and ethics

clearance were obtained, the data collection procedures were implemented. About three months, from early October to late December 1999, were spent for the preparation and data gathering stages which included test and questionnaire administration and interview sessions.

As the students had been divided into classes of twenty-five to thirty-five persons, the administration of the test and the questionnaires was carried out after a teaching-learning session was over. In this case, I myself (the researcher) came to the classrooms without any assistance from local lecturers. The absence of local lecturers was in fact required in order not to affect the students' decision to take part in the project. Explanation of the nature of the research was delivered so that they had a clear idea of things such as what the research was about, what advantages and disadvantages they might have if they participated, and what was expected from them. They were also made aware that their participation was not obligatory and that even if they decided to participate, they could still withdraw at any time by returning the unanswered or the incompletely answered test and questionnaires or by not attending the interview session. A written 'Explanatory Statement' was also distributed. It contained key information such as:

- a. project title,
- b. name of the researcher and the supervisors,
- c. aims of the research,
- d. significance of the research,
- e. required data and what the researcher wanted the students to do to provide the data,
- f. the time the students had to spend for their participation,
- g. anonymity assurance, and
- h. contact person in case the students had something to complain about concerning the procedures of the data collection.

After the explanation had been given and the potential participants had read the written explanatory statement, they were given time to decide whether to take part in the project or not. Students who decided not to take part promptly left the classroom. Meanwhile, those who considered taking part were required to remain

in the classroom and to sign consent forms declaring that they were willing to participate in the project. Two consent forms were prepared: one for stating their willingness to answer the test and the questionnaires and the other one for stating their willingness to participate in the interview. In fact, only nine students were interviewed, three from each institution. To maintain anonymity of their work in the test and questionnaires, the signed consent forms were first collected. This preparatory stage took about 20 minutes to implement.

Up to this stage, the test and questionnaires were ready to be administered. In this case, the Modern Language Aptitude Test (MLAT) was given first because it was a standardised test so that a rigid control of its administration was maintained. The same procedures of test administration were followed in all classes and it took 25 minutes to complete. A short break of five minutes was provided before allowing the students to work with the questionnaires. Then, a booklet of questionnaires containing personal background, personality, attitude and motivation, learning strategies questionnaires and an English proficiency rating scale were distributed. The students were given two hours to complete the questionnaires. This meant that the administration of the test and the questionnaires took two hours and a half to perform for each class.

During the administration of the test and the questionnaires, the administrator behaved as unobtrusively as possible in order to avoid any influence on the participants' answers. Moving from one student to another or looking at a student's answers was strictly avoided. This was done to ensure as much validity and reliability of the results as possible (Gronlund & Linn, 1990).

When the test and the questionnaires had been administered, the following step was to conduct interview sessions. Consultations with the local lecturers were carried out to ask them to nominate three students, each of whom was expected to represent the good, moderate and poor student respectively. The nominated students who had signed the consent form for the interview were contacted to arrange an appointment as to when and where each interview was to be carried out. The schedule for the interviews appears in Table 5.2.

Table 5.2 Schedule for Interview Sessions

Institution	Subject	Date	Time
English Department, Islamic University of Malang (UNISMA)	1	17 - 12 - 1999	09:30 am - 10:15 am
	2	17 - 12 - 1999	10:30 am - 11:15 am
	3	17 - 12 - 1999	11:30 am - 12:15 pm
English Department, Gajayana University (UNIGA)	1	18 - 12 - 1999	02:00 pm - 02:45 pm
	2	18 - 12 - 1999	03:00 pm - 03:45 pm
	3	18 - 12 - 1999	04:00 pm - 04:45 pm
Accounting Department, Polytechnic, Brawijaya University (UNIBRAW)	1	20 - 12 - 1999	08:00 am - 08:45 am
	2	20 - 12 - 1999	09:00 am - 09:45 am
	3	20 - 12 - 1999	10:00 am - 10:45 am

### 5.7 Procedure of Data Analysis

The data obtained from the test and the questionnaires were analysed quantitatively. To do so, the students' work was scored so that each of them had their own score on the five measures: language aptitude, personality traits, attitude and motivation, learning strategies, and perceived proficiency. Since the responses of the questionnaires are constructed in different ways, scoring was also done differently for each of them.

The Modern Language Aptitude Test (MLAT) requires the students to provide an answer to an item by selecting a response, that they think correct, out of five alternatives. Only one correct answer is available for each item. Thus, scoring was simply done by adding up the correct responses, disregarding the wrong ones.

The short scale of the Revised Version of the Eysenck Personality Questionnaire (EPQ-R Short Scale) requires the students to provide an answer either 'yes' or 'no' to each of the statement. This 'yes' or 'no' response to a certain item implies a tendency to a particular personality trait. To assess this tendency, comparing the students' responses with the key answers prepared by the authors, Eysenck and Eysenck (1991), was done to get their scores. The key answers to the four scales are presented in Table 5.3. If the response to an item was the same as the expected response in the key answer, a score of 1 was given, but when it was

different, a score of 0 was assigned. The students' accumulative scores for each personality trait (tough-mindedness, extroversion, emotionality, lie) could then be counted. For the purpose of the present research, however, the students' scores on psychoticism and lie scales were disregarded in the final analysis as the characteristics of these personality traits were considered to be of little use for a study of language learning. Moreover, the use of extroversion and neuroticism are supposed to be enough to describe one's personality traits (Eysenck & Eysenck, 1991)

Table 5.3 Scoring Key of the EPQ-R Scales

Scale/Response	Item
Tough-mindedness (P):	
Yes	10, 14, 22, 31, 39
No	2, 6, 18, 26, 28, 35, 43
Extroversion (E):	
Yes	3, 7, 11, 15, 19, 23, 32, 36, 44, 48
No	27, 41
Emotional Stability (N)	
Yes	1, 5, 9, 13, 17, 21, 25, 30, 34, 38, 42, 46
No	-
Lie (L)	
Yes	4, 16, 45
No	8, 12, 20, 24, 29, 33, 37, 40, 47

The Attitude/Motivation Test Battery (AMTB) requires the students to provide responses to the statements by selecting degrees of their agreement/disagreement. As described in an earlier section, the alternatives range from strong disagreement to strong agreement. To these alternatives, different scoring techniques were applied depending on whether an item was positively or negatively keyed. When an item was positively keyed such as *I really enjoy learning English*, scoring was as follows,

- Strongly Disagree scored -3,
- Moderately Disagree scored -2,
- Slightly Disagree scored -1,
- Neutral scored 0,

Slightly Agree scored 1,  
Moderately Agree scored 2, and  
Strongly Agree scored 3.

Conversely, when an item was negatively keyed, for example, *Studying a foreign language is not a pleasant experience*, the other way around was applied. Thus, the scoring was as follows,

Strongly Disagree scored 3,  
Moderately Disagree scored 2,  
Slightly Disagree scored 1,  
Neutral scored 0,  
Slightly Agree scored -1,  
Moderately Agree scored -2, and  
Strongly Agree scored -3.

The Strategy Inventory for Language Learning (SILL) requires the students to provide the response to each statement by determining how true a statement is for them. The alternatives, that range from *never or almost never true of me* to *always or almost always true of me*, are represented in numbers. The subjects will have to choose:

- number 1 if the statement is never or almost never true of them,
- number 2 if it is rarely true of them,
- number 3 if it is sometimes true of them,
- number 4 if it is often true of them, and
- number 5 if it is always or almost always true of them.

The representation of number for the alternatives makes it easy in scoring. Thus, the students' score on a particular learning strategy type was just obtained by adding up their answers to the items representing that learning strategy category. When the scores in all strategy types were further added up, a single score of overall learning strategies were obtained.

The English proficiency rating scale requires the students to circle a score ranging from 0 to 7 that best describes the level of proficiency they perceive they have acquired in each of the four language skills: listening, speaking, reading, and

writing. When the scores were added up, they made a single score of overall proficiency.

After working through the scoring procedures as described above, the subjects had their scores in the following variables:

<i>Categories</i>	<i>Variables</i>
a. Language Aptitude:	1. Words in Sentences
	2. Paired Associates
b. Personality Traits:	3. Extroversion
	4. Neuroticism
c. Attitudes/Motivation:	5. Attitudes toward Native Speakers of English
	6. Attitudes toward Learning English
	7. Desire to Learn English
	8. English Class Anxiety
	9. English Use Anxiety
	10. Interest in Foreign Languages
	11. Instrumental Orientation
	12. Integrative Orientation
	13. Motivational Intensity
d. Learning Strategies:	14. Memory Strategies
	15. Cognitive Strategies
	16. Compensation Strategies
	17. Metacognitive Strategies
	18. Affective Strategies
	19. Social Strategies
	20. Overall Strategies
e. Perceived Proficiency:	21. Listening
	22. Speaking
	23. Reading
	24. Writing
	25. Overall Proficiency

When each individual student had got a score on each of 25 variables above, further statistical analyses were ready to be performed using the 10.5 version of SPSS/PC+. The analyses covered descriptive statistics, correlation, t-test, and multiple linear regression. In the descriptive analysis, the mean and standard deviation of learning strategy variables were calculated to determine the patterns of strategies that the subjects employ. Interpretation of the frequency of use was made according to the following criteria as proposed by Oxford (1990a, p. 300):

- a. Low if the average was between 1.00 to 2.44
- b. Medium if the average was between 2.45 to 3.44
- c. High if the average was between 3.45 to 5.00.

The correlation analyses were carried out to measure the interrelationship among the six strategy categories. In this case, as the data were interval in nature, the Pearson product moment formula was preferred. The obtained coefficients were interpreted in terms of both the size and the significance. In terms of the size, Hinkle, Wiersma, and Jurs (1988, p. 118) classified correlation coefficients into 5 categories as presented in Table 5.4 below.

Table 5.4 Rule of Thumb for Interpreting the Size of a Correlation Coefficient

Size of Correlation Coefficient	Interpretation
.90 to 1.00 (-.90 to -1.00)	Very high positive (negative) correlation
.70 to .90 (-.70 to -.90)	High positive (negative) correlation
.50 to .70 (-.50 to -.70)	Moderate positive (negative) correlation
.30 to .50 (-.30 to -.50)	Low positive (negative) correlation
.00 to .30 (-.30 to -.30)	Very low positive (negative) correlation

The data on learning strategies were also analysed using the t-test to investigate the differences in the use of strategies between groups of students learning English as a major versus those learning English as a minor course.

The regression analyses were employed to measure the predictability of learning strategy use from thirteen variables of language aptitude, personality traits, and attitudes and motivation. Prior to these analyses, a factor analysis was performed to find factors that underlay the thirteen predictor variables. Another

factor analysis was carried out to reclassify the 50 items of learning strategies into a posteriori categories of factors. These factors were then used as the predictors of perceived proficiency in the regression analyses.

Then, another regression analysis was carried out to measure the predictability of proficiency from learning strategies as well as other variables of individual differences that did not correlate with learning strategies. From the findings of the above analyses, a scheme showing the interrelationship of these variables was proposed.

It should be noted here that the analyses were conducted in two stages for both the descriptive and t-test analyses. Firstly, the data were analysed at the level of strategy categories. In this case, the average score of each student on each strategy category was calculated. The mean score of the group on each strategy category was then obtained. A description of the patterns of the strategy use was provided based on the obtained mean scores of the group. Furthermore, these mean scores were used in the subsequent analysis to find the variation in strategy use in relation to a difference in the status of the English course. The other stage was to analyse the data at the level of individual strategy. In this case, the mean scores of all students on all individual strategies were calculated to see the extent of their use. These mean scores were also used in the subsequent analysis to find the differences in the extent of strategy use in relation to the variation in the status of the English course.

The analysis of the predictability of learning strategies based on factors underlying variables of individual differences was also carried out in two stages. First, learning strategies were regressed against the factors in order to investigate to discern the significant ones. Once they were identified, further regression analyses representing the second stage were carried out to find which variables of these significant factors provided significant contributions to the prediction.

Finally, the data obtained from interviews were analysed qualitatively. As such, the data, which were recorded on cassettes, were transcribed. Codes G, M, and P were assigned to refer to students with the supposedly high, moderate, and low proficiency respectively based on the lecturers' judgement. Moreover, codes

1, 2, and 3 were also used to refer to the institutions where the students were studying. Code 1 was for UNISMA, 2 UNIGA, and 3 UNIBRAW. Thus, G2, for example, refers to the good student from UNIGA and P3 the poor student from UNIBRAW. In the analysis, Oxford's (1990a) categories of learning strategies were used as references. When there was a strategy that happened to be not in Oxford's strategy items, a new name was used.

The findings obtained from these data analyses are presented in the following Chapters Six to Ten. Chapters Six to Nine deal with the quantitative findings, while Chapter Ten deals with the qualitative findings.

Chapter Six  
RESEARCH FINDINGS 1:  
A PROFILE OF ENGLISH LEARNING STRATEGIES  
BY INDONESIAN LEARNERS

This chapter<sup>1</sup> presents the results of descriptive statistical analyses related to the questions about the extent to which Indonesian university students use strategies in learning English as a foreign language. The profile was presented in two stages. Firstly, the profile was reported in terms of the use of strategy categories, that is, the extent to which the students used memory, cognitive, compensation, metacognitive, affective, and social strategies was reported at this stage. Secondly, the extent of the use of individual strategies within each strategy category was reported to provide a more detailed profile of the strategy use. In addition, the intercorrelation of the strategy categories was also reported.

As described in Chapter Five, the profile of strategy use was reported based on the mean score of use, based on whether it was low (mean between 1.00 and 2.44), medium (mean between 2.45 and 3.44), and high (mean between 3.45 and 5.00). The correlation analyses, moreover, were carried out using the Pearson product moment formula. The coefficients were firstly interpreted in terms of the size as very low ( $r$  between .00 and .30), low ( $r$  between .30 and .50), moderate ( $r$  between .50 and .70), high ( $r$  between .70 and .90), and very high ( $r$  between .90 and 1.00) (Hinkle, Wiersma & Jurs, 1988, p.118). Then, they were also tested for the significance at either .10, .05, or .01 level.

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<sup>1</sup>The summary of this chapter and that of Chapter Seven together with the discussion as appears in Chapter Eleven is published in *Melbourne Papers in Linguistics and Applied Linguistics*, 1, 2001.

## 6.1 English Learning Strategy Profile of Indonesian University Students

Before presenting the profile of Indonesian university students' strategies in learning English, it is necessary to report the total variance of learning strategies explained by the instrument - Strategy Inventory for Language Learning - as used in the present study. To find it, a factor analysis was carried out on the 50 items of learning strategies and the analysis resulted in twelve components with an eigenvalue greater than 1. These factors explained 56.8% of the total variance of English learning strategies by Indonesian university students. Detailed presentation of the findings related to the factor analysis of the learning strategies is presented in Chapter Nine.

Table 6.1 Frequency of Use of Learning Strategy Categories

No.	Strategy Category	Min.	Max.	Mean	s.d.	Frequency Level	Rank of Use
1.	Memory Strategies	1.11	5.00	3.13	.59	Medium	5
2.	Cognitive Strategies	1.43	4.79	3.24	.54	Medium	4
3.	Compensation Strategies	1.33	5.00	3.07	.66	Medium	6
4.	Metacognitive Strategies	1.56	5.00	3.81	.61	High	1
5.	Affective Strategies	1.17	5.00	3.27	.62	Medium	3
6.	Social Strategies	1.33	5.00	3.50	.62	High	2
7.	Overall Strategies	1.80	4.66	3.34	.45	Medium	

Next, the answers to the question about the extent to which Indonesian university students use strategies in learning English are summarised in Table 6.1. Disregarding the strategy categories, the mean of overall use of learning strategies was 3.34 (s.d. = .45), suggesting a medium range of use. As far as the strategy categories were concerned, two categories were used at a high frequency level, while the other four categories were used at a medium level of frequency. The most frequently used strategies were metacognitive, with a minimum score of 1.56 and a maximum score of 5.00. The computation on the mean score revealed 3.81 (s.d. = .61), the frequency level of which was high. As previously discussed, metacognitive strategies include such strategies as setting clear goals in learning, making study plans, noticing mistakes and learning from them, and thinking about the progress already made. Thus, this finding suggests that the students have

extensively implemented actions in organising, monitoring, and evaluating their English learning activities.

Social strategies, positioned in the second rank order of use, also turned out to be exercised at a high frequency as the mean was 3.50 (s.d. = .62) with a minimum score of use of 1.33 and a maximum score of 5.00. This finding suggests that the students have engaged very frequently with social contacts to enhance communicative practice in using English as well as to develop cultural understanding. This interpretation is made because social strategies cover such strategies as asking questions in English, practicing English with peers, asking the interlocutor(s) to slow down or repeat, and developing cultural understanding.

Among the strategy categories with a medium range of use, affective strategies were the highest with a minimum score of 1.17, a maximum score of 5.00 and a mean of 3.27 (s.d. = .62). These strategies deal with the management of emotions, motivation, and attitudes toward the task of learning. Two examples of strategies within this category are the use of laughter to lower anxiety and self-encouragement to take risks in using the language being learned.

The moderately used strategies with a lower range of use were cognitive strategies with a minimum score of use of 1.43, a maximum score of 4.79 and a mean of 3.24 (s.d. = .54). This category of strategies deals with mental activities that learners use to enhance their learning. Included in this category are strategies such as using synonyms, finding patterns, taking notes, translating into first language, scanning and skimming, and dividing words into parts to understand their meaning.

Memory strategies were the next moderately used strategy category with a lower frequency of use. The students' mean score for the use of these strategies was 3.13 (s.d. = .59) with a minimum score of 1.11 and a maximum score of 5.00. Within this category are strategies that concern actions taken to increase remembering in learning English such as connecting words to a mental picture of a situation and physically acting out new words.

Finally, the strategies with the lowest range of use were compensation strategies, as the mean was 3.07 (s.d. = .66) with a minimum score of 1.33 and a

maximum score of 5.00. These strategies deal with any actions that the learners take when there is a communication breakdown due to a shortage of knowledge. Guessing, using gestures, and making up new words are just a few of the examples of compensation strategies.

In addition to reporting the frequency of use in terms of the six strategy categories, it is also worthwhile to present findings on the number as well as percentage of subjects reporting each level of frequency of use of the six strategy categories. Moreover, the frequency of use of each learning strategy item as indicated by the numbers 1, 2, 3, 4, and 5 is also worth reporting. The following sections present such findings.

### 6.1.1 The Use of Memory Strategies

As explained earlier, memory strategies are related to strategies employed to enhance memorisation, that is, how new information is to be stored in and retrieved from memory. Generally speaking, while this strategy category is used at the medium range of frequency as described in the previous section, some students reported a low frequency of use and several other students reported a high frequency of use. Table 6.2 contains information of the number as well as the percentage of subjects reported using these strategies. As the table indicates, out of 386 students, 230 students representing 59.6% reported a medium use of memory strategies suggesting that more than a half of the total students sometimes used these strategies. Moreover, 105 students making up 27.3% stated a high range of use and 51 students making up about 13% reported a low use.

Table 6.2 Frequency of Use of Memory Strategies

Level of Frequency	Score	Number of Cases	Percentage (%)	Cumulative Percentage (%)
Low	1.00 - 2.44	51	13.2	13.2
Medium	2.45 - 3.44	230	59.6	72.8
High	3.45 - 5.00	105	27.3	100.01*)

\*) The total is not 100.0 due to rounding up/down.

The memory strategies in the Strategy Inventory for Language Learning (SILL) contain nine indicators of learning strategies, each of which was represented by one item. The first item says, "*I think of a relationship between what I already know and new things I learn in English*". To this item, almost half of the students - 170 students representing 44% - mentioned a medium range of use suggesting that they sometimes used this strategy. About a quarter of them - 101 students or about 26% - stated that they generally used it and 66 students or about 17% claimed that they always or almost always used it. Thus, in total more than two fifths reported a high frequency of use. Meanwhile, about one eighth mentioned a low intensity of use, where 31 students representing 8% stated that they generally did not use it and 18 students or about 5% stated that they never or almost never associated their old and new knowledge in their English learning. In sum, the mean score of use of this learning strategy was 3.43 (s.d. = 1.01) suggesting that the use of this strategy is very close to the high criterion.

Item 2 deals with a memory strategy that requires the students to use new English vocabulary items in sentences. The item says, "*I use new English words in sentences so I can remember them*". The mean score of this strategy was 3.45 (s.d. = .97) indicating that it was used at a high frequency. Details of the responses showed that the majority of the subjects stated that they either sometimes or generally used this strategy of remembering new English words. While 152 students or about 39% reported that they sometimes used it, 120 students or about 31% mentioned that they generally used it. As many as 59 students or about 15% stated a very high use as they always or almost always used such a strategy. Meanwhile, only 55 students reported a low use of this strategy, where 45 students or about 12% mentioned that they generally did not use this strategy and only 10 students or about 3% stated that they never or almost never used it.

The use of an image or a picture of words to remember new words is another strategy that falls within the category of memory strategies and it is represented by item 3. This item says, "*I connect the sound of a new English word and an image or picture of the word to help me remember the word*". The statistical mean of its use was 3.42 (s.d. = 1.10), indicating a medium-close-to-

high frequency of use. In fact, about a half of the total students reported a high frequency of use, where 133 students or about 35% reported that they generally used it and about 16% of them - 63 students - reported that they always or almost always used this strategy. Meanwhile, about 19% indicated that they used it at a low frequency level as 47 students (12%) reported that they generally did not use it and 25 students (7%) reported that they almost never or never used it at all. The other 118 students or about 31% stated they sometimes used this strategy of connecting sounds and mental pictures or images.

Another strategy within the memory strategy category is by trying to create a mental picture of a situation where the word is used. This strategy is represented by item 4, which states, "*I remember a new English word by making a mental picture of a situation in which the word might be used*". A mean score of 3.55 (s.d. = .99) was obtained about the use of this learning behaviour indicating a high frequency of use. Thus, the majority of the students reported that they were either generally or always used such a learning strategy. In this case, 140 students or about 36% stated that they generally used it and 66 students or about 17% reported that they always or almost always used it. Meanwhile, 132 students or about 34% reported that they sometimes used it. Among students who reported a low use of this strategy, 35 students or about 9% stated that they generally did not use it and 13 students or about 3% indicated that they never or almost never used it.

The use of rhymes as a learning strategy is represented by item 5 of the SILL, "*I use rhymes to remember new English words*". This strategy turned out to be not very popular among Indonesian learners of English as the mean score of its use was 2.78 (s.d. = 1.04) suggesting a medium range of use. Out of 386 students, only 20 students or about 5% mentioned that they always or almost always used this strategy and 68 student or about 18% stated that they generally used it. The rest used it at lower levels of frequency. While 93 students or about 24% declared that they generally did not used it and 49 students or about 13% mentioned that they never or almost never used it, 156 students or about 40% stated that they sometimes used this rhyming strategy to remember new English words.

The use of flashcards is a learning strategy that is also not popular among Indonesian learners of English. This strategy is represented by item 6 of the SILL and it says, "*I use flashcards to remember new English words*". The frequency of use of this strategy was categorised as low because the mean score was 2.16 (s.d. = 1.16). While 118 students making up 31% stated that they generally did not use this strategy, 139 students making up 36% mentioned that they never or almost never tried to memorise new English words using this strategy. Moreover, about one fifth of the students - 80 students making up 21% - stated that they used it at the frequency category of *sometimes*. Only 13% of 386 students mentioned that they used it at high frequency with 22 students or about 6% mentioning that they always or almost always used it and 27 students or 7% stating that they generally used it.

Item 7 says, "*I physically act out new English words*". The intensity of use of this strategy was medium as the mean was 2.88 (s.d. = 1.03). Details of the number of subjects reporting using this strategy at a certain frequency level are as follows. About two fifths of the students - 153 making up about 40% - reported that they sometimes used this strategy to remember new English words. About a quarter - 100 students making up 26% - reported that they generally did not use this strategy and 9% - 35 students - stated that they never or almost never used it. Meanwhile, about a quarter mentioned a high frequency of use as 72 students or about 19% reported that they generally used it and 26 students or about 7% mentioned that they always or almost always used it.

Reviewing classroom lessons is another memory strategy and it is represented by item 8, which says, "*I review English lessons*". Although the frequency of use of this strategy was still within the category of medium, the mean score almost indicated a high level of use as it was 3.34 (s.d. = .93). In this case, 100 students, or about 26%, reported that they generally used this strategy and 141 students making up about 37% reported that they sometimes used it. Surprisingly, more than a quarter of the students reported a low intensity of use, 69 students or about 18% mentioned that they generally did not use it and 30 students or about 8% stated that they never or almost never used it. The number of

students who reported that they always or almost always reviewed the English lessons was 46 and this number made up about 12% of the total students involved in the study.

Table 6.3 Frequency of Use of Memory Strategy Indicators

Item no.	Strategy	M	Freq. Level	f of each score option				
				1	2	3	4	5
1.	Relating old and new language items	3.43	Medium	18	31	170	101	66
2.	Using new words in sentences	3.45	High	10	45	152	120	59
3.	Connecting the sound of a word and an image or picture of it	3.42	Medium	25	47	118	133	63
4.	Making a mental picture of a situation where words are used	3.55	High	13	35	132	140	66
5.	Using rhymes	2.78	Medium	49	93	156	68	20
6.	Using flashcards	2.16	Low	139	118	80	27	22
7.	Acting out words	2.88	Medium	35	100	153	72	26
8.	Reviewing lessons	3.34	Medium	13	40	178	112	43
9.	Remember location of words on page, board, or street sign, etc.	3.16	Medium	30	69	141	100	46

Legend: *f* : frequency

1 : never or almost never used

2 : generally not used

3 : sometimes used

4 : generally used

5 : always or almost always used

The last strategy of the SILL under the category of memory strategy was trying to remember English words or phrases by recognising their location. This strategy is represented by item 9 and says, "I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign". The mean score of use of this strategy was 3.16 (s.d. = 1.10) suggesting a medium frequency level. Out of 386 students being involved in the study, 141 students or about 36% reported that they sometimes used this strategy. In fact, more than one third stated a high intensity of use as 100 students or about 26%

mentioned that they generally used it and 46 students or about 12% reported that they always or almost always used this strategy for remembering new English words or phrases. Meanwhile in the group of students who reported a low frequency of use, 69 students or about 18% reported that they generally did not use it and 30 students or about 8% reported that they never or almost never used it.

In short, out of the nine indicators of memory strategies, two strategies were used at a high frequency level. They were using new words in sentences and creating mental pictures of words so that they can be more easily remembered. The only strategy being used at a low frequency level was using flashcards to help remember new words. The other six strategies were employed at a medium level of frequency. The students' responses to the nine indicators of memory strategy are summarised in Table 6.3.

### 6.1.2 The Use of Cognitive Strategies

Cognitive strategies concern the students' internal mental activities which enable them to comprehend linguistic input as well as produce linguistic output. This strategy category was employed at the medium range of frequency, since the majority of the students reported using these strategies at the *sometimes* frequency level. Table 6.4 presents the number of subjects who reported using this strategy category at the three different levels of frequency. The table indicates that almost two thirds of the 386 subjects - 242 students making up 62.7% - reported a medium frequency of use of cognitive strategies. Nearly one third - 117 students representing 30.3% - stated a high frequency of use. And, only 27 students or 7% reported a low frequency of use of this category of learning strategies.

Table 6.4 Frequency of Use of Cognitive Strategies

Level of Frequency	Score	Number of Cases	Percentage (%)	Cumulative Percentage (%)
Low	1.00 - 2.44	27	7.0	7.0
Medium	2.45 - 3.44	242	62.7	79.7
High	3.45 - 5.00	117	30.3	100.0

The summary of the findings above was obtained from the fourteen indicators of cognitive strategies covered by the SILL. The first indicator of cognitive strategies is represented by item 10 and it says, "*I say or write new English words*". While only 20 students or about 5% reported that they never or almost never used this learning strategy and 67 students or about 17% reported that they generally did not use it, about two fifths or 154 students mentioned that they sometimes used it. Moreover, almost two fifths claimed a high level of frequency of use. That is, 98 students making up about 25% reported that they generally used it and 47 students, 12%, mentioned that they always or almost always used it as their learning strategy. Generally speaking, this strategy was employed by the Indonesian university students at a medium level of frequency as the mean score was 3.22 (s.d. = 1.04).

Being native-like is another cognitive strategy and this is assessed by item 11 of the SILL, in which the item says, "*I try to talk like native speakers of English*". This strategy was very popular among Indonesian learners of English, thus it was exercised at a high level of frequency as indicated by the mean score of use, which was 3.72 (s.d = 1.00). Many more students reported a high frequency of use than those reporting a low frequency of use. In this case, 126 students or about 33% of the total students reported that they generally tried to talk like native speakers and 100 students or about 26% reported that they always or almost always tried to do so. On the contrary, 31 students or 8% reported that they generally did not use this strategy and 8 students or about 2% mentioned that they never tried to talk like native speakers of English. The other 121 students or about 31% reported that they sometimes used this learning strategy.

Practicing the sounds of English, which is represented by item 12 in the SILL, was another cognitive learning strategy that was also common among Indonesian university learners of English. The item says, "*I practice the sounds of English*". This cognitive learning strategy was employed by the students at a high intensity level as the mean was 3.78 (s.d. = .90). Thus, the number of students reporting a high level of use was greater than that reporting a low level of use. In this case, while 87 students or about 23% reported that they always or almost

always practiced the sounds of English, only 6 students or about 2% mentioned that they never used such a learning strategy. Whereas 158 students or about 41% stated that they generally practiced the sounds of English, only 19 students or about 5% reported that they generally did not. About 30% or 116 students stated that they sometimes used this cognitive learning strategy.

Another mental activity that may be applied to internalize linguistic input is to use new words in many different ways. This learning strategy, which is assessed by item 13 of the SILL and says, "*I use the English words that I know in different ways*", was also used at a high level of frequency, the mean score of which was 3.51 (s.d. = .97). The number of students who reported that they never or almost never used this strategy was only 6, representing less than 2% and those who reported that they generally did not use it numbered 48, representing about 12%. About 30% or 116 students stated that they used it at the *sometimes* level of frequency of use. In contrast, about 63% reported a high intensity of use, where 158 students or about 41% mentioned that they generally used it and 87 students or about 23% mentioned that they always or almost always used the English words they knew in many different ways.

Although it turned out that the students, to a great extent, tried to be like native speakers of English as described above, they seemed not to like initiating English conversations very much. This was clear from the use of the learning strategy as represented by item 14, which says, "*I start conversations in English*". The mean score of use of this strategy was 2.80 (s.d. = 1.01) suggesting a medium intensity. Out of the 386 students, only about one fifth stated a high use of it, where 23 students making up 6% mentioned that they always or almost always started conversations in English and 55 students or about 14% reported that they usually did so. More than one third reported a low frequency of use, where 40 students or about 10% mentioned that they never or almost never initiated English conversations and 97 students or about 25% reported that generally they did not do so. The other 171 students making up about 44% reported that they sometimes used this learning strategy.

Utilizing TV shows and movies as learning media is another indicator of the use of cognitive strategies. This strategy, which is assessed by item 15, says, "I watch English language TV shows spoken in English or go to movies spoken in English". This learning strategy was used the most frequently of all strategies under the cognitive category, of which the mean score of use was 3.84 (s.d. = .90) indicating a high frequency level. Thus, more than a half of the total students mentioned a high frequency of use, where 105 students, or about 27%, reported that they always or almost always used this strategy and 140 students or about 36% reported that they usually used it. On the contrary, less than 1% or 2 students mentioned that they never or almost never did it and 20 students or about 5% said that they generally did not use it. The other 119 students (about 31%) reported that they sometimes watch English TV shows or movies.

Item 16 of the SILL assesses the extent to which the students read English materials for pleasure. It says, "I read for pleasure in English" and this learning strategy was used at a medium frequency since the mean score was 3.02 (s.d. = .95). About the use of this strategy, the number of students reporting a high frequency and that reporting a low frequency was almost equal. While 25 students making up 6.5% stated that they never or almost never used this strategy, the same number of subjects reported that they always or almost always used it. Similarly, 71 students or about 18% stated that they generally did not use it, whereas 77 students making up about 20% said that they generally used it. And, almost a half of the students – 188 persons making up about 49% - reported that they sometimes read for pleasure in English.

Writing notes, messages and letters as a learning strategy to improve English skills does not seem to be very much used. This learning strategy, which is assessed by item 17 of the SILL, says, "I write notes, messages letters or reports in English", the mean score of which was 2.71 (s.d. = 1.01) suggesting a medium range of use. In this case, more students reported a low frequency of use than those reporting a high frequency. While 51 students or about 13% stated that they never or almost never used this learning strategy, 17 students, making up 4%, reported that they always or almost always used it. Likewise, 99 students making

up about 26% reported that they generally did not use it, whereas 55 students making up about 14% reported the opposite. The other 164 students or about 42.5% stated that they sometimes wrote notes, letters, or reports in English.

Skimming then reading carefully is another learning strategy within the category of cognitive strategies. The use of this strategy is assessed by item 18 and it says, "*I first skim an English passage (read over the passage quickly) then go back and read carefully*". Although the mean score of use of this strategy, which was 3.44 (s.d. = 1.10), was still in the medium category, the score was at the upper border since the range for it was between 2.45 and 3.44. Thus, the number of students reporting a high use of it was greater than that reporting a low use. While only 18 students, or about 13%, reported that they never or almost never used this strategy, 74 students (about 19%) reported that they always or almost always used it. Similarly, whereas 58 students or 15% reported that they generally did not use it, 117 students making up about 30% stated that they generally used it. The other 119 students or about 31% mentioned that they sometimes skimmed the reading text first before reading it again carefully.

Item 19 says, "*I look for words in my own language that are similar to new words in English*". This strategy was used at a medium range of frequency as the mean score was 2.73 (s.d. = 1.15). In fact, about two fifths of the total students reported a low frequency of use, where 66 students or about 17% said that they never or almost never used this strategy and 93 students making up about 24% said that they usually did not use it. About one third - 132 students making up about 34% - reported that they sometimes tried to look for words in their first language having similar meaning to new words in English. And about a quarter of them mentioned a high level of use, where 68 students, making up about 18%, said that they generally used it and 27 students or 7% stated that they always or almost always used this strategy.

Thinking inductively when learning linguistic rules is another strategy and it was measured by item 20 of the SILL which says, "*I try to find patterns in English*". About two fifths - 162 students or 42% - stated that they sometimes tried to use this strategy. About 25% or 95 students mentioned that they generally

used it and 34 students making up about 9% said that they always or almost always used it. Meanwhile, of the students with a low intensity of use, 26 students or about 7% stated that they never or almost never used it and 69 students making up about 18% said that they generally did not try to find patterns in English.

Finding the meaning of words by analyzing their components that make up the words is another indicator of the use of cognitive strategies. This is measured by item 21 which says, "*I find the meaning of an English word by dividing it into parts that I understand*". Although the mean score of the use of this strategy, which was 3.37 (s.d. = 1.04), indicated a medium frequency of use, the score was very close to the lower limit of the high frequency category, which was between 3.45 and 4.44. Thus, the number of students who reported using it at a high range was greater than that of those who reported a low use. While only 17 students or about 4% said that they never or almost never used this strategy, 52 students or 13.5% said that they always or almost always used it. Likewise, whereas 59 students or about 15% stated that they usually did not use it, 130 students, making up about 34%, stated that they usually used it. The other 128 students, about 33%, mentioned that they sometimes employed this strategy of learning English.

Translating word-for-word from first language to English or vice versa is to be avoided for good language learning. This learning strategy is assessed by item 22 and it says, "*I try not to translate word-for-word*". Generally speaking, this strategy was used by Indonesian university students at a medium range of frequency as the mean score was 3.26 (s.d. = 1.22). In this case, more than a quarter of the students reported that they still did the word-for-word translation since 41 students, making up about 11%, said that they never or almost never tried not to do it. In addition, 62 students representing about 16% said that they usually did not try not to do the word-for-word translation. About another quarter - 102 students making up about 26% - reported that they sometimes tried not to do it. Almost a half of the students reported a high use of this strategy where 117 students or about 30% stated that they generally tried to avoid word-for-word translation and 64 students making up about 17% stated that they always tried to avoid doing so.

Table 6.5 Frequency of Use of Cognitive Strategy Indicators

Item no.	Strategy	M	Freq. Level	f of each score option				
				1	2	3	4	5
10.	Saying or writing new words	3.22	Medium	20	67	154	98	47
11.	Talking like native speakers	3.72	High	8	31	121	126	100
12.	Practicing the sounds	3.78	High	6	19	116	158	87
13.	Using words in different ways	3.51	High	8	48	130	140	60
14.	Starting conversation	2.80	Medium	40	97	171	55	23
15.	Watching TV shows or movies	3.84	High	2	20	119	140	105
16.	Reading for pleasure	3.02	Medium	25	71	188	77	25
17.	Writing notes/letters/reports etc.	2.71	Medium	51	99	164	55	17
18.	Skimming first, then reading carefully	3.44	Medium	18	58	119	117	74
19.	Looking for similar words in first language	2.73	Medium	66	93	132	68	27
20.	Finding patterns	3.11	Medium	26	69	162	95	34
21.	Dividing words into parts to understand meaning	3.37	Medium	17	59	128	130	52
22.	Not translating word-for-word	3.26	Medium	14	62	102	117	64
23.	Making summaries of new information in English	2.90	Medium	32	91	168	75	20

Legend: f : frequency

1 : never or almost never used

2 : generally not used

3 : sometimes used

4 : generally used

5 : always or almost always used

The last indicator of the use of cognitive strategy covered by the SILL is making summaries of new incoming information. Item 23 says, "I make summaries of information that I hear or read in English". Out of the 386 students who participated in the study, about one third reported a low level of use consisting of 32 students, or about 8%, saying that they never or almost never used this strategy and 91 students or about 24% saying that they generally did not use it. Meanwhile, among those reporting a high use of it, 75 students,

representing about 19%, stated that they generally used it and 20 students or about 5% stated that they always or almost always used it. The other 168 students making up 43.5% reported that they sometimes made summaries of information they received in English. In general, this strategy was used at a medium range of frequency as the mean score was 2.90 (s.d. = .98).

In short, out of the fourteen strategies within the cognitive category, four strategies were employed up to a high frequency level. These strategies were trying to talk like native speakers of English, practicing the sounds of English, using words in different ways, and watching English TV shows or movies. The other ten strategies were used at a medium frequency level. The use of each strategy indicator of the fourteen cognitive strategies is summarised in Table 6.5 above.

### 6.1.3 The Use of Compensation Strategies

Compensation strategies are related to any action that the students take when they are faced with problems of communication. As described earlier this strategy category was employed at the lowest level of frequency although the range was still within a medium category. Table 6.6 below presents the number of students reporting using these strategies at the three different levels of frequency of use. As the table indicates more than a half of the 386 students - 228 students making up about 59% - reported using these strategies at the medium frequency. More than a quarter - 108 students representing 28% - stated a high frequency of use. On the contrary, 50 students making up about 13% reported a low frequency of use.

Table 6.6 Frequency of Use of Compensation Strategies

Level of Frequency	Score	Number of Cases	Percentage (%)	Cumulative Percentage (%)
Low	1.00 - 2.44	50	12.9	12.9
Medium	2.45 - 3.44	228	59.1	72.0
High	3.45 - 5.00	108	28.0	100.0

The SILL measures the use of compensation strategies from six indicators expressed in items 24 through 29. Item 24, *"To understand unfamiliar English words, I make guesses"*, measures the extent to which the students try to make guesses. This learning strategy was used at an almost high level of frequency as indicated by the mean score, which was 3.44 (s.d. = 1.04). This mean score is exactly the upper border of a range of scores indicating a medium frequency of use. Thus, the number of students reporting a high frequency of use was greater than that of students reporting a low frequency of use. While 16 students or about 4% reported that they never or almost never used this strategy, 63 students or about 16% stated that they always or almost always used it. Also, 48 students or about 12% said that they usually did not use it, whereas 124 or about 32% mentioned that they generally used it. Meanwhile, the other 135 students making up 35% reported that they sometimes used guesses when encountering unfamiliar words.

The use of gestures to overcome a communication breakdown is another indicator of compensation strategies and it is assessed by item 25, which says, *"When I can't think of a word during a conversation in English, I use gestures"*. The mean score of use of this strategy was 3.11 (s.d. = 1.00) suggesting a medium range of frequency. Out of the 386 students, 38 students representing about 9% reported that they never or almost never used gestures to overcome communication difficulties. However, the same number of students stated that they always or almost always used gestures. Moreover, 69 students making up about 18% stated that they generally did not use this strategy, but 113 students making up about 29% stated the opposite. The other 128 students or about 33% mentioned that they sometimes used gestures when conversing.

Item 26 deals with a strategy by which the students make up their own words when not knowing the right word to use. It says, *"I make up new words when I do not know the right ones in English"*. The mean score of its use was 2.67 (s.d. = 1.27) suggesting a medium frequency level of use. However, detailed inspection of the data revealed that the number of students reporting a low frequency of use was greater than that of students reporting a high frequency.

While 42 students or about 11% stated that they always or almost always used this strategy, about twice as many as this - 87 students making up 22.5% - stated that they never or almost never used it. While 54 students representing 14% said that they generally used it, 90 students making up about 23% stated that they generally did not use it. The other 113 students or about 29% reported that they used this strategy at the *sometimes* level of frequency.

It is very likely that learners of a foreign language find several difficult words when reading a text in the target language. This requires a strategy to deal with the problem and this strategy is assessed by item 27 of the SILL, which says, "*I read English without looking up every new word*". Although this stands as a good strategy for developing reading skill, more than a half of the students reported a low use of this strategy. About 19% of the total students - 72 persons - reported that they never or almost never used it. This means that they always tend to look up every single unfamiliar word they face when reading. Moreover, 138 students making up about 36% reported that in general they did not use the strategy, meaning that they generally looked up every new word. About 28%, consisting of 107 students, reported that they sometimes used it, but sometimes not. Moreover, there were only about 12% or 46 students who stated that generally they used this strategy and even fewer students - 23 persons making up 6% - stated that they always or almost always used this strategy.

Another strategy within the category of compensation strategies is anticipating by guessing what other people will say when having a conversation with them. This strategy is assessed by item 28, which says, "*I try to guess what the other person will say next in English*". This strategy was employed at a medium level of frequency as indicated by the mean score, which was 3.11 (s.d. = 1.00). Thus, the majority of the students - 165 representing about 43% - reported that they used it at the *sometimes* level of frequency. About a quarter of the students reported a low use, where 23 students or 6% stated that they never or almost never used this strategy and 71 or about 18% stated that generally they did not use it. Among those reporting a high use, a quarter of the total students - 95

making up about 25% - said that they generally used it and 32 students or about 8% mentioned that they always or almost always used this guessing strategy.

Table 6.7 Frequency of Use of Compensation Strategy Indicators

Item no.	Strategy	M	Freq. Level	f of each score option				
				1	2	3	4	5
24.	Making guesses to understand unfamiliar words	3.44	Medium	16	48	135	124	63
25.	Using gestures	3.11	Medium	38	69	128	113	38
26.	Making up new words	2.67	Medium	87	90	113	54	42
27.	Reading without looking up every unknown word	2.51	Medium	72	138	107	46	23
28.	Guessing what others are going to say	3.11	Medium	23	71	165	95	32
29.	Using synonyms	3.59	High	13	26	135	145	67

Legend: *f* : frequency

- 1 : never or almost never used
- 2 : generally not used
- 3 : sometimes used
- 4 : generally used
- 5 : always or almost always used

In addition to gestures as described above, the use of synonyms to overcome communication problems is also common among Indonesian learners of English. This strategy is measured by item 29 in the SILL and says, "If I can't think of an English word, I use a word or phrase that means the same thing". The mean score for the use of this strategy was 3.59 (s.d. = .96) suggesting a high frequency of use. Only about 10% of the total students reported a low use, where 13 students or about 3% mentioned that they never or almost never used it and 26 students representing 7% stated that they generally did not use it in their learning activities. On the other hand, more than a half mentioned a high use, where 145 students making up about 38% stated that they generally used it and 67 students making up about 17% stated that they always or almost always used it. The other

135 students making up 35% mentioned that sometimes they used a synonym when finding difficulties in thinking of a word in English.

Thus, out of the six indicators of compensation strategies, only one - using synonyms - was used at a high frequency level, while the other five strategies were used at a medium level. Table 6.7 summarises the frequency of use of the six indicators of compensation strategies.

#### 6.1.4 The Use of Metacognitive Strategies

Metacognitive strategies are strategies that the students employ to manage their learning activities so that an effective learning process is enhanced. Monitoring as well as evaluating progress are just two examples of strategies within this category. This strategy category turned out to be the most frequently used by Indonesian learners of English as described in the previous section. Thus, only a very small portion of the students reported a low use of these strategies. Table 6.8 below presents the number as well as percentage of students reported using this strategy category at different levels of frequency. As the table indicates, while only 6 students, representing 1.6%, reported a low frequency of use of this strategy category, 267 students, making up about 62%, stated that they used them at a high level. The other 113 students or about 29% mentioned a medium level of frequency of use.

Table 6.8 Frequency of Use of Metacognitive Strategies

Level of Frequency	Score	Number of Cases	Percentage (%)	Cumulative Percentage (%)
Low	1.00 - 2.44	6	1.6	1.6
Medium	2.45 - 3.44	113	29.3	30.9
High	3.45 - 5.00	267	69.2	100.1*)

\*) The total is not 100.0 due to rounding up/down.

Items 30 through 39 of the SILL contain strategies that concern metacognitive processes. Item 30 says, "I try to find as many ways as I can to use my English". While only about 7% reported a low use of this strategy, more than 60% reported a high frequency of use. In this case, while 5 students or only about

1% reported that they never or almost never used it, 94 students making up about 24% reported that they always or almost always used it. Similarly, whereas only 24 students or about 6% reported that they generally did not use it, 146 students, making up about 38%, said that they generally used it. The other 117 students, or about 30%, mentioned a medium range of intensity of use as they stated that they used it at the *sometimes* level of frequency. When taken together, the mean score was 3.78 (s.d. = .93) suggesting a high frequency of use.

Noticing one's own mistakes when speaking is another monitoring strategy and this is assessed by item 31 of the SILL, which says, "*I notice my English mistakes and use that information to help me do better*". This strategy was also employed up to a high level of frequency as indicated by the mean score of use, which turned out to be 3.87 (s.d. = .86). Accordingly, only a very small number of students reported a low use, while a great number reported a high use. Out of 386 students, only 3 students or less than 1% reported that they never or almost never used this strategy and 15 students or about 4% stated that in general they did not use it. On the contrary, 166 students making up about 44% stated that they generally used it and 95 students or about a quarter of the total mentioned that they always or almost always used it. A little more than a quarter - 107 students making up about 28% - reported that they sometimes noticed their mistakes when using English.

Another metacognitive strategy with an even higher frequency of use is paying attention to others when involved in a conversation with them. This strategy is measured by item 32 and it says, "*I pay attention when someone is speaking English*". The mean score of use for this strategy was 4.18 (s.d. = .82) suggesting a high level of frequency of use. In this case, only less than one fifth of the total students did not report a high frequency of use. As many as 3 students or less than 1% stated that they never or almost never used it and 10 students or about 3% mentioned that they generally did not use it and 52 students or 13.5% mentioned that they sometimes used it. Among students showing a high frequency of use, 169 students, making up about 44%, mentioned that they usually paid

attention when someone is speaking and 152 students making up about 39% mentioned that always or almost always did so.

Finding ways to be a better learner is a learning strategy assessed by item 33 and the item says, "*I try to find out how to be a better learner of English*". This strategy was also used at a high level of frequency as indicated by the mean score, which was 4.05 (s.d. = .87). More than three fourths reported a high frequency of use, where 161 students (about 42%) stated that they generally used this strategy and 133 students, representing about 35%, stated that they always or almost always used it. Among students with a low frequency of use, 3 students (less than 1%) mentioned that they never or almost never used it and 14 students representing about 4% mentioned that they generally did not use it. The other 75 students or about 19% said that they sometimes used it.

Making schedules in learning English is another metacognitive strategy and this strategy is measured by item 34 of the SILL. It says, "*I plan my schedule so I will have enough time to study English*". The mean score of its use was 3.10 (s.d. = 1.00) suggesting a medium range of use. Detailed inspection of the data showed that 19 students or about 5% mentioned that they never or almost never used it and 79 students, making up about 21%, stated that they generally did not use it. Among students who reported using it at a high frequency, 77 students or about 20% said that they generally used it and 40 students representing more than 10% stated that they always or almost always used it. Meanwhile, those who reported that they sometimes made learning schedules were 171 students, representing about 44%.

Item 35 (*I look for people I can talk to in English*) concerns the extent to which students look for people to practice speaking English. This strategy was employed at a high range of use as the mean score was 3.54 (s.d. = .94). More than a half of the total students reported a high frequency of use, where 64 students representing about 17% reported that they always or almost always used this strategy and 134 students or about 35% said that they generally used it. Meanwhile, only 6 students or about 2% reported that they never or almost never used it and 41 students representing about 11% stated that in general they did not

use this strategy. The other 141 students, making up 36.5%, stated that they sometimes look for people to talk to in English.

Item 36 says, "*I look for opportunities to read as much as possible in English*". Out of 386 students participating in the study, about two fifths mentioned a high frequency of use of this strategy. In this case, 100 students making up about 26% stated that they generally used it and 61 students, or about 16%, mentioned that they always or almost always used it. Meanwhile, only 14% reported a low intensity of use, where 7 students or about 2% reported that they never or almost never used this strategy and 48 students or about 12% stated that they generally did not use it. The other 170 students making up 44% said that they sometimes look for opportunities to read English materials. Generally speaking, this strategy was used at a medium level of frequency as indicated by the mean score of use, which was 3.41 (s.d. = .96).

Setting goals in learning is another indicator of metacognitive strategies and the extent to which the students used this strategy is assessed by item 37 in the SILL. The item says, "*I have clear goals for improving my English skills*". Almost two thirds of the students reported a high use of this strategy. About 39% comprising 152 students reported that they generally used this strategy and 38% or 147 students stated that they always or almost always used it. On the contrary, only a very small portion of the students reported a low use of this strategy. Just 4 students or 1% stated that they never or almost never used this strategy and 13 students or about 3% stated that they generally did not use it. The other 70 students, making up 18%, reported that they sometimes set clear goals to improve their skills in English. Generally speaking then, this strategy was used at a high level of frequency as the mean score of use was 4.10 (s.d. = .88).

The last indicator of the use of metacognitive strategies is thinking of progress in learning and this is assessed by item 38, which says, "*I think about my progress in learning English*". This strategy turned to be the most intensively used of all strategies covered by the SILL. Its mean score of use, which was 4.22 (s.d. = .80), was the highest one. Thus, the majority of students reported a high frequency of use and only a small percentage reported a low use. Among those

with high use, 163 students, making up about 42%, reported that they generally used it and 160 students or 41.5% stated that they always or almost always used it. On the contrary, those who reported that they never or almost never used it were only 4 students representing 1% only. The same number of students reported that they generally did not use this strategy. The other 55 students making up 14% stated that they sometimes thought about the progress they had made in learning English.

Table 6.9 Frequency of Use of Metacognitive Strategy Indicators

Item No.	Strategy	M	Freq. Level	f of each score option				
				1	2	3	4	5
30.	Finding as many ways as possible to use English	3.78	High	5	24	117	146	94
31.	Noticing mistakes	3.87	High	3	15	107	166	95
32.	Paying attention when others speaking	4.18	High	3	10	52	169	152
33.	Finding ways to be a better learner	4.05	High	3	14	75	161	133
34.	Making learning plans	3.10	Medium	19	79	171	77	40
35.	Looking for people to talk to	3.54	High	6	41	141	134	64
36.	Looking for opportunities to read	3.41	Medium	7	48	170	100	61
37.	Setting clear goals for language skill development	4.10	High	4	13	70	152	147
38.	Thinking about progress	4.22	High	4	4	55	163	160

Legend: *f* : frequency

1 : never or almost never used

2 : generally not used

3 : sometimes used

4 : generally used

5 : always or almost always used

In summary, out of nine indicators of metacognitive strategies, only two strategies were used at a medium level of frequency. They were *making learning schedules* and *looking for opportunities to read in English*. The other seven strategies were used at a high frequency level with a strategy of *thinking about*

*learning progress* being the most frequently used. Table 6.9 presents the summary of the intensity of use of these strategies.

### 6.1.5 The Use of Affective Strategies

Affective strategies concern strategies for managing feelings of being anxious, afraid or nervous when learning. The SILL covers six indicators of this group of learning strategies represented by items 39 through 44. As presented in the previous section, this strategy category was used at a medium level of frequency. The number as well as percentage of students reporting different levels of use was presented in the following Table 6.10. As the table shows, more than a half containing 204 students reported a medium frequency of use. Two fifths - 154 students making up 40% - stated a high level of use and only 28 students or about 7% mentioned a low use.

Table 6.10 Frequency of Use of Affective Strategies

Level of Frequency	Score	Number of Cases	Percentage (%)	Cumulative Percentage (%)
Low	1.00 - 2.44	28	7.2	7.2
Medium	2.45 - 3.44	204	52.9	60.1
High	3.45 - 5.00	154	39.9	100.0

The first item - item 39 - of affective strategies says, "*I try to relax whenever I feel afraid of using English*". In regard to this strategy, only about 11% of the students reported a low use, where 36 students or about 9% stated that they generally did not use it and 9 students or about 2% stated that they never or almost never used it. On the contrary, almost three fifths reported a high frequency of use, where 149 students (about 39%) mentioned that they generally used this strategy and 79 students making up 20.5% stated that they always or almost always used it. The remaining 113 students, representing about 29%, stated that they sometimes tried to be relaxed when afraid of using English. When these data were taken together, it turned out that the mean score was 3.66 (s.d. = .98) suggesting a high level of frequency of use.

Encouraging oneself when afraid of making mistakes is another affective strategy. This is assessed by item 40 of the SILL, which says, "*I encourage myself to speak English even when I am afraid of making a mistake*". This strategy was also used at a high level as indicated by the mean score, which was 3.68 (s.d. = .91). Thus, only a small percentage of students reported a low use of it. The data showed that only 9 students, representing about 2%, stated that they never or almost never used this strategy and 17 students making up about 4% stated that they generally did not use it. Conversely, more than a half of the students reported a high use, where 153 students or about 40% mentioned that they generally used this strategy and 72 students, making up about 19%, stated that they always or almost always used it. The other 135 students representing 35% stated that they sometimes encouraged themselves to speak even when they were afraid of making mistakes.

Self-reward is also important and it stands as another indicator of affective strategies. This strategy is assessed by item 41 of the SILL, which says, "*I give myself a reward or treat when I do well in English*". While about two fifths of the students reported a high use of this strategy, about a quarter reported the opposite. In this case, 105 students representing about 27% stated that they generally used this strategy and 53 students or about 14% stated that they always or almost always used it. On the other hand, 32 students representing about 8% said that they never or almost never used it and 76 students making up about 20% stated that they generally did not use it. The other 120 students representing about 31% mentioned that they sometimes gave themselves a self-reward. When taken together, a mean score of 3.18 (s.d. = 1.15) was obtained suggesting a medium level of frequency of use.

Item 42 deals with the extent to which students notice whether they feel nervous or not when using English. It says, "*I notice if I am tense or nervous when I am studying or using English*". The mean score of use of this strategy was 3.51 (s.d. = .99) suggesting a high level of use. Thus, only a small percentage of students reported a low use of this strategy. In this case, 14 students or about 4% stated that they never or almost never used this strategy, while 67 students or

about 17% reported that they always or almost always used it. Whereas only 31 students, making up 8%, reported that they generally did not use it, 123 students (about 32%) reported the opposite. The other 151 students, representing about 39%, stated that they sometimes noticed whether they were nervous or not.

The only learning strategy in the affective category which was not reported as being popular among Indonesian learners of English is writing down feelings into a diary. This strategy is assessed by item 43 in the SILL and it says, "*I write down my feelings in a language learning diary*". Although generally speaking, this learning strategy was employed at a medium level of frequency as indicated by the mean score, which was 2.55 (s.d. = 1.26), a great number of students reported a low use of it. While 32 students or about 8% reported that they always or almost always used it, 103 students representing about 27% stated that they never or almost never used it. Whereas 57 students or about 15% stated that they generally used this strategy, 87 students or 22.5% mentioned that they generally did not use it. Finally, 151 students making up about 39% reported that they sometimes wrote down their feelings about learning English.

Instead of writing down their feelings, sharing with others seems to be more common among Indonesian learners of English. This strategy is assessed by item 44 of the SILL and it says, "*I talk to someone else about how I feel when I am learning English*". Although the mean score of use of this strategy, which turned out to be 3.04 (s.d. = 1.08) also fell within a category of medium intensity of use, it was far greater than the mean score of the writing-down-feelings strategy as previously described. The data showed that about 37% of the total students participating in the study mentioned that they sometimes used this strategy. About 9% or 34 students stated that they always or almost always used this strategy. An equal number of students - 35 students - stated the opposite, that is, they never or almost never used this strategy. About a quarter of students - 96 students - reported a high use of it as they stated that they generally used it, but 77 students, making up about 20%, stated that they generally did not talk to others about their feelings in learning English.

Table 6.11 Frequency of Use of Affective Strategy Indicators

Item no.	Strategy	M	Freq. Level	<i>f</i> of each score option				
				1	2	3	4	5
39.	Trying to be relaxed	3.66	High	9	36	113	149	79
40.	Encouraging self to speak	3.68	High	9	17	135	153	72
41.	Giving self-rewards when doing well	3.18	Medium	32	76	120	105	53
42.	Noticing if nervous when using or studying English	3.51	High	14	31	151	123	67
43.	Writing down feelings in a diary	2.55	Medium	103	87	107	57	32
44.	Talking to other about feelings	3.04	Medium	35	77	144	96	34

Legend: *f* : frequency

1 : never or almost never used

2 : generally not used

3 : sometimes used

4 : generally used

5 : always or almost always used

In short, out of the six indicators of the affective strategies, three strategies were used at a high level of frequency and the other three strategies were at a medium level. Table 6.11 summarises the frequency of use of these six affective strategy indicators as well as the number of students who reported different levels of use of these strategies.

### 6.1.6 The Use of Social Strategies

Social strategies, which were ranked the second in terms of the frequency of being used by Indonesian university students involved in the present study, refer to strategies that they take to enhance communicative interactions with other people both native speakers and non-native speakers of English. The study found that Indonesian learners of English used these strategies at a high frequency level as previously presented in section 6.1. Thus, the majority of the students reported that they used them at a high frequency with mean scores ranging from 3.45 to 5.00. Detailed percentages of students reporting different levels of use of social strategies are presented in Table 6.12. Out of 386 students, 14 students,

representing about 4%, reported that they employed these strategies at a low frequency, while 209 students, making up about 54%, mentioned a high use. The other 163 students or about 42% mentioned a medium level of use of social strategies.

Table 6.12 Frequency of Use of Social Strategies

Intensity of Use	Score	Frequency (N = 386)	Percentage (%)	Cumulative Percentage (%)
Low	1.00 - 2.44	14	3.7	3.7
Medium	2.45 - 3.44	163	42.2	45.9
High	3.45 - 5.00	209	54.2	100.1

\*) The total is not 100.0 due to rounding up/down.

Social strategies were assessed by 6 items in the SILL and they are items 45 through 50. Item 45 measures to what extent students maintain communicative interactions in English by asking the other conversant to slow down or repeat when they do not understand. The item says, "*If I do not understand something in English, I ask the other person to slow down or say it again*". This strategy was used at a high rate as the mean score was 3.91 (s.d. = .92), and only a few students reported a low use. While only 4 students or 1% reported that they never or almost never used this strategy, 110 students making up 28.5% said that they always or almost always used it. Likewise, whereas only 23 students or 6% mentioned that they generally did not use it, 161 representing about 42% said that they usually used it. The other 88 students or about 23% mentioned that they sometimes asked the other person to slow down or repeat when they did not understand what he or she was saying.

Asking other persons to correct one's utterances is another social strategy and this is assessed by item 46 in the SILL. The item says, "*I ask English speakers to correct me when I talk*". About a half of the students reported that they used this strategy at a high level of frequency, where 114 students or about 30% said that they generally used it and 80 students or about 21% mentioned that they always or almost always used it. As many as 143 students, representing 37%, reported that they sometimes used it. Among students reporting a low use, 36

students or about 9% stated they generally did not use it and 13 students making up 3% stated that they never or almost never used it. When these figures were taken together, a mean score of 3.55 (s.d. = 1.03) was obtained, suggesting a high frequency of use.

To what extent students practice speaking English with their peers is measured by item 47, which states, "*I practice English with other students*". This strategy was also used at a high frequency level as indicated by the mean score of use, which was 3.50 (s.d. = .94). While almost a half of the students reported a high use of this strategy, only about 11% mentioned a low use. Among those reporting a high use, 119 students or about 31% stated that they generally used it and 63 students or 16% reported that they always or almost always used it. On the other hand, among those reporting a low intensity of use, 8 students or about 2% said that they never or almost never used it and 35 students making up about 9% said that they usually did not use it. The other 161 students making up about 42% reported that they sometimes practiced using English with their friends.

Asking for help when getting into difficulties in using English is another social strategy. This strategy is measured by item 48 in the SILL, which says, "*I ask for help from English speakers*". This strategy was exercised up to a high level of frequency as indicated by the mean score, which turned out to be 3.80 (s.d. = .95). In this case, more than three fifths of the students reported a high use, where 100 students representing about 26% stated that they always or almost always used this strategy and 143 students making up 37% reported that they generally used it. Meanwhile, less than 10% reported a low intensity of use, where only 6 students or about 2% stated that they never or almost never used it and 22 students or about 6% stated that they generally did not use it. The number of students who reported that they sometimes asked for help when using English was 115, making up about 30%.

Asking questions in English is another social strategy assessed by the SILL and it stands as item 49, which says, "*I ask questions in English*". This strategy was employed at a medium level of frequency as the mean score was 3.10 (s.d. = .84). Thus, the majority of the students - 219, representing about 57% -

mentioned that they used this strategy at the *sometimes* level of frequency. About a quarter of the students stated a high frequency of use, where 21 students or about 5% stated that they always or almost always used it and 79 students making up about 21% stated that they generally used it. Among those who reported a low use, 15 students or about 4% said that they never or almost never used it and 52 students or about 14% reported that they generally did not ask questions in English.

Table 6.13 Frequency of Use of Social Strategy Indicators

Item no.	Strategy	M	Freq. Level	<i>f</i> of each score option				
				1	2	3	4	5
45.	Asking others to slow down or repeat	3.91	High	4	23	88	161	110
46.	Asking others to correct mistakes	3.55	High	13	36	143	114	80
47.	Practicing English with other students	3.50	Medium	8	35	161	119	63
48.	Asking for help from speakers of English	3.80	High	6	22	115	143	100
49.	Asking questions in English	3.10	Medium	15	52	219	79	21
50.	Learning the culture of native speakers of English	3.13	Medium	27	75	151	87	46

Legend: *f* : frequency  
 1 : never or almost never used  
 2 : generally not used  
 3 : sometimes used  
 4 : generally used  
 5 : always or almost always used

The last item of the SILL - item 50 - measures how far the students try to understand differences between their culture and English native speakers' culture. It says, "*I try to learn about the culture of English speakers*". Out of 386 students, about one third stated a high frequency of use of this strategy, where 87 students or about 23% stated that they generally used it and 46 students or about 12% said they always or almost always used it. About a quarter of them reported a low frequency of use, where 27 students, making up 7%, stated that they never or

almost never used it and 75 students or about 19% stated that they generally did not use it. The other 151 students, making up about 39%, stated that they sometimes tried to understand the culture of the native speakers of English. Generally speaking, this strategy was used at a medium level of frequency as the mean score was 3.13 (s.d. = 1.08).

In summary, out of the six social strategies, only two indicators were used at a medium level of frequency, while the other four were used at a high level. The two strategies used at a medium level were *asking questions in English* and *trying to understand the culture of the community speaking the target language*. Table 6.13 summarises the frequency of use of social strategies as well as the number of students reporting different levels of use.

## 6.2 Interrelationship among the Six Strategy Categories

This section presents findings related to the question about whether the six strategy categories of learning strategies correlate with one another. In this regard, as mentioned in Chapter Five, a research hypothesis, "*The six strategy categories - memory, cognitive, compensation, metacognitive, affective and social - significantly correlate with one another*" was used. This hypothesis was changed into the null form: "*There are not any significant relationships among the six strategy categories*".

The results of the correlational analyses are summarised in Table 6.14. As the table shows, interpreted in terms of the size of relationship as suggested by Hinkle, Wiersma and Jurs (1988), the correlation between the following strategy categories were found to be moderate as the coefficients were between .50 to .70:

- memory and cognitive;
- memory and metacognitive;
- cognitive and metacognitive;
- metacognitive and social; and
- social and cognitive.

Moreover, the correlation between the following strategy types was found to be in the category of low correlation because the coefficients were between .30 to .50:

- memory and compensation;
- memory and affective;
- memory and social;
- cognitive and compensation;
- cognitive and affective;
- compensation and metacognitive;
- compensation and affective;
- metacognitive and affective; and
- affective and social.

The correlation between compensation and social strategy types was found to be very low as the coefficient was below .30.

Table 6.14 Coefficients of Intercorrelation among the Six Strategy Categories

	Mem	Cog	Com	Meta	Aff	Soc
Mem	1.000					
Cog	.631**	1.000				
Com	.378**	.459**	1.000			
Meta	.517**	.667**	.311**	1.000		
Aff	.311**	.380**	.390**	.425**	1.000	
Soc	.430**	.562**	.235**	.668**	.496**	1.000

\*\* significant at .01 level

It should be noted, however, that although some correlation coefficients fell within the category of low correlation and one within the category of very low correlation, when interpreted in terms of their significance, all of the coefficients indicated significant correlation at .01 level. Thus, the null hypothesis above was rejected. Instead, the alternative hypothesis was accepted. This finding indicates that an increase in the use of one particular strategy category tends to be followed by an increase in the use of the other categories. Conversely, a decrease in the use of one strategy category is followed by a decrease in the use of the other categories.

### 6.3 Summary of the Findings

In sum, the present study found that, generally speaking, the Indonesian university students covered in the study revealed the use of overall English learning strategies at a medium level of intensity with metacognitive strategies being the most frequently used and compensation strategies being the least frequently used. The order of the frequency of use from the most intensively used to the least intensively used was metacognitive strategies, social strategies, affective strategies, cognitive strategies, memory strategies, and compensation strategies.

Table 6.15 presents a summary of the number of individual strategies of each category that were used at different levels of frequency. As the table indicates, out of fifty individual strategies, only one strategy (2%) was used at a low level of frequency. This strategy was about the use of flashcards to remember new words, which was a memory strategy. Thirty strategies, representing 60%, were used at a medium level. They consisted of six memory strategies, ten cognitive strategies, five compensation strategies, two metacognitive strategies, three affective strategies, and four social strategies. And nineteen strategies (38%) were used at a high intensity level with two, four, one, seven, three, and two for memory, cognitive, compensation, metacognitive, affective, and social strategies respectively.

Table 6.15 Individual Strategies at Different Levels of Frequency of Use

Freq. Level	Strategy Category						Total	Percentage %
	Mem	Cog	Comp	Meta	Aff	Soc		
Low	1	-	-	-	-	-	1	2
Medium	6	10	5	2	3	4	30	60
High	2	4	1	7	3	2	19	38
Total	9	14	6	9	6	6	50	100

It was also found that the use of the six strategy categories was correlated significantly with one another. Thus, any change in the frequency of use of any one strategy category tends to be followed by a similar change in the use of the other five strategy categories. For example, an increase in the use of memory

strategies tends to increase the frequency of use of the cognitive, compensation, metacognitive, affective, and social strategies too.

As described earlier, the profile of the use of strategies was drawn from two groups of students: those learning English as a major course and those learning English as a minor course. While this combination may stand as an advantage of this study over previous studies, it can also at the same time stand as a weakness since the two groups may have different profiles of strategy use. That is why, in addition to presenting the general profile, the use of learning strategies by the two groups was also compared in this study. The findings of this comparison are presented in the next chapter, Chapter Seven.

Chapter Seven  
RESEARCH FINDINGS 2:  
VARIATION IN LEARNING STRATEGY USE  
IN RELATION TO COURSE STATUS

This chapter is devoted to the presentation of findings regarding the variation in learning strategy use in relation to a difference in the status of the English course, as either a major or a minor. As mentioned earlier, the subjects involved in the present study were drawn from three institutions. Students at the English Department of the Islamic University of Malang (n = 124) learn English as a major with a target of becoming English teachers at secondary schools. Students at the English Department of Gajayana University, Malang, (n = 126) also learn English as a major, but with a target of getting jobs related to the use of the English language as well as English literature, such as translators or interpreters. Students at the Accounting Department, Polytechnic, Brawijaya University, Malang, (n = 136) however, learn English as a minor to obtain a complementary skill to their major skills in accounting. Thus, the students from the first two institutions were grouped together into one group of students who learn English as a major. The students from the third institution, on the other hand, made up a group of students who learn English as a minor.

As described in Chapter Five, the mean scores of the two groups were compared to measure the variation of learning strategy use in relation to the difference of the course status. The difference of the two means was then tested using a t-test to measure its significance at .10, .05, and .01 levels. In this case, if the difference is significant at .10 level, it is considered as a weak but significant difference. A .05 level of significance suggests a strong difference and a .01 level of significance indicates a very strong difference. A weak but significant

difference suggests that one group used the strategy under investigation slightly more frequently than the other group. A strong difference means that one group used the strategy under investigation much more frequently than the other group and a very strong difference indicated that one group used it very much more frequently than the other group.

### 7.1 Variation in Strategy Use in Relation to a Difference in the Status of the English Course

The research question to be answered in this section is "*Do students who learn English as a major perform different frequencies of learning strategies from those who learn it as a minor?*". To this question a non-directional hypothesis, which states, "*Students who learn English as a major use learning strategies at significantly different levels of frequency from those who learn it as a minor*" was forwarded as a tentative answer. For the sake of hypothesis testing, however, this hypothesis was converted into a null hypothesis, which says, "*The difference in the frequency levels in the use of learning strategies by students of English as a major and those of English as a minor was not statistically significant*".

Analyses of the data found that the null hypothesis was rejected and that the working hypothesis was accepted. That is, the students who learned English as a major were found to use learning strategies at significantly different frequencies than the students who learned it as a minor. In other words, the difference in the status of English being learned is associated with variations in the frequency of the use of learning strategies. The results of the statistical analyses to measure such association are summarised in Table 7.1. As the table shows, the students with English as a major were observed to use overall learning strategies with a mean score of 3.40 (s.d. = .42), while the students with English as a minor were found to have a mean score of use of 3.23 (s.d. = .48). The t-test analysis resulted in a t-value of 3.726 ( $p < .000$ ). Thus, the t-value was significant at .01 level, suggesting that there was a very strong difference in the frequency of use of overall learning strategies by those learning English as a major and those learning it as a minor. In this case, as the mean score of the students with English as a

major was higher than that of the students with English as a minor, it can be inferred that the former group of students used learning strategies significantly very much more frequently than the latter group.

Table 7.1 Differences in the Use of the Six Strategy Categories and Overall Strategies by Learners of English as a Major (n = 250) and a Minor (n = 136)

Strategy Category/ English Subject Status	Mean	s.d.	Levene's Test for Equality of Var.		t-value	Sig.
			F	Sig.		
Memory Strategy						
Major	3.17	.59	.075	.785	1.797	.073
Minor	3.06	.59				
Cognitive Strategy						
Major	3.32	.52	.107	.744	4.055	.000
Minor	3.10	.54				
Compensation Strategy						
Major	3.07	.69	1.998	.158	-.272	.785
Minor	3.09	.61				
Metacognitive Strategy						
Major	3.88	.60	.064	.800	3.187	.002
Minor	3.68	.59				
Affective Strategy						
Major	3.32	.62	.266	.606	2.267	.024
Minor	3.18	.61				
Social Strategy						
Major	3.61	.57	.975	.324	4.866	.000
Minor	3.30	.65				
Overall Strategy						
Major	3.40	.42	.490	.484	3.726	.000
Minor	3.23	.49				

Further analyses of the significance of the differences in the use of the six strategy categories revealed that five categories were used at significantly different frequency levels and only one category was not. Among strategy categories used at significantly different levels of frequency, three of them indicate a very strong difference, one a strong difference, and the other one a weak difference.

Cognitive, metacognitive, and social strategies were the three categories being used with very strong differences. While the students with English as a major were found to show a mean score of use of cognitive strategies of 3.32 (s.d.

= .52), those with English as a minor were found to use this strategy category with a mean score of 3.10 (s.d. = .54). The t-test analysis resulted in a t-value of 4.055 ( $p < .000$ ). In terms of the use of metacognitive strategies, a mean score of use of 3.88 (s.d. = .60) was computed from the students with English as a major and that of 3.68 (s.d. = .59) from the students with English as a minor. The t-test analysis revealed a t-value of 3.187 ( $p < .002$ ). In regard to the use of social strategy category, the mean score of use by the students with English as a major was 3.61 (s.d. = .57) and that of use by the students with English as a minor was 3.30 (s.d. = .65). The t-test analysis revealed a t-value of 4.866 ( $p < .000$ ). The difference in the use of the three strategy categories above were all significant at .01 level suggesting that there were very strong differences in the use of cognitive, metacognitive and social strategy categories by those learning English as a major and those learning it as a minor. In this case, as the former group of students had higher means of use than the latter group, it can then be inferred that the students with English as a major used these three types of strategies very much more frequently than the students with English as a minor.

The difference in the use of affective strategy was found to be significant at .05 level. In this regard, the students with English as a major were found to have a mean score of use of 3.32 (s.d. = .62), whereas those with English as a minor were found to have a mean score of 3.18 (s.d. = .61). The t-test analysis found a t-value of 2.267 ( $p < .024$ ). Thus, there is a strong difference in the use of affective strategies by the two groups of students. Again, the students with English as a major had a higher mean score of use than their counterparts with English as a minor, suggesting that the former group of students exercised social strategies much more frequently than the latter group.

In addition, the memory strategy category was also used at significantly different levels of frequency although the difference was weak. The students who learned English as a major showed a mean score of use of this strategy 3.17 (s.d. = .59), whereas those who learned English as a minor were observed to have a mean score of 3.06 (s.d. = .59). A t-value of 1.797 ( $p < .073$ ) was obtained from the t-test analysis, suggesting that the difference was weak, but it was still marginally

significant. Again, the learners with English as a major showed a higher mean score suggesting that they used memory strategy category slightly more frequently than the learners with English as a minor.

The frequency of use of the other strategy category, on the other hand, did not indicate any significant difference. This category was compensation strategy, of which the students with English as a major were found to have a mean score of use of 3.07 (s.d. = .69) and those with English as a minor were found to have a mean score of use of 3.09 (s.d. = .61). A t-value of  $-.273$  ( $p < .785$ ) was obtained from the t-test analysis, suggesting that the difference was not significant. In short, the learners with English as a major and those with English as a minor did not show significantly different frequencies of use of compensation strategies. In other words, the two groups of learners showed more or less the same frequency of use of compensation strategies.

Furthermore, it is also necessary to report the variation in the use of individual strategy within the six categories above. The following sections are then devoted to the presentation of findings related to how the individual strategy varied in its use in association with the difference in the status of the English course being learned by the students.

### *7.1.1 Variation in the Use of Memory Strategies*

As mentioned in the previous section, in terms of the strategy category, the students who learned English as a major and those who learned it as a minor used memory strategies at significantly slightly different levels of frequency. Further analyses of the variation in the use of an individual strategy within the memory strategy category revealed that only four out of nine strategies were exercised at significantly different levels of frequency. Table 7.2 presents the statistical findings of the analyses.

Table 7.2 Differences in the Use of Memory Strategies by Learners of English as a Major (n = 250) and a Minor (n = 136)

Learning Strategy/ English Subject Status	Mean	s.d.	Levene's Test for Eq. of Var.		t-value	Sig.
			F	Sig.		
Relating old and new language items						
Major	3.45	1.04	1.204	.273	.576	.565
Minor	3.39	.98				
Using new words in sentences						
Major	3.52	.99	2.836	.093	2.087	.038
Minor	3.31	.92				
Connecting sound of a word and an image or picture of it						
Major	3.40	1.13	.461	.497	-.574	.566
Minor	3.46	1.05				
Making a mental picture of a situation where words are used						
Major	3.50	1.01	.680	.410	-1.150	.251
Minor	3.63	.95				
Using rhymes						
Major	2.82	1.08	1.009	.316	.894	.372
Minor	2.72	.95				
Using flashcards						
Major	2.25	1.20	9.442	.002	2.165	.031
Minor	1.99	1.05				
Acting out words						
Major	2.99	1.06	.439	.508	2.789	.006
Minor	2.68	.96				
Reviewing lessons						
Major	3.42	.92	1.488	.223	2.254	.025
Minor	3.20	.92				
Remembering location of words on page, board, or street sign, etc.						
Major	3.18	1.08	1.102	.295	.407	.684
Minor	3.13	1.13				

The table shows that the students with English as a major were found to show higher scores for the use of seven strategies. However, only four differences of means were significant, while the other three were not. The first memory strategy used at significantly different levels of frequency was *using new words in sentences*. In this case, a mean score of use of 3.52 (s.d. = .99) was observed from the students who learned English as a major and that of 3.31 (s.d. = .92) was found from those with English as a minor. The analysis of the significance of this difference revealed a t-value of 2.087 ( $p < .038$ ), suggesting that the difference was significant at .05 level. *Using flashcards* was another strategy within this

category. In this case, the students with English as a major were found to have a mean score of use of 2.25 (s.d. = 1.20), while the students with English as a minor were found to have a mean score of use of 1.99 (s.d. = 1.05). The two distributions of scores, however, turned out to have unequal variance since Levene's test for equality of variance indicated an F-value of 9.442 ( $p < .002$ ). Thus, the t-test analysis was carried out with means from two distributions having unequal variance and it found a t-value of 2.165 ( $p < .031$ ), suggesting that the difference was significant at .05 level. *Acting out new words* was also another memory strategy being reported by the students with English as a major having a significantly higher mean score of use than the learners with English as a minor. In this case, the former group was observed to have a mean score of use of 2.99 (s.d. = 1.06), while the latter group was found to have a mean score of use of 2.68 (s.d. = .96). The t-test analysis obtained a t-value of 2.789 ( $p < .006$ ), suggesting that the difference was significant at .01 level. The last strategy used at a significantly different level of frequency was *reviewing lessons*. Of this strategy the students with English as a major were observed to have a mean score of use of 3.42 (s.d. = .92), while the students with English as a minor were found to have a mean score of use of 3.20 (s.d. = .92). The analysis of the significance of the difference found a t-value of 2.254 ( $p < .025$ ). This means that the difference was significant at .05 level. Thus, in the use of strategies of *using new words in sentences*, *using flashcards to remember new words*, and *reviewing English lessons*, the students with English as a major turned out to use them much more frequently than their friends who learned it as a minor. An even very much higher frequency of use was found in the case of the use of *acting out new words* to help remember them effectively.

The students with English as a major course were also found to use three other strategies with higher mean scores than the students with English as a minor, but the differences were not significant. Within this category was a strategy of *relating what is already known and new language items*. Of this strategy, the former group was observed to have a mean score of use of 3.45 (s.d. = 1.04), while the latter group of 3.39 (s.d. = .98). The t-test analysis of the significance of

the difference between these two means revealed a t-value of .576 ( $p < .565$ ). Another strategy within this category was *using rhymes*, of which a mean score of use of 2.82 (s.d. = 1.08) was observed from the students with English as a major and that of 2.72 (s.d. = .96) was observed from their fellow students with English as a minor. A t-value of .894 ( $p < .372$ ) was obtained from the t-test analysis. The last one was *remembering location of words on page, board, or street sign, etc.* Of this strategy, the students with English as a major had a mean score of use of 3.18 (s.d. = 1.08) and the students with English as a minor showed a mean score of use of 3.13 (s.d. = 1.13). The t-test analysis found a t-value of .407 ( $p < .684$ ). Thus, it is statistically inferred that the differences in the use of these three strategies occurred by chance only.

The students with English as a minor, on the other hand, were observed to have higher mean scores for the use of two strategies. One was *connecting the sound of a word and an image or a picture of it*. In this regard, the students with English as a major course were found to have a mean score of use of 3.40 (s.d. = 1.13), while the students with English as a minor showed a mean score of use of 3.46 (s.d. = 1.05). Unfortunately, the t-test analysis obtained a t-value of only -.574 ( $p < .566$ ), suggesting that the difference was not significant. The other one was *making a mental picture of a situation where words are used*. Mean scores of 3.50 (s.d. = 1.01) and 3.63 (s.d. = .95) were obtained from the two groups. Again, the difference was not large enough to be significant as the t-test analysis found a t-value of -1.150 ( $p < .251$ ).

In summary, out of the nine memory strategies, five strategies were used at insignificantly different levels of frequency and the other four strategies were used at significantly different levels of frequency. In this case, the students learning English as a major turned out to use strategies of *using new words in sentences*, *using flashcards*, and *reviewing lessons* significantly much more frequently than the students who learned English as a minor as the differences were significant at .05 level. Even, regarding the use of a strategy of *acting out words*, the former group of learners was found to use it significantly very much more frequently than the latter group as the difference was significant at .01 level.

### 7.1.2 Variation in the Use of Cognitive Strategies

Cognitive strategy, which was assessed in fourteen strategy items, was used at significantly different levels of frequency by the students learning English as a major and those learning English as a minor. Further analyses of the individual strategy, however, revealed that only seven strategies were exercised at significantly different levels of frequency, whereas the other seven strategies were not. Table 7.3 presents the statistical findings of the analyses.

The table shows that the students with English as a major used one strategy with a lower mean score than that of their fellows with English as a minor. The strategy was *looking for similar words in the first language*. Of this strategy, the mean score of use by the former group of students was 2.65 (s.d. = 1.10), while that by the latter group was 2.89 (s.d. = 1.21). The t-test analysis obtained a t-value of -1.987 ( $p < .048$ ), suggesting that the difference was significant at .05 level. In other words, it was found that there was a significantly strong difference in the frequency of use of this strategy by the two groups of students. In this case, the students who learn English as a major course used this strategy much less frequently than those learning English as a minor.

The students with English as a major, on the other hand, were found to have higher mean scores for the use of thirteen strategies. However, not all of the differences in the frequency of use of these strategies were significant. In fact, differences in the use of only six strategies were significant. The first one was a strategy of *saying or writing new words*. Of this strategy, the students with English as a major were observed to have a mean score of use of 3.33 (s.d. = 1.05) and the students with English as a minor were found to have a mean score of use of 3.02 (s.d. = .98). The two distributions of scores, however, indicated equal variances as the Levene's test for equality of variance found an F-value of 3.745 ( $p < .054$ ). A t-test analysis applied to the two means obtained from the distribution of scores having equal variances indicated a t-value of 2.847 ( $p < .005$ ), suggesting that the difference was significant at .01 level. The strategy of *talking like native speakers of English* is another strategy with the learners with

Table 7.3 Differences in the Use of Cognitive Strategies by Learners of English as a Major (n = 250) and a Minor (n = 136)

Learning Strategy/ English Subject Status		Mean	s.d.	Levene's Test for Eq. of Var.		t-value	Sig.																																																																																																																																										
				F	Sig.																																																																																																																																												
Saying or writing new words	Major	3.33	1.05	3.745	.054	2.847	.005																																																																																																																																										
	Minor	3.02	.98					Talking like native speakers	Major	3.82	1.01	.001	.971	2.710	.007	Minor	3.54	.96	Practicing the sounds	Major	3.80	.94	2.011	.157	.595	.552	Minor	3.74	.83	Using words in different ways	Major	3.55	1.00	2.482	.116	1.218	.224	Minor	3.43	.90	Starting conversation	Major	3.02	.97	4.387	.037	6.051	.000	Minor	2.40	.95	Watching TV shows or movies	Major	3.87	.90	.114	.736	.692	.489	Minor	3.80	.90	Reading for pleasure	Major	3.20	.91	1.045	.307	5.351	.000	Minor	2.68	.93	Writing notes/letters/reports etc.	Major	2.91	.98	2.296	.131	5.527	.000	Minor	2.34	.96	Skimming first, then reading carefully	Major	3.48	1.11	.492	.483	.797	.426	Minor	3.38	1.09	Looking for similar words in first language	Major	2.65	1.10	.891	.346	-1.987	.048	Minor	2.89	1.21	Finding patterns	Major	3.17	1.03	1.787	.182	1.551	.122	Minor	3.00	.99	Dividing words into parts to understand meaning	Major	3.42	1.02	.074	.785	1.512	.131	Minor	3.26	1.05	Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272	Minor	3.17	1.16	Making summaries of new information in English	Major	3.00	.98	1.649	.200
Talking like native speakers	Major	3.82	1.01	.001	.971	2.710	.007																																																																																																																																										
	Minor	3.54	.96					Practicing the sounds	Major	3.80	.94	2.011	.157	.595	.552	Minor	3.74	.83	Using words in different ways	Major	3.55	1.00	2.482	.116	1.218	.224	Minor	3.43	.90	Starting conversation	Major	3.02	.97	4.387	.037	6.051	.000	Minor	2.40	.95	Watching TV shows or movies	Major	3.87	.90	.114	.736	.692	.489	Minor	3.80	.90	Reading for pleasure	Major	3.20	.91	1.045	.307	5.351	.000	Minor	2.68	.93	Writing notes/letters/reports etc.	Major	2.91	.98	2.296	.131	5.527	.000	Minor	2.34	.96	Skimming first, then reading carefully	Major	3.48	1.11	.492	.483	.797	.426	Minor	3.38	1.09	Looking for similar words in first language	Major	2.65	1.10	.891	.346	-1.987	.048	Minor	2.89	1.21	Finding patterns	Major	3.17	1.03	1.787	.182	1.551	.122	Minor	3.00	.99	Dividing words into parts to understand meaning	Major	3.42	1.02	.074	.785	1.512	.131	Minor	3.26	1.05	Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272	Minor	3.17	1.16	Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005	Minor	2.71	.96						
Practicing the sounds	Major	3.80	.94	2.011	.157	.595	.552																																																																																																																																										
	Minor	3.74	.83					Using words in different ways	Major	3.55	1.00	2.482	.116	1.218	.224	Minor	3.43	.90	Starting conversation	Major	3.02	.97	4.387	.037	6.051	.000	Minor	2.40	.95	Watching TV shows or movies	Major	3.87	.90	.114	.736	.692	.489	Minor	3.80	.90	Reading for pleasure	Major	3.20	.91	1.045	.307	5.351	.000	Minor	2.68	.93	Writing notes/letters/reports etc.	Major	2.91	.98	2.296	.131	5.527	.000	Minor	2.34	.96	Skimming first, then reading carefully	Major	3.48	1.11	.492	.483	.797	.426	Minor	3.38	1.09	Looking for similar words in first language	Major	2.65	1.10	.891	.346	-1.987	.048	Minor	2.89	1.21	Finding patterns	Major	3.17	1.03	1.787	.182	1.551	.122	Minor	3.00	.99	Dividing words into parts to understand meaning	Major	3.42	1.02	.074	.785	1.512	.131	Minor	3.26	1.05	Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272	Minor	3.17	1.16	Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005	Minor	2.71	.96																	
Using words in different ways	Major	3.55	1.00	2.482	.116	1.218	.224																																																																																																																																										
	Minor	3.43	.90					Starting conversation	Major	3.02	.97	4.387	.037	6.051	.000	Minor	2.40	.95	Watching TV shows or movies	Major	3.87	.90	.114	.736	.692	.489	Minor	3.80	.90	Reading for pleasure	Major	3.20	.91	1.045	.307	5.351	.000	Minor	2.68	.93	Writing notes/letters/reports etc.	Major	2.91	.98	2.296	.131	5.527	.000	Minor	2.34	.96	Skimming first, then reading carefully	Major	3.48	1.11	.492	.483	.797	.426	Minor	3.38	1.09	Looking for similar words in first language	Major	2.65	1.10	.891	.346	-1.987	.048	Minor	2.89	1.21	Finding patterns	Major	3.17	1.03	1.787	.182	1.551	.122	Minor	3.00	.99	Dividing words into parts to understand meaning	Major	3.42	1.02	.074	.785	1.512	.131	Minor	3.26	1.05	Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272	Minor	3.17	1.16	Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005	Minor	2.71	.96																												
Starting conversation	Major	3.02	.97	4.387	.037	6.051	.000																																																																																																																																										
	Minor	2.40	.95					Watching TV shows or movies	Major	3.87	.90	.114	.736	.692	.489	Minor	3.80	.90	Reading for pleasure	Major	3.20	.91	1.045	.307	5.351	.000	Minor	2.68	.93	Writing notes/letters/reports etc.	Major	2.91	.98	2.296	.131	5.527	.000	Minor	2.34	.96	Skimming first, then reading carefully	Major	3.48	1.11	.492	.483	.797	.426	Minor	3.38	1.09	Looking for similar words in first language	Major	2.65	1.10	.891	.346	-1.987	.048	Minor	2.89	1.21	Finding patterns	Major	3.17	1.03	1.787	.182	1.551	.122	Minor	3.00	.99	Dividing words into parts to understand meaning	Major	3.42	1.02	.074	.785	1.512	.131	Minor	3.26	1.05	Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272	Minor	3.17	1.16	Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005	Minor	2.71	.96																																							
Watching TV shows or movies	Major	3.87	.90	.114	.736	.692	.489																																																																																																																																										
	Minor	3.80	.90					Reading for pleasure	Major	3.20	.91	1.045	.307	5.351	.000	Minor	2.68	.93	Writing notes/letters/reports etc.	Major	2.91	.98	2.296	.131	5.527	.000	Minor	2.34	.96	Skimming first, then reading carefully	Major	3.48	1.11	.492	.483	.797	.426	Minor	3.38	1.09	Looking for similar words in first language	Major	2.65	1.10	.891	.346	-1.987	.048	Minor	2.89	1.21	Finding patterns	Major	3.17	1.03	1.787	.182	1.551	.122	Minor	3.00	.99	Dividing words into parts to understand meaning	Major	3.42	1.02	.074	.785	1.512	.131	Minor	3.26	1.05	Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272	Minor	3.17	1.16	Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005	Minor	2.71	.96																																																		
Reading for pleasure	Major	3.20	.91	1.045	.307	5.351	.000																																																																																																																																										
	Minor	2.68	.93					Writing notes/letters/reports etc.	Major	2.91	.98	2.296	.131	5.527	.000	Minor	2.34	.96	Skimming first, then reading carefully	Major	3.48	1.11	.492	.483	.797	.426	Minor	3.38	1.09	Looking for similar words in first language	Major	2.65	1.10	.891	.346	-1.987	.048	Minor	2.89	1.21	Finding patterns	Major	3.17	1.03	1.787	.182	1.551	.122	Minor	3.00	.99	Dividing words into parts to understand meaning	Major	3.42	1.02	.074	.785	1.512	.131	Minor	3.26	1.05	Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272	Minor	3.17	1.16	Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005	Minor	2.71	.96																																																													
Writing notes/letters/reports etc.	Major	2.91	.98	2.296	.131	5.527	.000																																																																																																																																										
	Minor	2.34	.96					Skimming first, then reading carefully	Major	3.48	1.11	.492	.483	.797	.426	Minor	3.38	1.09	Looking for similar words in first language	Major	2.65	1.10	.891	.346	-1.987	.048	Minor	2.89	1.21	Finding patterns	Major	3.17	1.03	1.787	.182	1.551	.122	Minor	3.00	.99	Dividing words into parts to understand meaning	Major	3.42	1.02	.074	.785	1.512	.131	Minor	3.26	1.05	Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272	Minor	3.17	1.16	Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005	Minor	2.71	.96																																																																								
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	Minor	3.38	1.09					Looking for similar words in first language	Major	2.65	1.10	.891	.346	-1.987	.048	Minor	2.89	1.21	Finding patterns	Major	3.17	1.03	1.787	.182	1.551	.122	Minor	3.00	.99	Dividing words into parts to understand meaning	Major	3.42	1.02	.074	.785	1.512	.131	Minor	3.26	1.05	Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272	Minor	3.17	1.16	Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005	Minor	2.71	.96																																																																																			
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	Minor	2.89	1.21					Finding patterns	Major	3.17	1.03	1.787	.182	1.551	.122	Minor	3.00	.99	Dividing words into parts to understand meaning	Major	3.42	1.02	.074	.785	1.512	.131	Minor	3.26	1.05	Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272	Minor	3.17	1.16	Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005	Minor	2.71	.96																																																																																														
Finding patterns	Major	3.17	1.03	1.787	.182	1.551	.122																																																																																																																																										
	Minor	3.00	.99					Dividing words into parts to understand meaning	Major	3.42	1.02	.074	.785	1.512	.131	Minor	3.26	1.05	Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272	Minor	3.17	1.16	Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005	Minor	2.71	.96																																																																																																									
Dividing words into parts to understand meaning	Major	3.42	1.02	.074	.785	1.512	.131																																																																																																																																										
	Minor	3.26	1.05					Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272	Minor	3.17	1.16	Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005	Minor	2.71	.96																																																																																																																				
Not translating word-for-word	Major	3.31	1.25	2.847	.092	1.100	.272																																																																																																																																										
	Minor	3.17	1.16					Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005	Minor	2.71	.96																																																																																																																															
Making summaries of new information in English	Major	3.00	.98	1.649	.200	2.842	.005																																																																																																																																										
	Minor	2.71	.96																																																																																																																																														

English as a major showing a significantly higher mean score of use. In this case, their mean score of use was 3.82 (s.d. = 1.01), while that of the students with English as a minor was 3.54 (s.d. = .96). The t-test analysis obtained a t-value of 2.710 ( $p < .007$ ), suggesting that it was significant at .01 level. The next strategy within this category was *starting conversations in English*. The students with English as a major were found to have a mean score of use of 3.02 (s.d. = .97) and the students with English a minor were found to have a mean score of use of 2.40 (s.d. = .95). An analysis of the significance of the equality of variance of the distributions from which the means were derived found an F-value of 4.387 ( $p < .037$ ) suggesting that the variance was equal. The t-test analysis for a difference of two means from two distributions of score with equal variance resulted in a t-value of 6.051 ( $p < .000$ ), suggesting that the difference was significant at .01 level. *Reading in English for pleasure* is also a strategy being employed at significantly different levels of frequency by the two groups of students. In this case, mean scores of 3.20 (s.d. = .91) and 2.68 (s.d. = .93) were obtained from the two groups. A t-value of 5.351 ( $p < .000$ ) was obtained from the t-test analysis, suggesting that the difference was significant at .01 level. The former group of students was also observed to have a significantly higher mean score of use of the strategy of *writing notes, letters, reports etc. in English*. In this case, their mean score was 2.91 (s.d. = .98) and the mean score of the students with English as a minor was 2.34 (s.d. = .96). The t-test analysis obtained a t-value of 5.527 ( $p < .000$ ), suggesting that the difference was significant at .01 level. The last strategy within this category was *making summaries of new information in English*. Of this strategy, the students with English as a major were observed to have a mean score of use of 3.00 (s.d. = .98) and the students with English as a minor were found to have a mean score of 2.71 (s.d. = .96). A t-value of 2.842 ( $p < .005$ ) was obtained from the t-test analysis suggesting that the difference was also significant at .01 level.

The differences in the use of the other seven strategies, however, did not show any significance. These strategies included *practicing the sounds of English*, *using English words in different ways*, *watching TV shows or movies in English*,

*skimming first, then reading carefully, finding patterns in English, dividing words into parts to understand their meaning, and not translating word-for-word.*

In short, out of the fourteen cognitive strategies, seven were used at insignificantly different levels of frequency and the other seven strategies were used at significantly different levels of frequency. The strategies that belong to the latter group were *saying or writing new words, talking like native speakers, starting conversations, reading for pleasure, writing notes, letters or reports in English, looking for similar words in first language, and making summaries in English.* Among this group of strategies, the students with English as a major turned out to use six strategies at significantly very much higher frequency levels. *Looking for words in the first language similar to new words in English,* however, turned out to be significantly much more frequently used by the students with English as a minor course than by the learners with English as a major course.

### 7.1.3 Variation in the Use of Compensation Strategies

As reported in section 7.1 the two groups of students - the students who learned English as a major and those who learned English as a minor - were found to use compensation strategies at levels of frequency that were not significantly different. In other words, both groups of students used these strategies at more or less the same frequency levels. Further analyses of the use of individual strategies within this strategy category supported the general finding. Out of the six compensation strategies, none was used at significantly different levels of frequency. Table 7.4 presents the statistical computations to find the significance of the differences in the use of these strategies.

What was interesting, however, was that, despite the statistically insignificant differences of use of these strategies, the students with English as a major showed greater means for the use of only two strategies. One was *reading without looking up every unknown word*, of which they were found to have a mean score of use of 2.57 (s.d. = 1.13), while the students with English as a minor were found to have a mean score of use of 2.40 (s.d. = 1.05). The t-test analysis obtained a t-value of 1.453 ( $p < .147$ ). The other one was *making guesses of what*

*the other person is going to say in English.* This strategy was used at mean scores of frequency of 3.12 (s.d. = 1.02) and 3.08 (s.d. = .94) by the students with English as a major and those with English as a minor respectively. A t-value of .406 ( $p < .685$ ) was obtained.

Table 7.4 Differences in the Use of Compensation Strategies by Learners of English as a Major (n = 250) and a Minor (n = 136)

Learning Strategy/ English Subject Status		Mean	s.d.	Levene's Test for Eq. of Var.		t-value	Sig.
				F	Sig.		
Making guesses to understand unfamiliar words	Major	3.40	1.03	.066	.797	-.936	.350
	Minor	3.51	1.04				
Using gestures	Major	3.09	1.17	2.620	.106	-.619	.536
	Minor	3.16	1.03				
Making up new words	Major	2.66	1.29	.819	.366	-.369	.712
	Minor	2.71	1.24				
Reading without looking up every unknown word	Major	2.57	1.13	1.870	.172	1.453	.147
	Minor	2.40	1.05				
Guessing what others are going to say	Major	3.12	1.02	1.319	.252	.406	.685
	Minor	3.08	.94				
Using synonyms	Major	3.55	.99	1.008	.316	-.997	.319
	Minor	3.65	.91				

The students with English as a minor, however, were observed to have higher mean scores for the use of four strategies although the differences were also not great enough to suggest a statistical significance. *Making guesses to understand unfamiliar words* was one of the four strategies. Of this strategy, the learners with English as a major were found to have a mean score of use of 3.40 (s.d. = 1.03), while the learners with English as a minor were found to have a mean score of use of 3.51 (s.d. = 1.04). The t-test analysis found a t-value of -.936 ( $p < .350$ ). The next strategy within this category was *using gestures when not able to think of a word in English*. The learners with English as a major and those with English as a minor were found to use this strategy with mean scores of 3.09

(s.d. = 1.17) and 3.16 (s.d. = 1.03) respectively. A t-value of  $-.619$  ( $p < .536$ ) was obtained from the t-test analysis. *Making up new words when not knowing the right ones* was another strategy being used with a higher mean by the learners with English as a minor. In this case, while the learners with English as a major were found to have a mean score of use of 2.66 (s.d. = 1.29), the learners with English as a minor course were observed to have a mean score of use of 2.71 (s.d. 1.24). However, the difference was too small to be significant as the t-value obtained from the t-test analysis was  $-.369$  ( $p < .712$ ). *Using a word or a phrase that means the same thing when not able to think of a word in English* is the last of the compensation strategies with the students with English as a major using it with a lower mean score. Their mean score was 3.55 (s.d. = .99), while the mean score of use by the students with English as a minor was 3.65 (s.d. = .91). The difference, however, was not statistically significant since the t-value obtained from the t-test analysis was  $-.997$  ( $p < .319$ ).

In summary, out of the six compensation strategies, none was used at significantly different levels of frequency. In other words, the learners of English as a major and those of English as a minor employed compensation strategies at the same levels of frequency. Although there were differences in the mean scores of use of these strategies, they were not great enough to suggest significant differences. Thus, these differences were interpreted as occurring by chance only.

#### 7.1.4 Variation in the Use of Metacognitive Strategies

When considered in terms of strategy category, metacognitive strategies turned out to be used at significantly different levels of frequency by the students with English as a major and those with English as a minor as presented in section 7.1. In this case, the former group of learners performed these strategies very much more frequently than the latter group. Further inspection on the use of individual strategy showed that the learners with English as a major reported a higher mean score of use in all of the nine strategies. However, not all of these differences were found to be significant. Detailed presentation of the statistical findings of the differences of use of metacognitive strategies is found in Table 7.5.

Table 7.5 Differences in the Use of Metacognitive Strategies by Learners of English as a Major (n = 250) and a Minor Course (n = 136)

Learning Strategy/ English Subject Status	Mean	s.d.	Levene's Test For Eq. of Var.		t-value	Sig.
			F	Sig.		
Finding as many ways as possible to use English						
Major	3.84	.95	.128	.721	1.804	.072
Minor	3.66	.89				
Noticing mistakes						
Major	3.88	.87	.970	.325	.501	.617
Minor	3.84	.84				
Paying attention when others speaking						
Major	4.24	.81	.870	.352	1.698	.090
Minor	4.09	.82				
Finding ways to be a better learner						
Major	4.11	.84	.800	.372	1.649	.100
Minor	3.96	.92				
Making learning plans						
Major	3.23	1.05	9.605	.002	3.668	.000
Minor	2.87	.86				
Looking for people to talk to						
Major	3.66	.82	2.024	.156	3.279	.003
Minor	3.33	1.00				
Looking for opportunities to read						
Major	3.54	.97	7.840	.005	3.515	.001
Minor	3.19	.89				
Setting clear goals for language skill development						
Major	4.13	.88	.000	.998	.812	.417
Minor	4.05	.90				
Thinking about progress						
Major	4.29	.81	3.376	.067	2.261	.024
Minor	4.10	.78				

As the table shows, the students with English as a major were found to have higher mean scores of use of all of the nine metacognitive strategies. However, the differences for the use of two strategies were found to be insignificant. One was *noticing mistakes and using that information to improve English skill*. Of this strategy, the mean score of use of the students with English as a major was 3.88 (s.d. = .87) and that of the students with English as a minor was 3.84 (s.d. = .84). The t-test analysis found a t-value of .501 ( $p < .617$ ). The other one was *defining clear goals for English skill development*, of which a mean score of use of 4.13 (s.d. = .88) was computed from the students with English as a

major course. Meanwhile, a mean score of 4.05 (s.d. = .90) was computed from the students with English as a minor. The t-test analysis found a t-value of .812 ( $p < .417$ ). Despite the insignificant difference in the use of the two strategies, however, mean scores of the two groups suggested that both groups employed these strategies at high level of frequencies.

The differences in the use of the other seven strategies, however, were significant. Of these seven significant differences, three indicated weak differences, one a strong difference, and the other three very strong differences. Within the weak difference category was the use a strategy of *finding as many ways as possible to use English*. The students with English as a major were found to have a mean score of use of this strategy of 3.84 (s.d. = .95) and the students with English as a minor were found to have a mean score of 3.66 (s.d. = .89). The t-test analysis resulted in a t-value of 1.804 ( $p < .072$ ), indicating that the difference was significant at .10 level. Also within this category was a strategy of *paying attention when someone is speaking English*. The students with English as a major showed a mean score of use of this strategy of 4.24 (s.d. = .81) and the students who learned English as a minor subject showed a mean score of 4.09 (s.d. = .82). The t-test analysis obtained a t-value of 1.698 ( $p < .090$ ), indicating that the difference was significant at .10 level. The last strategy in this category was *finding ways to be a better learner*. This strategy was used at mean scores of 4.11 (s.d. = .84) and 3.96 (s.d. = .92) by the students learning English as a major and those learning English as a minor respectively. A t-value of 1.649 ( $p < .100$ ) was obtained from the t-test analysis indicating that the difference was marginally significant at .10 level. Thus, it can be inferred that the learners with English as a major used these three strategies slightly more frequently than did their friends who learn English as a minor course.

The only strategy being used at a difference significant at .05 level was *thinking about progress in learning English*. While a mean score of 4.29 (s.d. = .81) was calculated from the students with English as a major, that of 4.10 (s.d. = .78) was from the students with English as a minor. A t-value of 2.261 ( $p < .024$ ) was found from the t-test analysis. This implies that although the frequency of use

a metacognitive strategy by the students with English as a minor was classified as high (i.e., the mean was more than 3.45), the frequency of use by the students with English as a major was even higher.

The differences in the use of three strategies were found to be very strong. *Making learning schedules so that enough time to study English can be spared* was one of these. The students with English as a major were found to have a mean score of use of this strategy of 3.23 (s.d. = 1.05), while the students with English as a minor were found to have a mean score of 2.87 (s.d. = .86). Lavene's test for equality of variances of the two distributions of scores from which the two means above were derived indicated an F-value of 9.605 ( $p < .002$ ) suggesting that the variances were equal. The t-test applied to find the significance of the difference of means obtained from distribution having equal variances above obtained a t-value of 3.688 ( $p < .000$ ). This means that the difference was significant at .01 level. *Looking for people to talk to in English* was another metacognitive strategy within this category. The students with English as a major showed a mean score of use of this strategy of 3.66 (s.d. = .89) and the students with English as a minor showed a mean score of 3.33 (s.d. = 1.00). A t-value of 3.279 ( $p < .001$ ) was obtained from the t-test analysis and it indicated a significant difference at .01 level. The last metacognitive strategy within this category was *looking for opportunities to read in English*. In this case, their mean scores of use were 3.54 (s.d. = .97) for the learners with English as major and 3.19 (s.d. = .89) for the learners with English as a minor. These two means were from two distributions of scores having equal variances because Lavene's test for equal variances found an F-value of 7.840 ( $p < .005$ ). The t-test analysis for means obtained from two distributions with equal variances suggested a t-value of 3.515 ( $p < .001$ ), which was significant at .01 level. Thus, in regard to the strategies of *making learning plans*, *looking for people to talk to*, and *looking for opportunities to read in English*, the students who learned English as a major used them very much more frequently than their fellow learners who learned English as a minor.

In summary, the students who learned English as a major reported significantly more frequencies of use of nine metacognitive strategies. They were

strategies of *finding as many ways as possible to use English*, *noticing mistakes*, *paying attention when others are speaking*, *making learning plans*, *looking for people to talk to in English*, *looking for opportunities to read in English*, and *thinking about progress in learning English*. Meanwhile, the use of the other two strategies - *noticing mistakes and using that information to improve English skill* and *defining clear goals for English skill development* did not indicate significant differences. Thus, statistically speaking, it was considered that the two groups of students used these two strategies at the same degrees of frequency.

### 7.1.5 Variation in the Use of Affective Strategies

Taken together as a strategy category, affective strategies were also employed at significantly different degrees of intensity as presented in section 7.1. Further inspection on the differences of use of each of the six affective strategies showed that the learners learning English as a minor reported a higher mean score of use of one strategy. The learners learning English as a major, on the other hand, reported higher mean scores of five strategies. A detailed presentation of the statistical findings is found in Table 7.6.

As the table shows, the students of English as a minor course were found to have a higher mean score of the use of a strategy of *trying to be relaxed*. In this case, the mean score of the learners with English as a major was 3.59 (s.d. = 1.07) and that of the learners with English as a minor was 3.78 (s.d. = .80). The t-test analysis revealed a t-value of  $-1.997$  ( $p < .047$ ), suggesting that the difference was significant at .05 level. Thus, there was a strong difference in the effort to be relaxed in learning and using English between the two groups of students. As the students with English as a minor had a higher mean, it can be inferred that they were significantly much more relaxed in learning English than their peers who learn English as a major.

The students with English as a major, however, were found to have higher mean scores for the other five affective strategies, two of them showing significant differences. These strategies were *writing down feelings in a language learning diary* and *talking to others about feeling of learning English*. The first

strategy was reported to be used with a mean score of 2.74 (s.d. = 1.27) by the students with English as a major and of 2.21 (s.d. = 1.16) by the students with English as a minor. The t-test analysis revealed a t-value of 4.013 ( $p < .000$ ). This meant that the difference was significant at .01 level. The second strategy, *talking to others about feelings*, was used with a mean score of 3.16 (s.d. = 1.05) by the former group of students and of 2.84 (s.d. = 1.10) by the latter group. A t-value of 2.788 ( $p < .006$ ) was obtained from the t-test analysis suggesting that the difference was also significant at .01 level. Thus, it can be inferred that the students with English as a major course significantly were very much more concerned about their feelings in learning English by writing down their feelings in a learning diary or telling them to their friends.

Table 7.6 Differences in the Use of Affective Strategies by Learners of English as a Major (n = 250) and a Minor (n = 136)

Learning Strategy/ English Subject Status		Mean	s.d.	Levene's Test for Eq. of Var.		t-value	Sig.
				F	Sig.		
Trying to be relaxed	Major	3.59	1.07	20.17	.000	-1.997	.047
	Minor	3.78	.80				
Encouraging self to speak	Major	3.69	.92	.129	.720	.389	.698
	Minor	3.65	.88				
Giving self-rewards when doing well	Major	3.25	1.18	3.070	.081	1.581	.115
	Minor	3.06	1.09				
Noticing if nervous when using or studying English	Major	3.52	1.03	2.754	.098	.082	.935
	Minor	3.51	.90				
Writing down feelings in a diary	Major	2.74	1.27	1.682	.195	4.013	.000
	Minor	2.21	1.16				
Talking to others about feelings	Major	3.16	1.05	.899	.344	2.788	.006
	Minor	2.84	1.10				

Among the strategies used at the insignificantly different levels of intensity was *encouraging self to speak even when afraid of making mistakes*. The mean scores for the use of this strategy were 3.69 (s.d. = .92) and 3.65 (s.d. = .88)

by the students with English as a major and by those with English as a minor respectively. The analysis of the significance of the difference between these two means provided a t-value of .389 ( $p < .698$ ), indicating that the difference was not significant. Another strategy within this category was *giving self-rewards when doing well*. The students with English as a major were found to have a mean score of use of this strategy of 3.25 (s.d. = 1.18) and the students with English as a minor were found to have a mean score of 3.06 (s.d. = 1.09). The t-test analysis revealed a t-value of 1.581 ( $p < .115$ ), which also indicated a non-significant difference. And the last strategy within this category was *noticing if nervous when using or studying English*. While a mean score of 3.52 (s.d. = 1.03) was computed from the former group, that of 3.51 (s.d. = .90) was computed from the latter group. A very small t-value of .082 ( $p < .935$ ) was obtained from the t-test analysis suggesting no significant difference. Thus, statistically speaking, the use of these three strategies was considered to be at the same levels of frequency by both groups of learners and the differences in the means were considered as occurring by chance only.

In summary, although the students with English as a major were observed to have higher mean scores for the use of five affective strategies, only two were significant. In other words, this group of students reported significantly higher frequency of use for two strategies. These strategies were *recording feelings in a diary* and *talking about feelings to others*. The students with English as a minor, however, were found to use one affective strategy at significantly higher frequency levels than the students with English as a major. This strategy was *relaxing when learning*. The frequency of use of the other three affective strategies - *encouraging self to speak even when afraid of making mistakes*, *giving self-rewards when doing well*, and *noticing if nervous when using or studying English*, moreover, was found to be insignificantly different. In other words, both the students learning English as a major and those learning it as a minor used these strategies at the same extent.

### 7.1.6 Variation in the Use of Social Strategies

Social strategies deal with any strategies the learners take to enhance communicative interactions and develop better understanding of the culture of the native speakers of the language being learned. Generally speaking, the students learning English as a major and those learning it as a minor reported significantly different levels of intensity of use of social strategies as presented in section 7.1. Further inspection of the data indicated that the former group of students was found to have higher mean scores of use of all six social strategies. However, not all of the differences in the mean scores of use were significant. The statistical presentation of the analyses of the differences in the use of each social strategy is found in Table 7.7.

As the table shows, out of the six social strategies, only the differences in the use of three strategies were significant. One of them was *practicing with other students*. This strategy was used at mean scores of 3.67 (s.d. = .92) and 3.20 (s.d. = .90) by the students with English as a major and those with English as a minor respectively. The t-test analysis found a t-value of 4.818 ( $p < .000$ ), indicating that the difference was significant at .01 level. *Asking questions in English* was another social strategy within this category. In this case, the former group of students was found to have a mean score of use of 3.24 (s.d. = .79) and the latter group was found to have a mean score of 2.84 (s.d. = .86). A t-value of 4.659 ( $p < .000$ ) was obtained from the t-test analysis. This indicated that the difference of the two means was significant at .01 level. The last strategy was *learning the culture of the native speakers of English*, which was used at a mean score of 3.39 (s.d. = 1.05) by the former group of students and of 2.65 (s.d. = .97) by the latter group. The analysis of the significance of the difference of these two means suggested a t-value of 6.745 ( $p < .000$ ), which far exceeded the critical limit for significance at .01 level. Thus, as the differences in the use of these three strategies were significant at .01 level, it can be concluded that the differences were very strong. In other words there was a very strong difference in the frequency of use of these strategies. Thus, as the learners with English as a major course were found to have higher mean scores of use, it can be inferred that they

used these strategies significantly very much more frequently than their fellows who learned English as a minor.

Table 7.7 Differences in the Use of Social Strategies by Learners of English as a Major (n = 250) and a Minor (n = 136)

Learning Strategy/ English Subject Status	Mean	s.d.	Levene's Test For Eq. of Var.		t-value	Sig.
			F	Sig.		
Asking others to slow down or repeat						
Major	3.94	.93	.126	.723	.968	.334
Minor	3.85	.89				
Asking others to correct mistakes						
Major	3.58	1.05	.836	.361	.694	.488
Minor	3.50	.99				
Practicing with other students						
Major	3.67	.92	2.223	.137	4.818	.000
Minor	3.20	.90				
Asking for help from speakers of English						
Major	3.83	.96	.381	.537	.700	.484
Minor	3.76	.92				
Asking questions in English						
Major	3.24	.79	.518	.437	4.659	.000
Minor	2.84	.86				
Learning the culture of native English speakers						
Major	3.39	1.05	1.264	.472	6.745	.000
Minor	2.65	.97				

The use of the other three strategies, on the other hand, was found to be insignificantly different although the students with English as a major were also found to show higher mean scores of use. These strategies were *asking others to slow down or repeat when not understanding something in English*, *asking others to correct mistakes when talking*, and *asking for help from speakers of English*.

In short, the students with English as a major were found to have higher mean scores in the use of all of the six social strategies. However, only three differences were significant and the other three were not. The strategies used more frequently by the students with English as a major were strategies of *practicing English with other students*, *asking questions in English*, and *learning the culture of the native speakers of English*. Meanwhile, the strategies of *asking others to*

*slow down or repeat, asking others to correct mistakes, and asking help from speakers of English* were used at insignificantly different levels of frequency by the two groups of students.

## 7.2 Summary of the Findings

The present study found that, broadly speaking, among Indonesian university students learning English the differences in the status of English course being learned associated with the differences in the use of the overall learning strategies. In this case, the students who learned English as a major were found to use them very much more frequently than the students who learned English as a minor. This interpretation was made as the former group of students was observed to have a higher mean score of use of overall strategies than the latter group and the difference of the means was significant at .01 level ( $t = 3.726, p < .000$ ).

When further analysed in terms of strategy categories, the differences in the use of five strategy categories were found to be significant with the students learning English as a major being found to show higher mean scores of use. These five strategy categories were memory strategies ( $t = 1.797, p < .073$ ), cognitive strategies ( $t = 4.055, p < .000$ ), metacognitive strategies ( $t = 3.187, p < .002$ ), affective strategies ( $t = 2.267, p < .002$ ) and social strategies ( $t = 4.866, p < .000$ ). Meanwhile, the difference in the use of the other one category was found to be insignificant. This was compensation strategy category ( $t = -.273, p < .785$ ).

Regarding variation of the use of individual strategies, the differences were found to be marginally significant at .10 level in the use of the following strategies:

- Finding as many ways as possible to use English ( $t = 1.804, p < .072$ )
- Paying attention when others are speaking ( $t = 1.698, p < .090$ )
- Finding ways to be a better learner ( $t = 1.649, p < .100$ ).

In this case, the students with English as a major were found to show a slightly higher frequency of use of these strategies than did the students with English as a minor.

Moreover, the differences in the use of the following strategies were significant at .05 level:

- Using new English words in sentences ( $t = 2.087, p < .038$ )
- Using flashcards to remember new words ( $t = 2.080, p < .038$ )
- Reviewing English lessons ( $t = 2.254, p < .025$ )
- Seeking words in first language similar to English ( $t = -1.987, p < .048$ )
- Thinking about the progress in learning English ( $t = 2.261, p < .024$ )
- Trying to relax when learning or using English ( $t = -1.997, p < .047$ ).

The difference in the use of the strategies above was that the students with English as a major used them much more frequently than those with English as a minor. An exception, surprisingly, was in the case of the use of strategies of *seeking words in first language similar to English* and *trying to be relaxed when learning or using English*, in which the former group of learners were found to use much less frequently than the latter.

Lastly, the differences were also found to be significant at .01 level in the case of the use of the following strategies:

- Physically acting out new words ( $t = 2.789, p < .006$ )
- Saying or writing new words several times ( $t = 2.792, p < .005$ )
- Trying to talk like native speakers of English ( $t = 2.710, p < .007$ )
- Starting conversations in English ( $t = 6.003, p < .000$ )
- Reading for pleasure in English ( $t = 5.351, p < .000$ )
- Writing notes etc. in English ( $t = 5.527, p < .000$ )
- Making summaries of information ( $t = 2.842, p < .005$ )
- Planing schedule to have enough time to study English ( $t = 3.455, p < .001$ )
- Looking for people to talk to in English ( $t = 3.279, p < .001$ )
- Seeking opportunities to read in English ( $t = 3.423, p < .001$ )
- Recording feelings in learning diary ( $t = 4.013, p < .000$ )
- Talking to someone about feelings ( $t = 2.788, p < .006$ )
- Practicing English with other students ( $t = 4.818, p < .000$ )
- Asking questions in English ( $t = 4.659, p < .000$ )
- Trying to develop cultural understanding ( $t = 6.745, p < .000$ ).

In regard to these strategies, the former group - the students with English as a major - used them very much more frequently than the latter group - the students with English as a minor.

Thus, the findings of the present study support the notion that situational differences bring about variation in the use of learning strategies. In 23 out of 50 strategy items, the tendency was that the students who learn English as a major course used learning strategies more frequently than do their fellow students who learn it as a minor. The students with English as a minor, on the other hand, used one strategy - *seeking words in first language similar to English and trying to be relaxed when learning or using English* - at a higher frequency than those who learn it as a major course.

In the next chapter, the predictability of learning strategies from variables of individual differences, including language aptitude, personality traits, attitude, and motivation was reported.

Chapter Eight  
RESEARCH FINDINGS 3:  
LEARNING STRATEGIES  
ACROSS INDIVIDUAL DIFFERENCES

This chapter<sup>1</sup> presents findings related to the extent to which individual differences can predict the use of learning strategies. As mentioned in Chapter Five, the individual factors covered in the present study were language aptitude, personality traits, and attitude and motivational attributes. Language aptitude was measured in two indicators: words in sentences and paired associates. Personality traits were assessed in two dimensions: extroversion (E) and neuroticism (N). Attitude and motivational attributes were assessed in nine measures, including attitude toward native speakers of English, attitude toward learning English, desire to learn English, English class anxiety, English use anxiety, interest in foreign languages, instrumental orientation, integrative orientation, and motivational intensity. Hence, in total, thirteen measures of individual differences were covered in the study.

In this case, these thirteen variables of individual differences were first factor analysed, in order to scrutinise the underlying factors. Regression analyses were then carried out to measure the extent of the relationship between the combination of the resultant factors as the predictor variables and learning strategies as the dependent variables. The significance of the correlation coefficient was also computed in the analyses. Next, the relative importance of each factor in predicting the overall variance of the dependent variable was investigated. Lastly, the relative importance of the variables within each significant factor was measured. The significance of the prediction was tested at

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<sup>1</sup> The summary of this chapter together with its discussion as appears in Chapter Eleven is published in *Asian Journal of English Language Teaching (AJELT)*, Volume 11, 2001, Hongkong.

.10, .05, or .01 level. Variables significant at .05 and .01 levels were considered as the best predictors. In addition, a .10 significance level was considered to suggest a moderate prediction.

### 8.1 Factor Analysis of Individual Differences

Prior to the factor analysis, an inspection of the data was undertaken to ensure that the data could be factor analysed. Pallant (2001) mentions that the data should meet three criteria: 1) the correlation matrix should contain any one or more coefficient of .3 or above, 2) Bartlett's test of sphericity should be significant, and 3) the Kaise-Meyer-Oklin measure of sampling adequacy should be at least .6. To check whether the present data meet the first criterion, correlation analyses were carried out among the thirteen variables of individual differences being covered. All coefficients were put together in a table called a correlation matrix as shown in Table 8.1. The correlation matrix revealed the presence of twenty-seven coefficient indexes equal to or greater than .3. Moreover, the Kaiser-Meyer-Oklin (KMO) measure of sampling adequacy resulted in a value of .815 and Bartlett's test of sphericity found an approximate Chi-Square value of 1610.949 with a significance level of .000 as appears in Table 8.2. These three forms of evidence guarantee a good factor analysis for the thirteen variables covered in the study.

The Principal Component Analysis (PCA) revealed the presence of four components with initial eigenvalues greater than 1 explaining a cumulative variance of 64.1%. The variances being explained by each of the four extracted components were 33%, 11.5%, 10.7% and 8.9% respectively. The component matrix was rotated using the Varimax with Keiser Normalisation Method and the results appear in Table 8.3. The table contains the loadings of each of the predictor variables on the four factors. Factor 1 was found to obtain high loadings (greater than  $\pm .3$ ) from six variables with appreciable loadings from attitudes toward learning English, desire to learn English and interest in foreign languages. The very strong loadings were from English class anxiety, English anxiety and motivational intensity. Thus, the first factor could be best described as a factor of

Table 8.1 Correlation Matrix of the 13 Variables of Individual Differences

VARIABLE	WIS	PAS	EXT	NEU	ANS	ALE	DLE	ECA	EUA	IFL	INSO	INT	MIN
WIS	1.000												
PAS	.414	1.000											
EXT	.028	.025	1.000										
NEU	-.110	-.076	-.300	1.000									
ANS	.104	.087	.131	-.075	1.000								
ALE	.152	.108	.139	-.033	.491	1.000							
DLE	.165	.128	.118	-.054	.460	.699	1.000						
ECA	.088	.006	.174	-.189	.239	.385	.341	1.000					
EUA	.154	.034	.127	-.236	.306	.455	.353	.742	1.000				
IFL	.166	.191	.162	-.090	.435	.577	.553	.298	.412	1.000			
INSO	-.017	-.007	.109	.028	.275	.184	.232	.036	.085	.073	1.000		
INT	-.016	-.041	.107	.007	.398	.406	.410	.242	.268	.379	.309	1.000	
MIN	.057	.063	.188	-.101	.385	.578	.534	.530	.517	.481	.080	.347	1.000

## Legend:

WIS	: Words in Sentences	DLE	: Desire to Learn English
PAS	: Paired Associates	ECA	: English Class Anxiety
EXT	: Extroversion	EUE	: English Use Anxiety
NEU	: Neuroticism	IFL	: Interest in Foreign Languages
ANS	: Attitude toward Native Speakers of English	INSO	: Instrumental Orientation
ALE	: Attitude toward Learning English	INT	: Integrative Orientation
		MIN	: Motivational Intensity

Table 8.2 KMO and Bartlett's Test

Keiser-Meyer-Oklin Measure of Sampling Adequacy		.815
Bartlett's Test	Approx. Chi-Square	1610.949
of Sphericity	df	79
	Significance	.000

Table 8.3 Rotated Component Matrix of the Four Factors of Individual Differences

No.	Variables	Factors			
		1	2	3	4
1.	Words in Sentences	-	-	.798	-
2.	Paired Associates	-	-	.827	-
3.	Extroversion	-	-	-	.779
4.	Neuroticism	-	-	-	-.767
5.	Attitude toward Native Speakers of English	-	.676	-	-
6.	Attitude toward Learning English	.535	.615	-	-
7.	Desire to Learn English	.435	.653	-	-
8.	English Class Anxiety	.842	-	-	-
9.	English Use Anxiety	.833	-	-	-
10.	Interest in Foreign Languages	.472	.512	-	-
11.	Instrumental Orientation	-	.669	-	-
12.	Integrative Orientation	-	.690	-	-
13.	Motivational Intensity	.703	.379	-	-

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Keiser Normalisation

*anxiousness about English learning*. This anxiousness carries a motivational component suggesting that an individual with a high motivational intensity shows a low degree of anxiousness.

Factor 2 obtained high loadings from seven variables, of which five variables contributed strong loadings. They were attitude toward native speakers of English, attitude toward learning English, desire to learn English, instrumental orientation and integrative orientation. Thus, this factor could be best defined as an *attitude and learning orientation* factor. This factor was also found to carry components of interest in foreign languages and motivational intensity.

Two variables, which were measures of language aptitude, loaded very highly on factor 3. These variables were word in sentence, which was believed to measure grammatical sensitivity, and paired associates, which was supposed to

measure an ability to memorise words of a foreign language. Thus, the term *language aptitude* could be best used to describe factor 3.

Finally, factor 4 also obtained very strong loadings from two variables, which were indicators of personality traits. Positive loading was from degrees of extroversion (EPQ E) and negative loading was from degrees of neuroticism or emotional stability (EPQ N). Thus, this factor could be defined as a factor of *personality traits*. These loadings suggest that extroverts - persons with high degrees of extroversion - tend to have low emotional stability and vice versa.

These four factors of individual differences were then treated as predictors of English learning strategies in the regression analyses, which are reported in the following sections.

## 8.2 The Predictability of the Use of Learning Strategies from Individual Differences

As four factors of individual differences have been identified, the research question to be answered in this section is formulated as follows, "*Are factors of anxiousness about English learning, attitude and learning orientation, language aptitude, and personality traits significant predictors of learning strategies?*". If they are found to be significant predictors, another question is to be asked, "*Which of the four factors are the best predictors?*". In relation to the first question, language aptitude, personality traits, attitude and motivation have been found to be significant predictors in a number of earlier studies (Ehrman & Oxford, 1989; Oxford & Ehrman, 1995; Oxford & Nyikos, 1989; Oxford *et al.*, 1993). Thus, to accord with previous studies, a working hypothesis, which states, "*Factors of anxiousness about English learning, attitude and learning orientation, language aptitude, and personality traits are significant predictors of learning strategy use*" was used. This hypothesis was negated to make a null hypothesis, "*Factors of anxiousness about English learning, attitude and learning orientation, language aptitude, and personality traits are not significant predictors of learning strategy use*".

To obtain the answers to the two research questions above, a standard regression analysis was performed and the results are presented in Table 8.4. As the table shows, the combination of the four identified factors was found to correlate significantly with the use of overall learning strategies as the analysis of variance resulted in an F-value of 53.266 ( $p < .000$ ). Thus, the null hypothesis was rejected, while the working hypothesis was accepted. In other words, it was found here that anxiousness about English learning, attitude and learning orientation, language aptitude, and personality traits were a set of significant predictors of learning strategy use. The total variance of the overall strategies accounted for by the combination of these four factors was about 36% (*R Square*) since the correlation coefficient between overall learning strategies and the linear combination of the four factors (*Multiple R*) was .599.

However, an analysis of the relative importance of these factors revealed that only factor 1 - *anxiousness about English learning* ( $\beta = .431$ ,  $t = 10.500$ ,  $p < .000$ ) - and factor 2 - *attitude and learning orientation* ( $\beta = .416$ ,  $t = 10.140$ ,  $p < .000$ ) - provided a highly significant contribution to the variances of use of overall strategies. Meanwhile, the other two factors - *language aptitude* and *personality traits* - did not contribute significantly to the prediction of the use of overall learning strategies. Beta scores of .004 ( $t = .091$ ,  $p < .927$ ) and .000 ( $t = .005$ ,  $p < .996$ ) were found for the language aptitude and personality traits respectively.

Table 8.4 Regression of the Four Factors against Overall Strategies

Dependent Variable: Overall Strategies					
<i>Multiple R</i>	.599	<i>Analysis of Variance</i>			
<i>R Square</i>	.359		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.352	Regression	4	28.009	7.002
<i>Standard Error</i>	.363	Residual	381	50.085	.131
		Total	385	78.093	
		F = 53.266		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Anxiousness about English Learning	.194	.018	.431	10.500	.000
Attitude and Learning Orientation	.187	.018	.416	10.140	.000
Language Aptitude	.002	.018	.004	.091	.927
Personality Traits	.000	.018	.000	.005	.996
Constant	3.340	.018			

Since it was found that factors 1 and 2 significantly contributed to the use of overall strategies, further analyses were undertaken to investigate which of the variables that made up factors 1 and 2 provided significant contribution to the use of the overall strategies. These analyses were to provide further evidence since it was possible that not all variables within these two factors correlated significantly with the use of learning strategies. The results of the analyses are found in Table 8.5 and Table 8.6 below.

Table 8.5 Regression of Variables of Factor 1 against Overall Strategies

Dependent Variable: Overall Strategies					
<i>Multiple R</i>	.564	<i>Analysis of Variance</i>			
<i>R Square</i>	.318		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.307	Regression	6	24.810	4.135
<i>Standard Error</i>	.375	Residual	379	53.283	.141
		Total	385	78.093	
		F = 29.412		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Attitude toward learning English	.013	.005	.174	2.628	.009
Desire to learn English	.005	.004	.076	1.214	.226
English class anxiety	.007	.003	.156	2.360	.019
English use anxiety	.007	.003	.151	2.234	.026
Interest in foreign language	.003	.004	.039	.693	.488
Motivational intensity	.007	.003	.128	2.176	.030
Constant	2.807	.093			

Table 8.5 shows that when analysed separately from the other three factors, the six variables that made up factor 1 accounted for about 32% (*R Square*) of the total variance in overall learning strategies. This amount of the shared variance was found, since the correlation coefficient between the overall learning strategies and the combination of the six variables of factor 1 (*Multiple R*) was .564. An analysis of the significance of this multiple correlation coefficient revealed an F-value of 29.412 ( $p < .000$ ), indicating that it was highly significant.

However, two variables did not uniquely contribute to the use of overall strategies. They were variables of *desire to learn English (DLE)* and *interest in foreign languages (IFL)* as their levels of significance were only  $p < .226$  (beta = .076,  $t = 1.214$ ) and  $p < .488$  (beta = .039,  $t = .693$ ) respectively. Meanwhile, the

other four variables including *attitudes toward learning English (ALE)*, *English class anxiety (ECA)*, *English use anxiety (EUA)*, and *motivational intensity (MIN)* turned out to be significant predictors of the use of overall learning strategies. Their significance levels were  $p < .009$  (beta = .174,  $t = 2.628$ ),  $p < .019$  (beta = .156,  $t = 2.360$ ),  $p < .026$  (beta = .151,  $t = 2.234$ ), and  $p < .030$  (beta = .128,  $t = 2.176$ ) respectively. Thus, among variables that made up factor 1, these four variables best predicted the total variance of the use of overall learning strategies.

Table 8.6 Regression of Variables of Factor 2 against Overall Strategies

Dependent Variable: Overall Strategies		Analysis of Variance			
		d.f	Sum of Squares	Mean Square	
<i>Multiple R</i>	.580				
<i>R Square</i>	.336				
<i>Adjusted R Square</i>	.324	Regression	7	26.270	3.753
<i>Standard Error</i>	.370	Residual	378	51.824	.137
		Total	385	78.093	
		F = 27.373		Significance F = .000	
Coefficients					
Predictor Variables	B	Std. Error B	Beta	t	Sig. t
Attitude toward native speakers of English	.011	.004	.132	2.547	.011
Attitude toward learning English	.012	.005	.153	2.335	.020
Desire to learn English	.000	.004	-.006	-.101	.920
Interest in foreign languages	.000	.004	.012	.216	.829
Instrumental orientation	.007	.005	.063	1.381	.168
Integrative orientation	.028	.006	.224	4.498	.000
Motivational intensity	.012	.003	.224	4.153	.000
Constant	2.548	.089			

Table 8.6, moreover, shows that the coefficient of correlation between the combination of the seven variables that made up factor 2 and overall strategies (*Multiple R*) was .580. This suggests that about 34% (*R Square*) of the total variance in overall learning strategies was attributable to the variance of the combined seven variables. An analysis of the significance of the multiple correlation coefficient revealed an F-value of 27.373 ( $p < .000$ ) indicating that it was also very significant.

A further analysis of the relative importance of these variables, however, indicated that only four variables uniquely contributed to the variance of overall strategies. These variables were *attitudes toward native speakers of English (ANS)* (beta = .132,  $t = 2.547$ ,  $p < .011$ ), *attitudes toward learning English (ALE)* (beta =

153,  $t = 2.335$ ,  $p < .020$ ), *integrative orientation (ITO)* ( $\beta = .224$ ,  $t = 4.498$ ,  $p < .000$ ), and *motivational intensity (MIN)* ( $\beta = .224$ ,  $t = 4.153$ ,  $p < .000$ ). The other three variables, on the other hand, did not significantly contribute to the variance in the use of overall strategies. These variables were *desire to learn English (DLE)*, *interest in foreign language (IFL)*, and *instrumental orientation (ISO)* as the levels of significance were  $p < .920$  ( $\beta = -.006$ ,  $t = -.101$ ),  $p < .829$  ( $\beta = .012$ ,  $t = .216$ ), and  $p < .168$  ( $\beta = .063$ ,  $t = 1.381$ ) respectively. Therefore, among variables that constituted factor 2, the variance of the overall learning strategies was, in fact, not predictable from these three variables.

In addition to reporting the predictability of the use of overall strategies from the four factors of individual differences as mentioned above, the predictability of the use of each learning strategy category was also investigated and the results are reported in the following sections.

### 8.2.1 The Predictability of Memory Strategies

Table 8.7 presents the results of a regression analysis of the four factors against the use of memory strategies. As the table indicates, the multiple correlation coefficient between the linear combination of the four factors and the use of memory strategies (*Multiple R*) was .484. This suggests that about 24% (*R Square*) of the total variance of use of memory strategies was accounted for by the combination of factors of *anxiousness about English learning*, *attitudes and learning orientation*, *language aptitude*, and *personality traits*. An analysis of the significance of the coefficient of the multiple correlation found an F-value of 29.196 ( $p < .000$ ), suggesting a high significance. This means that, taken together, the four factors of individual differences could be used as a significant combined predictor of the memory strategy use.

An analysis of the relative importance of these four factors, however, indicated that factor 3 - *language aptitude* - ( $\beta = -.024$ ,  $t = -.532$ ,  $p < .595$ ) and factor 4 - *personality traits* ( $\beta = .005$ ,  $t = .103$ ,  $p < .918$ ) failed to uniquely contribute to the prediction of the use of memory strategies. Only factor 1 - *anxiousness about English learning* ( $\beta = .393$ ,  $t = 8.778$ ,  $p < .000$ ) - and factor 2

- attitudes and learning orientation (beta = .281,  $t = 6.280$ ,  $p < .000$ ) significantly contributed to the use of memory strategies.

Table 8.7 Regression of the Four Factors against Memory Strategies

Dependent Variable: Memory Strategies					
<i>Multiple R</i>	.484	<i>Analysis of Variance</i>			
<i>R Square</i>	.235		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.227	Regression	4	31.673	7.918
<i>Standard Error</i>	.521	Residual	381	103.331	.271
		Total	385	135.005	
		F = 29.196		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Anxiousness about English Learning	.233	.027	.393	8.778	.000
Attitude and Learning Orientation	.167	.027	.281	6.280	.000
Language Aptitude	-.014	.027	-.024	-.532	.595
Personality Traits	.003	.027	.005	.103	.918
Constant	3.130	.027			

Further analyses were then undertaken to investigate the variables within factor 1 and factor 2 that significantly affected the use of memory strategies and the results are summarised in Tables 8.8 and 8.9. Variables that made up factors 3 and 4 were not further analysed because these two factors did not significantly predict the use of memory strategies.

Table 8.8 indicates that when analysed separately from the other three factors, the correlation coefficient between the combined six variables of factor 1 and memory strategies (*Multiple R*) was .472. This indicates that the six variables, when taken together, and memory strategies shared 22% (*R Square*) common variance. The combination of these six variables turned out to be a significant predictor of the use of memory strategies, as an analysis of the significance of the multiple correlation coefficient indicated an F-value of 18.064 ( $p < .000$ ).

A further analysis of the relative importance of the six variables, however, revealed only two variables that best predicted the use of memory strategies. These variables were *English use anxiety (EUA)* and *motivational intensity (MIN)* as their significance levels were  $p < .011$  (beta = .185,  $t = 2.567$ ) and  $p < .001$  (beta = .210,  $t = 3.335$ ) respectively. The other four variables, on the other hand, did not

significantly predict the use of memory strategies. These included *attitudes toward learning English (ALE)* ( $\beta = .086$ ,  $t = 1.215$ ,  $p < .225$ ), *desire to learn English (DLE)* ( $\beta = .037$ ,  $t = .549$ ,  $p < .583$ ), *English class anxiety (ECA)*, ( $\beta = .070$ ,  $t = .990$ ,  $p < .323$ ), and *interest in foreign language (IFL)* ( $\beta = -.008$ ,  $t = -.128$ ,  $p < .898$ ). As such, among variables that made up factor 1, *English use anxiety (EUA)* and *motivational intensity (MIN)* were the best predictors of the use of memory strategies.

Table 8.8 Regression of Variables of Factor 1 against Memory Strategies

Dependent Variable: Memory Strategies					
<i>Multiple R</i>	.472	<i>Analysis of Variance</i>			
<i>R Square</i>	.222		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.210	Regression	6	30.022	5.004
<i>Standard Error</i>	.526	Residual	379	104.983	.277
		Total	385	135.005	
		F = 18.064		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Attitude toward learning English	.008	.007	.086	1.215	.225
Desire to learn English	.003	.005	.037	.549	.583
English class anxiety	.004	.004	.070	.990	.323
English use anxiety	.011	.004	.185	2.567	.011
Interest in foreign language	.000	.006	-.008	-.128	.898
Motivational intensity	.015	.005	.210	3.335	.001
Constant	2.709	.130			

Table 8.9 contains a summary of the statistical findings related to the regression analysis of variables within factor 2 against the use of memory strategies. As the table suggests, the correlation coefficient of the combined seven variables making up factor 2 and memory strategies (*Multiple R*) turned out to be .475. This suggests that about 23% (*R Square*) of the total variance in memory strategies was accounted for by the combination of these seven variables. The combination of these variables proved to be a significant predictor of the use of memory strategies since an analysis of the significance of the multiple correlation coefficient found an F-value of 15.767 ( $p < .000$ ).

Table 8.9 Regression of Variables of Factor 2 against Memory Strategies

Dependent Variable: Memory Strategies					
<i>Multiple R</i>	.475	<i>Analysis of Variance</i>			
<i>R Square</i>	.226	d.f	Sum of Squares	Mean Square	
<i>Adjusted R Square</i>	.212	Regression	7	30.511	4.359
<i>Standard Error</i>	.526	Residual	378	104.494	.276
		Total	385	135.005	
		F = 15.767		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Attitude toward native speakers of English	.015	.006	.134	2.399	.017
Attitude toward learning English	.008	.007	.077	1.081	.280
Desire to learn English	-.002	.006	-.025	-.374	.709
Interest in foreign languages	-.003	.006	-.027	-.459	.646
Instrumental orientation	.000	.007	-.002	-.043	.966
Integrative orientation	.028	.009	.172	3.199	.001
Motivational intensity	.020	.004	.280	4.795	.000
Constant	2.438	.126			

Unfortunately, a further regression analysis failed to prove that all of these seven variables were significant predictors of memory strategies. In fact, only three were found to be unique predictors, while the other four were not. The variables that provided significant prediction on memory strategies were *attitudes toward native speakers of English (ANS)* (beta = .134,  $t = 2.399$ ,  $p < .017$ ), *integrative orientation (ITO)* (beta = .172,  $t = 3.199$ ,  $p < .001$ ), and *motivational intensity (MIN)* (beta = .280,  $t = 4.795$ ,  $p < .000$ ). The four variables that did not significantly contribute to the prediction of memory strategies were *attitudes toward learning English (ALE)* (beta = .077,  $t = 1.081$ ,  $p < .280$ ), *desire to learn English (DLE)* (beta = -.025,  $t = -.374$ ,  $p < .709$ ), *interest in foreign language (IFL)* (beta = -.027,  $t = -.459$ ,  $p < .646$ ), and *instrumental orientation (ISO)* (beta = -.002,  $t = -.043$ ,  $p < .966$ ). Hence, among variables that made up factor 2, the use of memory strategies was best predicted from the students' *attitudes toward native speakers of English (ANS)*, *integrative orientation (ITO)*, and *motivational intensity (MIN)*.

### 8.2.2 The Predictability of Cognitive Strategies

The computer solution of the regression analysis of the four factors against the use of cognitive strategies is summarised in the following Table 8.10. As shown in the table, the coefficient of correlation between the combined four factors of individual differences and cognitive strategies (*Multiple R*) was .541. This means that about 29% (*R Square*) of the total variance of the use of cognitive strategies was attributable to the variation in the combination of the four factors of individual differences. The analysis of variance to measure the significance of the multiple correlation above obtained an F-value of 39.505 ( $p < .000$ ), suggesting that it was highly significant.

Table 8.10 Regression of the Four Factors against Cognitive Strategies

Dependent Variable: Cognitive Strategies					
<i>Multiple R</i>	.541	<i>Analysis of Variance</i>			
<i>R Square</i>	.293		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.286	Regression	4	32.429	8.107
<i>Standard Error</i>	.453	Residual	381	78.191	.202
		Total	385	110.620	
		F = 39.505		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Anxiousness about English Learning	.236	.023	.441	10.242	.000
Attitude and Learning Orientation	.167	.023	.312	7.239	.000
Language Aptitude	.012	.023	.022	.517	.606
Personality Traits	.016	.023	.029	.678	.498
Constant	3.130	.023			

An analysis of the relative importance of the four factors in predicting the use of cognitive strategies, however, revealed that not all of these four factors significantly predicted the use of cognitive strategies. In fact, only two factors were significant, while the other two were not. The factors that significantly contributed to the variance in the use of cognitive strategies were *anxiousness about English learning* (beta = .441,  $t = 10.242$ ,  $p < .000$ ) and *attitudes and learning orientation* (beta = .312,  $t = 7.239$ ,  $p < .000$ ). The factors that did not significantly contribute to the variance in the use of cognitive strategies were

language aptitude (beta = .022,  $t = .517$ ,  $p < .606$ ) and personality traits (beta = .029,  $t = .678$ ,  $p < .498$ ).

As it was found that only the *anxiousness about English learning* factor and the *attitudes and learning orientation* factor significantly contributed to the variance of the use memory strategies, further analyses were carried out to investigate the variables within these two factors that predicted well the use of memory strategies. Summaries of these analyses are presented in Table 8.11 and Table 8.12.

Table 8.11 Regression of Variables of Factor 1 against Cognitive Strategies

Dependent Variable: Cognitive Strategies		Analysis of Variance			
		d.f	Sum of Squares	Mean Square	
Multiple R	.534				
R Square	.285				
Adjusted R Square	.274	Regression	6	31.521	5.254
Standard Error	.457	Residual	379	79.099	.209
		Total	385	110.620	
		F = 25.172		Significance F = .000	
Coefficients					
Predictor Variables	B	Std. Error B	Beta	t	Sig. t
Attitude toward learning English	.012	.006	.139	2.048	.041
Desire to learn English	.003	.005	.034	.535	.593
English class anxiety	.011	.004	.191	2.819	.005
English use anxiety	.010	.004	.194	2.801	.005
Interest in foreign language	.000	.005	.003	.047	.962
Motivational intensity	.007	.004	.104	1.720	.086
Constant	2.802	.113			

Table 8.11 above shows that the coefficient of correlation between the combined six variables that made up factor 1 and cognitive strategies (*Multiple R*) was .534 and this coefficient was very significant as indicated in the F-value of 25.172 ( $p < .000$ ). This amount of correlation coefficient indicated that the combination of the six variables of factor 1 and cognitive strategies shared a common variance (*R Square*) of 28.5%. In other words, about 29% of the variance in the use of cognitive strategies was accounted for by the combination of *attitudes toward learning English (ALE)*, *desire to learn English (DLE)*, *English class anxiety (ECA)*, *English use anxiety (EUA)*, *interest in foreign languages (IFL)*, and *motivational intensity (MIN)*.

When analysed in terms of its relative importance in predicting the use of cognitive strategies, however, not all of these six variables contributed well to the use of memory strategies. In fact, three variables predicted well, one variable predicted moderately and the other two did not significantly predict the use of cognitive strategies. The three factors that best predicted the use of memory strategies were *English use anxiety (EUA)* (beta = .194,  $t = 2.801$ ,  $p < .005$ ), *English class anxiety (ECA)* (beta = .191,  $t = 2.819$ ,  $p < .005$ ), and *attitudes toward learning English (ALE)* (beta = .139,  $t = 2.048$ ,  $p < .041$ ). The one variable that moderately contributed to the use of memory strategy was *motivational intensity (MIN)* (beta = .104,  $t = 1.720$ ,  $p < .086$ ). The term moderate contribution was used here because the coefficient was significant at .10, which was still acceptable in the field of education. Lastly, the two variables that did not contribute to the variance of memory strategies were *desire to learn English (DLE)* (beta = .034,  $t = .535$ ,  $p < .593$ ) and *interest in foreign languages (IFL)* (beta = .003,  $t = .047$ ,  $p < .962$ ).

Table 8.12 presents a summary of the statistical findings of the regression analysis of variables that made up factor 2 against cognitive strategies. The table shows that the combination of the seven predictor variables and cognitive strategies had a common variance of 26.8% (*R Square*). In other words, the linear combination of the seven predictors accounted for about 27% of the total variance in the use of cognitive strategies. This was so because the coefficient of the correlation between the combined seven variables and cognitive strategies (*Multiple R*) was .518. An analysis of the significance of this correlation coefficient revealed an F-value of 19.821 ( $p < .000$ ), indicating that it was significant at .01 level. Thus, the combination of *attitudes toward native speakers of English (ANS)*, *attitudes toward learning English (ALE)*, *desire to learn English (DLE)*, *interest in foreign language (IFL)*, *instrumental orientation (ISO)*, *integrative orientation (ITO)*, and *motivational intensity (MIN)* was a significant predictor of the use cognitive strategies.

Table 8.12 Regression of Variables of Factor 2 against Cognitive Strategies

Dependent Variable: Cognitive Strategies						
<i>Multiple R</i>	.518	<i>Analysis of Variance</i>				
<i>R Square</i>	.268		d.f	Sum of Squares	Mean Square	
<i>Adjusted R Square</i>	.255	Regression	7	29.701		4.243
<i>Standard Error</i>	.463	Residual	378	80.919		.214
		Total	385	110.620		
		F = 19.821		Significance F = .000		
<i>Coefficients</i>						
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>	
Attitude toward native speakers of English	.014	.006	.133	2.443	.015	
Attitude toward learning English	.012	.006	.134	1.951	.052	
Desire to learn English	-.003	.005	-.037	-.560	.576	
Interest in foreign languages	-.003	.006	-.027	-.464	.643	
Instrumental orientation	-.001	.006	-.008	-.168	.867	
Integrative orientation	.036	.008	.247	4.728	.000	
Motivational intensity	.015	.004	.224	3.946	.000	
Constant	2.473	.111				

When these seven variables were analysed in terms of the relative importance of each variable, however, it was found that not all of them contributed to the regression. This means that not all of them correlated significantly with variation in the use of cognitive strategies. Four variables were found to be significant predictors. These were *integrative orientation (ITO)* (beta = .247,  $t = 4.728$ ,  $p < .000$ ), *motivational intensity (MIN)* (beta = .224,  $t = 3.946$ ,  $p < .000$ ), *attitudes toward native speakers of English (ANS)* (beta = .133,  $t = 2.443$ ,  $p < .015$ ), and *attitudes toward learning English (ALE)* (beta = .134,  $t = 1.951$ ,  $p < .052$ ). Meanwhile, the other three variables of factor 2 did not significantly predict variation in the use of cognitive strategies. These variables were *desire to learn English (DLE)* (beta = -.037,  $t = -.560$ ,  $p < .576$ ), *interest in foreign language (IFL)* (beta = -.027,  $t = -.464$ ,  $p < .643$ ), and *instrumental orientation (ISO)* (beta = -.008,  $t = -.168$ ,  $p < .867$ ).

### 8.2.3 The Predictability of Compensation Strategies

A regression analysis was also performed to investigate the correlation between the combined four factors of individual differences and the use of compensation strategies. Table 8.13 presents a summary of the statistical findings

of the analysis of the power of the four factors of individual differences in predicting the use of compensation strategies. As shown in the table, the multiple correlation coefficient (*Multiple R*) between the combined four factors and compensation strategy use was .278. The shared variance of the combination of these factors and the use of compensation strategies was 7.7% (*R Square*). In other words, about 8% of the total variance of compensation strategies was attributable to the variance of the linear combination of *anxiousness about learning, attitudes and learning orientation, language aptitude, and personality traits*. Although this percentage of shared variance was relatively smaller than the percentage of the variance shared by these four factors and the other strategy categories as reported earlier, the correlation coefficient was yet significant as proved by the obtained *F*-value of 7.971 ( $p < .000$ ).

Table 8.13 Regression of the Four Factors against Compensation Strategies

Dependent Variable: Compensation Strategies					
<i>Multiple R</i>	.278	<i>Analysis of Variance</i>			
<i>R Square</i>	.077		<i>d.f</i>	<i>Sum of Squares</i>	<i>Mean Square</i>
<i>Adjusted R Square</i>	.068	Regression	4	12.927	3.232
<i>Standard Error</i>	.637	Residual	381	154.483	.405
		Total	385	167.410	
		F = 7.971		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Anxiousness about English Learning	.116	.032	.176	3.566	.000
Attitude and Learning Orientation	.132	.032	.199	4.053	.000
Language Aptitude	.053	.032	.081	1.637	.102
Personality Traits	-.008	.032	-.012	-.246	.806
Constant	3.072	.032			

An analysis of the relative importance of these four factors in predicting the use of compensation strategies revealed that factor 1 - *anxiousness about English learning* and factor 2 - *attitudes and learning orientation* - were the best predictors of compensation strategies. Beta scores of .176 ( $t = 3.566, p < .000$ ) and .199 ( $t = 4.053, p < .000$ ) were found. In addition, factor 3 - *language aptitude* - was also a moderately significant predictor of compensation strategies. The beta value found for this factor was .032 ( $t = 1.637, p < .102$ ).

Variables that constituted factors 1, 2 and 3 were then used in the subsequent regression analyses to find which variables within these factors were significant predictors of compensation strategies and which variables were not. The results of the analyses are summarised respectively in Tables 8.14, 8.15, and 8.16.

Table 8.14 Regression of Variables of Factor 1 against Compensation Strategies

Dependent Variable: Compensation Strategies					
<i>Multiple R</i>	.342	<i>Analysis of Variance</i>			
<i>R Square</i>	.117		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.103	Regression	6	19.622	3.270
<i>Standard Error</i>	.625	Residual	379	147.787	.390
		Total	385	167.410	
		F = 8.387		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Attitude toward learning English	.004	.008	.037	.489	.625
Desire to learn English	.005	.006	.055	.773	.440
English class anxiety	.009	.005	.137	1.817	.070
English use anxiety	.014	.005	.217	2.817	.005
Interest in foreign language	.014	.007	.118	1.859	.064
Motivational intensity	-.018	.005	-.227	-3.381	.001
Constant	2.747	.155			

A regression analysis of the six variables of factor 1 against compensation strategies as summarised in Table 8.14 found that the coefficient of correlation between the combination of these six variables and compensation strategies (*Multiple R*) was .342. This was found to be significant since an analysis of its significance obtained an F-value of 8.387 ( $p < .000$ ). The correlation coefficient also indicated that the linear combination of the predictor variables and the dependent variable - compensation strategies - shared a common variance of 11.7% (*R Square*). In other words, about 12% of the total variance of compensation strategies was attributable to the variance of the combination of attitudes toward learning English (*ALE*), desire to learn English (*DLE*), English class anxiety (*ECA*), English use anxiety (*EUA*), interest in foreign language (*IFL*), and motivational intensity (*MIN*).

However, not all of these six variables that made up factor 1 were significant predictors of compensation strategies. In fact, only two variables best predicted variation in the use of compensation strategies. These variables were *motivational intensity (MIN)* ( $\beta = -.227, t = -3.381, p < .001$ ) and *English use anxiety* ( $\beta = .217, t = 2.817, p < .005$ ). These two predictors were significant at .01 level. In addition, two variables could be classified as moderate predictors because they were significant at .10 level. They were *interest in foreign languages (IFL)* ( $\beta = .118, t = 1.859, p < .064$ ) and *English class anxiety (ECA)* ( $\beta = .137, t = 1.817, p < .070$ ). The other two variables, on the other hand, did not turn out to be significant predictors. The beta values of .037 ( $t = .489, p < .625$ ) and .055 ( $t = .773, p < .440$ ) were obtained for *attitudes toward learning English (ALE)* and *desire to learn English (DLE)* respectively.

Table 8.15 Regression of Variables of Factor 2 against Compensation Strategies

Dependent Variable: Compensation Strategies						
<i>Multiple R</i>	.312	<i>Analysis of Variance</i>				
<i>R Square</i>	.097		d.f	Sum of Squares	Mean Square	
<i>Adjusted R Square</i>	.081	Regression	7	16.302	2.329	
<i>Standard Error</i>	.632	Residual	378	151.107	.400	
		Total	385	167.410		
		F = 5.826		Significance F = .000		
<i>Coefficients</i>						
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>	
Attitude toward native speakers of English	.024	.008	.192	3.181	.002	
Attitude toward learning English	.003	.008	.030	.393	.695	
Desire to learn English	-.002	.007	-.022	-.303	.762	
Interest in foreign languages	.013	.008	.111	1.726	.085	
Instrumental orientation	.012	.009	.074	1.393	.164	
Integrative orientation	.017	.010	.097	1.665	.097	
Motivational intensity	-.009	.005	-.108	-1.710	.088	
Constant	2.364	.151				

Table 8.15 contains a summary of the regression analysis of variables that constituted factor 2 against compensation strategies. The table indicates that the coefficient of correlation between the combination of the seven predictor variables and compensation strategies (*Multiple R*) was .312 and the *R Square* was .097. This means that about 10% of the total variance of compensation strategies could be explained by the total variance of the combined seven variables. The correlation

coefficient proved to be significant as an analysis of its significance found an F-value of 5.826 ( $p < .000$ ). Thus, the combination of *attitudes toward native speakers of English (ANS)*, *attitudes toward learning English (ALE)*, *desire to learn English (DLE)*, *interest in foreign languages (IFL)*, *instrumental orientation (ISO)*, *integrative orientation (ITO)*, and *motivational intensity (MIN)* was a set of significant predictors of the use of compensation strategies.

An analysis of the unique contribution of each variable, however, revealed that not all of the seven variables contributed significantly. In fact, only the variable of *attitudes toward native speakers of English (ANS)* was the best predictor of compensation strategies (beta = .192,  $t = 3.181$ ,  $p < .002$ ). Three other variables also moderately contributed to the variation in the use of compensation strategies. These variables were *interest in foreign language (IFL)* (beta = .111,  $t = 1.726$ ,  $p < .085$ ), *motivational intensity (MIN)* (beta = -.108,  $t = -1.710$ ,  $p < .088$ ), and *integrative orientation (ITO)* (beta = .097,  $t = 1.665$ ,  $p < .097$ ). Meanwhile, the other three variables did not prove to provide significant contributions to the prediction of the use of compensation strategies. These variables were *attitudes toward learning English (ALE)* (beta = .030,  $t = .393$ ,  $p < .695$ ), *desire to learn English (DLE)* (beta = -.022,  $t = -.303$ ,  $p < .762$ ), and *instrumental orientation (ISO)* (beta = .070,  $t = 1.393$ ,  $p < .164$ ).

As previously reported, the regression analysis of the four factors against compensation strategies also found that factor 3 (*language aptitude*) turned out to be a moderate predictor of compensation strategies. A further analysis was then undertaken to investigate which variables under factor 3 made a unique contribution to the overall variance of compensation strategies. A summary of this analysis is presented in Table 8.16.

The table shows that the overall variance of compensation strategies accounted for by language aptitude was about 2% (*R Square*). This amount of shared variance was obtained as the coefficient of correlation between a set of the two variables that made up factor 3 and compensation strategies (*Multiple R*) was .133. This small amount of correlation coefficient was still significant as indicated in its F-value of 3.469 ( $p < .032$ ). Thus, the combination of *words in sentences*

(WIS) ability and *paired associates* (PAS) ability, which made up language aptitude, was also a significant predictor of compensation strategies.

Table 8.16 Regression of Variables of Factor 3 against Compensation Strategies

Dependent Variable: Compensation Strategies					
<i>Multiple R</i>	.133	<i>Analysis of Variance</i>			
<i>R Square</i>	.018		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.013	Regression	2	2.979	1.499
<i>Standard Error</i>	.655	Residual	383	164.431	.429
		Total	385	167.410	
		F = 3.469		Significance F = .032	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Words in sentences	.017	.008	.113	2.035	.043
Paired associates	.005	.008	.038	.686	.493
Constant	2.711	.146			

When the two variables were further regressed against the dependent variable to see the unique contribution of each, it turned out that only one variable significantly contributed to the variance of compensation strategies and the other one did not. The one that provided a significant contribution was *words in sentences* (WIS) (beta = .113,  $t = 2.035$ ,  $p < .043$ ). Meanwhile, the one that did not provide a significant contribution was *paired associates* (PAS) (beta = .038,  $t = .686$ ,  $p < .493$ ). In short, relative to the components of language aptitude covered in the present study, compensation strategies were best predicted from *words in sentences* ability.

#### 8.2.4 The Predictability of Metacognitive Strategies

The results of a regression analysis of the four factors of individual differences against metacognitive strategies are summarised in Table 8.17. The coefficient of correlation between a set of the four factors and metacognitive strategies (*Multiple R*) was found to be .590. This coefficient was significant as an analysis of variance to check its significance revealed an F-value of 50.883 ( $p < .000$ ). Thus, the combination of the four factors proved to be a significant predictor of compensation strategies. In fact, an amount of about 35% (*R Square*) of the

overall variance of metacognitive strategies could be explained by the overall variance of *anxiousness about learning, attitudes and learning orientation, language aptitude, and personality traits*.

Table 8.17 Regression of the Four Factors against Metacognitive Strategies

Dependent Variable: Metacognitive Strategies					
<i>Multiple R</i>	.590	<i>Analysis of Variance</i>			
<i>R Square</i>	.348		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.341	Regression	4	49.062	12.265
<i>Standard Error</i>	.491	Residual	381	91.840	.241
		Total	385	140.902	
		F = 50.883		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Anxiousness about English Learning	.260	.025	.429	10.379	.000
Attitude and Learning Orientation	.244	.025	.403	9.750	.000
Language Aptitude	-.013	.025	-.021	-.514	.607
Personality Traits	.017	.025	.029	.691	.490
Constant	3.807	.025			

An analysis of the unique variance of each of the four factors of predictor variables, however, revealed that factor 1 - *anxiousness about English learning* - and factor 2 - *attitudes and learning orientation* - were the best predictors of metacognitive strategies. The beta values of these two factors were .429 ( $t = 10.379, p < .000$ ) and .403 ( $t = 9.750, p < .000$ ) respectively. Neither *language aptitude* (factor 3) nor *personality traits* (factor 4) provided a unique contribution to the overall variance of the metacognitive strategies. In other words, *language aptitude* and *personality traits* did not provide significant contributions to the prediction of the use of metacognitive strategies as the beta values for these predictors were -.021 ( $t = -.514, p < .607$ ) and .029 ( $t = .691, p < .490$ ) respectively.

As factors 1 and 2 were found to significantly predict variance of score of the use of metacognitive strategies, further analyses were carried out by regressing the variables of factors 1 and 2 against metacognitive strategies. Again, these analyses were to find which variables within these two factors best described the variance of metacognitive strategies.

Table 8.18 contains a summary of the results of the regression of variables in factor 1 against metacognitive strategies as the dependent variable. As indicated in the table, the correlation coefficient between a set of the six variables of factor 1 and metacognitive strategies (*Multiple R*) was .581, suggesting 33.7% (*R Square*) of the shared variance. In other words, about 34% of the total variance of metacognitive strategies was attributable to the variance of the combination of the six variables. An analysis of variance to measure the significance of the coefficient found an F-value of 32.165 ( $p < .000$ ). Thus, it was found that the use of metacognitive strategies could also be predicted from the combination of the variables of *attitudes toward learning English (ALE)*, *desire to learn English (DLE)*, *English class anxiety (ECA)*, *English use anxiety (EUA)*, *interest in foreign languages (IFL)*, and *motivational intensity (MIN)*.

Table 8.18 Regression of Variables of Factor 1 against Metacognitive Strategies  
Dependent Variable: Metacognitive Strategies

		Analysis of Variance			
		d.f	Sum of Squares	Mean Square	
<i>Multiple R</i>	.581				
<i>R Square</i>	.337				
<i>Adjusted R Square</i>	.327	Regression	6	47.540	7.923
<i>Standard Error</i>	.496	Residual	379	93.361	.246
		Total	385	140.902	
		F = 32.165		Significance F = .000	
Coefficients					
Predictor Variables	B	Std. Error B	Beta	t	Sig. t
Attitude toward learning English	.018	.007	.183	2.803	.005
Desire to learn English	.009	.005	.106	1.714	.087
English class anxiety	.007	.004	.105	1.608	.109
English use anxiety	.006	.004	.098	1.471	.142
Interest in foreign language	-.001	.006	-.013	-.233	.816
Motivational intensity	.018	.004	.246	4.227	.000
Constant	3.074	.123			

A further analysis of the relative importance of the variables that made up *anxiousness about learning English* suggested that out of the six predictor variables, two variables provided the best prediction. These were *motivational intensity (MIN)* (beta = .246,  $t = 4.227$ ,  $p < .000$ ) and *attitudes toward learning English* (beta = .183,  $t = 2.803$ ,  $p < .005$ ). In addition, two other variables were also found to provide moderately unique contributions to the prediction. These

variables were *desire to learn English (DLE)* ( $\beta = .106$ ,  $t = 1.714$ ,  $p < .087$ ) and *English class anxiety (ECA)* ( $\beta = .105$ ,  $t = 1.608$ ,  $p < .109$ ). On the other hand, the other two variables - *English use anxiety (EUA)* and *interest in foreign languages (IFL)* - did not significantly predict the use of metacognitive strategies as their beta values were  $.098$  ( $t = 1.471$ ,  $p < .142$ ) and  $-.013$  ( $t = -.233$ ,  $p < .816$ ) respectively.

Table 8.19 Regression of Variables of Factor 2 against Metacognitive Strategies

Dependent Variable: Metacognitive Strategies					
<i>Multiple R</i>	.591	<i>Analysis of Variance</i>			
<i>R Square</i>	.350		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.338	Regression	7	49.263	7.038
<i>Standard Error</i>	.492	Residual	378	91.639	.242
		Total	385	140.902	
		F = 29.029		Significance F = .000	
Coefficients					
<i>Predictor Variables</i>	B	Std. Error B	Beta	t	Sig. t
Attitude toward native speakers of English	-.002	.006	-.013	-.256	.798
Attitude toward learning English	.002	.007	.185	2.841	.005
Desire to learn English	.004	.005	.050	.802	.423
Interest in foreign languages	.000	.006	-.008	-.153	.879
Instrumental orientation	.016	.007	.107	2.371	.018
Integrative orientation	.026	.008	.155	3.140	.002
Motivational intensity	.024	.004	.322	6.010	.000
Constant	2.822	.118			

Regarding the predictability of metacognitive strategies from variables that made up factor 2, Table 8.19 shows that the coefficient of correlation between the combined seven variables of factor 2 and metacognitive strategies (*Multiple R*) was  $.591$ . Thus, this set of predictor variables and metacognitive strategies shared a common variance of 35% (*R Square*). In other words, 35% of the overall variance of metacognitive strategies could be explained by the variance of the combination of these seven variables. The correlation coefficient above proved significant as indicated in the F-value of 29.029 ( $p < .000$ ) which was obtained from an analysis of variance to measure the significance of the correlation coefficient. Hence, taken as a set of variables, the combination of *attitudes toward native speakers of English (ANS)*, *attitudes toward learning English (ALE)*, *desire to learn English (DLE)*, *interest in foreign language (IFL)*, *instrumental*

orientation (*ISO*), integrative orientation (*ITO*), and motivational intensity (*MIN*) was a significant predictor of metacognitive strategies.

When these seven variables, that made up a factor of *attitudes and learning orientation*, were further analysed to measure their importance in contributing to the prediction, however, three of them failed to provide unique and significant contributions. These variables were *attitudes toward native speakers of English (ANS)* (beta = -.013,  $t = -.256$ ,  $p < .798$ ), *desire to learn English (DLE)* (beta = .050,  $t = .802$ ,  $p < .423$ ), and *interest in foreign languages (IFL)* (beta = -.008,  $t = -.153$ ,  $p < .879$ ). The other four variables, on the other hand, proved to provide unique and significant contributions to the prediction. These variables were *motivational intensity (MIN)*, *integrative orientation (ITO)*, *attitudes toward learning English (ALE)*, and *instrumental orientation (ISO)*, and with beta values of .322 ( $t = 6.010$ ,  $p < .000$ ), .155 ( $t = 3.140$ ,  $p < .002$ ), .185 ( $t = 2.841$ ,  $p < .005$ ), and .107 ( $t = 2.371$ ,  $p < .018$ ) respectively. Thus, among variables that made up factor 2, these four variables could best predict the use of metacognitive strategies.

### 8.2.5 The Predictability of Affective Strategies

A regression analysis was also performed to measure the predictability of the affective strategy use from the four factors of individual differences. Table 8.20 presents a summary of the computer solution of this analysis. The table shows that the coefficient correlation between the combined four factors as a set of predictor variables and affective strategies as a dependent variable (*Multiple R*) was .328. This suggests that the independent and the dependent variables shared 10.7% (*R Square*) common variance. In other words, about 11% of the total variance of the use of affective strategies could be attributable to the aggregated variance of *anxiousness about English learning, attitudes and learning orientation, language aptitude, and personality traits*. The correlation coefficient above turned out to be significant at .01 level as the analysis of variance (ANOVA) found an *F*-value of 11.456 ( $p < .000$ ). Thus, as an aggregate variable, the four factors of individual differences were significant predictors of variance in the use of affective strategies.

Table 8.20 Regression of the Four Factors against Affective Strategies

Dependent Variable: Affective Strategies					
<i>Multiple R</i>	.328	<i>Analysis of Variance</i>			
<i>R Square</i>	.107		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.098	Regression	4	15.842	3.960
<i>Standard Error</i>	.588	Residual	381	131.715	.346
		Total	385	147.556	
		F = 11.456		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Anxiousness about English Learning	.050	.030	.081	1.676	.094
Attitude and Learning Orientation	.193	.030	.311	6.426	.000
Language Aptitude	.000	.030	-.001	-.021	.984
Personality Traits	-.039	.030	-.063	-1.311	.191
Constant	3.272	.030			

Out of the four predictors, however, only *attitudes and learning orientation* turned out to be the best predictor of affective strategies as an analysis of the relative importance of each factor revealed a beta value of .311 ( $t = 6.426, p < .000$ ) for this factor. *Anxiousness about English learning* could be considered as a moderate predictor because it was still significant at .01 level. Its beta value was .081 ( $t = 1.676, p < .094$ ). The other two factors, on the other hand, failed to contribute unique and significant prediction since their beta values were  $-.063$  ( $t = -1.311, p < .191$ ) and  $-.001$  ( $t = -.021, p < .984$ ) for *personality traits* and *language aptitude* respectively. Thus, the use of affective strategies could be well predicted from the learners' attitudes and orientation in learning English. Their anxiousness about learning could also support the prediction.

As explained earlier, seven variables made up *attitudes and learning orientation* and six variables constituted *anxiousness about English learning*. Further analyses were then undertaken to find which variables of the two predictors above provided unique and significant contributions to the prediction. The results of these analyses are summarised in Table 8.21 and Table 8.22.

Table 8.21 contains a summary of the results of a regression analysis of variables that made up *anxiousness about learning* (factor 1) against affective strategies. As shown in the table, the multiple correlation between the combined six variables of factor 1 and affective strategies (*Multiple R*) resulted in a

coefficient of .243. This suggests that the set of six predictor variables and the dependent variable shared a common variance of 5.9% (*R Square*). In other words, about 6% of the overall variance of affective strategies was attributable to the variance of the combination of *attitudes toward learning English (ALE)*, *desire to learn English (DLE)*, *English class anxiety (ECA)*, *English use anxiety (EUA)*, *interest in foreign languages (IFL)*, and *motivational intensity (MIN)*. An analysis of variance (ANOVA) to measure the significance of the multiple correlation coefficient above found an F-value of 3.958 ( $p < .001$ ). Thus, apart from other individual differences, the combination of the six variables of *anxiousness about English learning* predicted the use of affective strategies.

Table 8.21 Regression of Variables of Factor 1 against Affective Strategies

Dependent Variable: Affective Strategies					
<i>Multiple R</i>	.243	<i>Analysis of Variance</i>			
<i>R Square</i>	.059		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.044	Regression	6	8.700	3.958
<i>Standard Error</i>	.605	Residual	379	138.856	.366
		Total	385	147.556	
		F = 3.958		Significance F = .001	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Attitude toward learning English	.010	.008	.100	1.282	.201
Desire to learn English	.006	.006	.072	.971	.332
English class anxiety	.005	.005	.075	.968	.334
English use anxiety	-.004	.005	-.068	-.854	.393
Interest in foreign language	.010	.007	.096	1.463	.144
Motivational intensity	.001	.005	.015	.223	.823
Constant	2.723	.150			

Unfortunately, an analysis of the relative importance of these six variables found a spurious finding. While taken as an aggregate factor, the six variables turned out to be a set of moderately significant predictors of affective strategies. However, none of these variables provided a unique and significant contribution to the regression. In other words, all of these six variables failed to be significant predictors of affective strategies when the significance of each was analysed. Beta values of .100 ( $t = 1.282, p < .201$ ), .072 ( $t = .971, p < .332$ ), .096 ( $t = 1.463, p < .144$ ), and .015 ( $t = .223, t < .823$ ) were obtained for *attitudes toward learning*

English (ALE), desire to learn English (DLE), interest in foreign languages (IFL), and motivational intensity (MIN). Moreover, for English class anxiety and English use anxiety (EUA), beta values of .075 ( $t = .968, p < .334$ ) and  $-.068 (t = -.854, p < .393)$  were found respectively.

Table 8.22 Regression of Variables of Factor 2 against Affective Strategies

Dependent Variable: Affective Strategies					
Multiple R	.314	<i>Analysis of Variance</i>			
R Square	.099		d.f	Sum of Squares	Mean Square
Adjusted R Square	.082	Regression	7	14.577	2.082
Standard Error	.593	Residual	378	132.979	.352
		Total	385	147.556	
		F = 5.919		Significance F = .000	
<i>Coefficients</i>					
Predictor Variables	B	Std. Error B	Beta	t	Sig. t
Attitude toward native speakers of English	.011	.007	.090	1.496	.136
Attitude toward learning English	.005	.008	.044	.579	.563
Desire to learn English	.001	.006	.014	.195	.845
Interest in foreign languages	.007	.007	.062	.961	.337
Instrumental orientation	.018	.008	.118	2.221	.027
Integrative orientation	.020	.010	.117	2.017	.044
Motivational intensity	.001	.005	.014	.224	.823
Constant	2.614	.142			

Table 8.22 presents a summary of the regression analysis of variables constituting factor 2 (*attitudes and learning orientation*) against affective strategies. As shown in the table, the coefficient of the multiple correlation between a set of the seven variables and affective strategies (*Multiple R*) was .314, indicating a shared variance of 9.9% (*R Square*). In other words, about 10% of the total variance of variance in the use of affective strategies was explained by the variance of the combined variables of *attitudes toward native speakers of English (ANS)*, *attitudes toward learning English (ALE)*, *desire to learn English (DLE)*, *interest in foreign languages (IFL)*, *instrumental orientation (ISO)*, *integrative orientation (ITO)*, and *motivational intensity (MIN)*. The correlation coefficient above was found to be significant as the F-value was found to be 5.919 ( $p < .000$ ). As such, the combination of the seven variables of factor 2 was a set of significant predictors of affective strategies.

The analysis of the relative importance of these seven variables revealed only two variables that provided significant contributions to the prediction. These variables were *instrumental orientation (ISO)* (beta = .118,  $t = 2.221$ ,  $p < .027$ ) and *integrative orientation (ITO)* (beta = .117,  $t = 2.017$ ,  $p < .044$ ). The other five variables, on the other hand, did not provide unique and significant contributions to the regression. The beta values were .090 ( $t = 1.496$ ,  $p < .136$ ), .044 ( $t = .579$ ,  $p < .563$ ), .014 ( $t = .195$ ,  $p < .845$ ), .062 ( $t = .961$ ,  $p < .337$ ), and .014 ( $t = .224$ ,  $p < .823$ ) for *attitudes toward native speakers of English (ANS)*, *attitudes toward learning English (ALE)*, *desire to learn English (DLE)*, *interest in foreign language (IFL)*, and *motivational intensity (MIN)*. In short, among variables that constituted factor 2, the use of affective strategies was best predicted from the students' *instrumental orientation (ISO)* and *integrative orientation (ITO)*.

### 8.2.6 The Predictability of Social Strategies

The last strategy category covered in the present study was social strategies. The results of the analysis of how well these strategies could be predicted from the four factors of individual differences are summarised in Table 8.23. The table shows that the linear combination of *anxiousness about English learning*, *attitudes and learning orientation*, *language aptitude*, and *personality traits* was significantly associated with the total variance of social strategies. This interpretation was made because the F-value obtained from the analysis was 28.052 ( $p < .000$ ). In fact, the total variance of the social strategies accounted for by the four combined factors was about 23% (*R Square*) since the correlation coefficient between social strategies and a set of the four factors (*Multiple R*) was .477.

Similar to the previous findings, an analysis of the relative importance of the four factors in contributing to the regression indicated that only factor 1 - *anxiousness about English learning* - and factor 2 - *attitudes and learning orientation* - provided unique and significant contributions. The obtained beta values were .294 ( $t = 6.528$ ,  $p < .000$ ) for factor 1 and .369 ( $t = 8.184$ ,  $p < .000$ ) for factor 2. In addition, factor 3 - *language aptitude* - could be considered as

providing a moderately significant contribution to the regression as its beta value was  $-.072$  ( $t = -1.606, p < .109$ ). Factor 4 - *personality traits*, on the other hand, failed to contribute significantly to the regression when used in combination with factor 1, 2 and 3. The obtained beta value for factor 4 was  $.007$  ( $t = .145, p < .885$ ). Thus, the variance of the use of social strategies was best predicted from the learners' *anxiousness about English learning* as well as *their attitudes and learning orientation*. *Language aptitude* could also be used as a base for predicting the learner's social strategies of learning English.

Table 8.23 Regression of the Four Factors against Social Strategies

Dependent Variable: Social Strategies					
<i>Multiple R</i>	.477	<i>Analysis of Variance</i>			
<i>R Square</i>	.228		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.219	Regression	4	33.652	8.413
<i>Standard Error</i>	.548	Residual	381	114.264	.300
		Total	385	147.916	
		F = 28.052		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Anxiousness about English Learning	.182	.028	.294	6.528	.000
Attitude and Learning Orientation	.228	.028	.369	8.184	.000
Language Aptitude	-.045	.028	-.072	-1.606	.109
Personality Traits	.004	.028	.007	.145	.885
Constant	3.501	.028			

Further regression analyses were carried out to investigate the variables within the three predictors above that uniquely and significantly contributed to the regression. The computer solutions of the analyses are summarised in Tables 8.24, 8.25, and 8.26 below.

Table 8.24 contains a summary of the regression analysis of variables that made up factor 1 - *anxiousness about English learning* - against social strategies. The table shows that the multiple correlation coefficient (*Multiple R*) between the combination of the six variables within factor 1 and social strategies was .447, suggesting a shared variance of 20%. This means that 20% of the total variance of social strategies was attributable to the variance of the linear combination of the learners' *attitudes toward learning English (ALE)*, *desire to learn English (DLE)*,

English class anxiety (ECA), English use anxiety (EUA), interest in foreign languages (IFL), and motivational intensity (MIN). An analysis of variance (ANOVA) to measure the significance of the correlation coefficient above found a significant F-value of 15.814 ( $p < .000$ ). This suggests that the combination of the six variables within factor 1 could best predict the variance of the use of social strategies in learning English.

Table 8.24 Regression of Variables of Factor 1 against Social Strategies

Dependent Variable: Social Strategies					
Multiple R	.447	<i>Analysis of Variance</i>			
R Square	.200		d.f	Sum of Squares	Mean Square
Adjusted R Square	.188	Regression	6	29.616	4.936
Standard Error	.559	Residual	379	118.300	.312
		Total	385	147.916	
		F = 15.814		Significance F = .000	
<i>Coefficients</i>					
Predictor Variables	B	Std. Error B	Beta	t	Sig. t
Attitude toward learning English	.021	.007	.205	2.860	.004
Desire to learn English	.000	.006	.010	.144	.886
English class anxiety	.008	.005	.124	1.728	.085
English use anxiety	-.004	.004	-.074	-1.015	.311
Interest in foreign language	.007	.007	.067	1.115	.266
Motivational intensity	.016	.005	.209	3.269	.001
Constant	2.701	.138			

The table also indicates that out of the six variables within factor 1, *motivational intensity (MIN)* and *attitudes toward learning English (ALE)* provided significant contributions to the prediction. The beta values were .209 ( $t = 3.269, p < .001$ ) for the motivational intensity and .205 ( $t = 2.860, p < .004$ ) for the attitudes toward learning English. In addition, *English class anxiety (ECA)* could be considered as a moderate contributor to the prediction of social strategies as its beta value was .124 ( $t = 1.728, p < .085$ ). The other three variables, however, failed to provide significant contributions to the regression. These variables were *desire to learn English (DLE)*, *English use anxiety (EUA)*, and *interest in foreign languages (IFL)* with beta values of .010 ( $t = .144, p < .886$ ),  $-.074$  ( $t = -1.015, p < .311$ ), and .067 ( $t = 1.115, p < .266$ ) respectively. As such, within variables of factor 1 the variance of social strategies was best predicted from the students'

motivational intensity and attitudes toward learning English. Students' anxiety in using English in the classroom could also predict the intensity of use of social strategies.

Table 8.25 Regression of Variables of Factor 2 against Social Strategies

Dependent Variable: Social Strategies					
<i>Multiple R</i>	.476	<i>Analysis of Variance</i>			
<i>R Square</i>	.227		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.212	Regression	7	33.514	4.788
<i>Standard Error</i>	.550	Residual	378	114.402	.303
		Total	385	147.916	
		F = 15.819		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>Std. Error B</i>	<i>Beta</i>	<i>t</i>	<i>Sig. t</i>
Attitude toward native speakers of English	.010	.007	.082	1.473	.141
Attitude toward learning English	.016	.007	.158	2.224	.027
Desire to learn English	-.003	.006	-.034	-.496	.620
Interest in foreign languages	.003	.007	.024	.395	.693
Instrumental orientation	.008	.008	.052	1.063	.289
Integrative orientation	.025	.009	.147	2.744	.006
Motivational intensity	.017	.004	.220	3.778	.000
Constant	2.597	.132			

Table 8.25, moreover, contain information of the results of the regression analysis dealing with the predictability of social strategies from variables that made up factor 2 - *attitudes and learning orientation*. The table shows that the coefficient of multiple correlation (*Multiple R*) between a set of the seven variables of factor 2 and social strategies was .476, suggesting that they shared 22.7% common variance. This means that these seven variables of factor 2 explained about 23% of the total variance of social strategies. The analysis of variance (ANOVA) to measure the significance of the multiple correlation coefficient above resulted in an F-value of 15.819 ( $p < .000$ ). Therefore, the seven variables of factor 2 - *attitudes toward native speakers of English (ANS)*, *attitudes toward learning English (ALE)*, *desire to learn English (DLE)*, *interest in foreign language (IFL)*, *instrumental orientation (ISO)*, *integrative orientation (ITO)*, and *motivational intensity (MIN)* were a set of significant predictors of the use of social strategies.

However, an analysis of the relative importance of each the seven variables within factor 2 revealed four variables that did not contribute significantly to the regression. These were *attitudes toward native speakers of English (ANS)*, *desire to learn English (DLE)*, *interest in foreign languages (IFL)*, and *instrumental orientation (ISO)* with beta values of .082 ( $t = 1.473, p < .141$ ),  $-.034$  ( $t = -.496, p < .620$ ), .024 ( $t = .395, p < .693$ ), and .052 ( $t = 1.063, p < .289$ ) respectively. The other three variables, on the other hand, provided unique and significant contributions to the prediction. These variables were *motivational intensity (MIN)*, *integrative orientation (ITO)*, and *attitudes toward learning English (ALE)* with beta values of .220 ( $t = 3.778, p < .000$ ), .147 ( $t = 2.744, p < .006$ ) and .158 ( $t = 2.224, p < .027$ ) respectively. Therefore, within variables that constituted factor 2, variance of the use of social strategies was best predicted from students' *intensity of motivation (MIN)*, *integrative orientation (ITO)* and *attitudes toward learning English (ALE)*.

As previously mentioned, factor 3 - *language aptitude* - could be considered as a moderately significant predictor of social strategies when it was used in combination with factors 1, 2 and 4. However, when this factor was analysed separately from the other variables, a different result was obtained. Table 8.26 summarises the results of the analysis.

Table 8.26 Regression of Variables of Factor 3 against Social Strategies

Dependent Variable: Compensation Strategies					
<i>Multiple R</i>	.061	<i>Analysis of Variance</i>			
<i>R Square</i>	.004		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	-.001	Regression	2	.559	.279
<i>Standard Error</i>	.620	Residual	383	147.357	.385
		Total	385	147.916	
		F = .726		Significance F = .484	
<i>Coefficients</i>					
<i>Predictor Variables</i>	B	Std. Error B	Beta	t	Sig. t
Words in sentences	-.009	.008	-.065	-1.166	.244
Paired associates	.002	.007	.011	.203	.839
Constant	3.626	.138			

The table shows that the multiple correlation coefficient (*Multiple R*) of the combined two variables that made up factor 3 and social strategies was .061 suggesting a shared variance of only 4%. This very small correlation coefficient turned out to be not significant as the analysis of its significance found an F-value of .726 ( $p < .484$ ). Consequently, this factor did not prove to be a significant predictor of the use of social strategies. An analysis of the relative importance of the two variables that made up *language aptitude* factor supported this assertion. Neither *words in sentences (WIS)* nor *paired associates (PAS)* provided a unique and significant contribution to the regression. The obtained beta values were -.065 ( $t = -1.166, p < .244$ ) for the *words in sentences (WIS)* and .011 ( $t = .203, p < .839$ ) for the *paired associates*. Thus, language aptitude did not correlate significantly with the use of social strategies when analysed apart from the students' *attitudes and learning orientation, anxiousness about English learning, and personality traits*.

### 8.3 Summary of the Findings

The present study divided thirteen measures of individual differences into four factors. These factors, labelled as anxiousness about English learning, attitudes and learning orientation, language aptitude and personality traits, were used as predictors of learning strategies.

Disregarding the strategy categories, the combination of the four factors was found to correlate significantly with the use of learning strategies. The total variance of the use of overall strategies accounted for by the four factors was about 36%. However, analyses of the relative importance of these factors revealed that only anxiousness in English learning and attitude and learning orientation provided highly significant contributions to the use of overall strategies.

When these four factors were used in regression analyses to measure how well they could predict the variance of the use of each learning strategy category, it turned out that as a set of independent variables, they were best predictors of the use of all learning strategy categories. The total variances of the use of learning strategies attributable to the variance of the combined four factors were 24%, 29%,

8%, 35%, 11%, and 23% respectively for the use of memory, cognitive, compensation, metacognitive, affective and social strategies.

However, not all of the four factors above proved to be significant predictors of learning strategies when the relative importance of each factor was analysed. Table 8.27 summarises how well each factor contributed to the prediction of the dependent variables when analysed in conjunction with one another. While *anxiousness about English learning* and *attitudes and learning orientation* proved to be significant predictors of all strategy categories including the overall strategies, the other two factors - *language aptitude* and *personality traits* failed to play this role. *Language aptitude* turned out to be a significant predictor of compensation and social strategies only. Meanwhile, *personality traits* did not prove to be a significant predictor of any strategy categories when used in combination with the other three factors above.

Table 8.27 Predictability of Learning Strategies by the Four Factors of Individual Differences

PREDICTOR	CRITERION						
	Overall	Mem.	Cog.	Comp.	Meta.	Aff.	Soc.
Anxiousness about English Learning	+++	+++	+++	+++	+++	+	+++
Attitudes and Learning Orientation	+++	+++	+++	+++	+++	+++	+++
Language Aptitude	-	-	-	+	-	-	+
Personality Traits	-	-	-	-	-	-	-

Legend: +++ = significant at .01; ++ = significant at .05; + = significant at .10  
- = not significant

The power of the variables within factor 1 - *anxiousness about English learning* - in predicting the use of learning strategies is summarised in Table 8.28. The table shows that motivational intensity turned out to be the best predictor of variation in the use of learning strategies as it affected the use of five out of six strategy categories. English class anxiety was the next best predictor as it predicted significantly the use of four strategy categories. Attitudes toward learning English and English use anxiety were also good predictors as they were significant predictors of three strategy categories. Then, desire to learn English and interest in

foreign languages showed a power of predicting only one strategy category for each. It was due to this reason that when the strategy categories were disregarded, these two variables did not show as significant predictors of overall strategies.

Table 8.28 Predictability of Learning Strategies by Variables of Anxiousness about English Learning

PREDICTOR	CRITERION						
	Overall	Mem.	Cog.	Comp.	Meta.	Aff.	Soc.
Attitudes toward learning English	+++	-	++	-	+++	-	+++
Desire to learn English	-	-	-	-	+	-	-
English class anxiety	++	-	+++	+	+	-	+
English use anxiety	++	++	+++	+++	-	-	-
Interest in foreign languages	-	-	-	+	-	-	-
Motivational intensity	++	++	+	+++	+++	-	+++

Legend: +++ = significant at .01; ++ = significant at .05; + = significant at .10  
- = not significant

The power of variables that made up factor 2 - *attitudes and learning orientation* - in predicting the use of strategies is summarised in Table 8.29. The table shows that the most powerful variable was integrative orientation as it affected the use of all learning strategy categories. Motivational intensity was also a very powerful predictor as it affected all strategy types, except the affective category. Attitudes toward native speakers of English and attitudes toward learning English were also good predictors as both of them predicted the use of three strategy categories. Instrumental orientation predicted two and interest in foreign languages predicted only one out of six strategy categories. Finally, desire to learn English did not prove to be a significant predictor of any strategy types. Thus, the last mentioned three variables failed to be significant predictors when the strategies were taken together as a set of overall strategies.

Table 8.29 Predictability of Learning Strategies by Variables of Attitudes and Learning Orientation

PREDICTOR	CRITERION						
	Overall	Mem.	Cog.	Comp.	Meta.	Aff.	Soc.
Attitudes toward native speakers	+++	++	++	+++	-	-	-
Attitudes toward learning English	++	-	++	-	+++	-	++
Desire to learn English	-	-	-	-	-	-	-
Interest in foreign languages	-	-	-	+	-	-	-
Instrumental orientation	-	-	-	-	++	++	-
Integrative orientation	+++	+++	+++	+	+++	++	+++
Motivational intensity	+++	+++	+++	+	+++	-	+++

Legend: +++ = significant at .01; ++ = significant at .05; + = significant at .10  
 - = not significant

One important point here was that all of the four variables, except one, that loaded on factor 1 and factor 2 predicted the same learning strategy categories no matter which factor they were considered to be parts of. Motivational intensity, for example, predicted significantly all strategy categories, except affective strategies. The only difference happened with the variable of desire to learn English. This variable proved to be a significant predictor of metacognitive strategies when considered as a composite of factor 1, but failed to be so when considered as a composite of factor 2.

Finally, the power of factor 3 - *language aptitude* - in predicting the use of learning strategies is summarised in Table 8.30. Since the regression analyses as reported previously indicated that this factor, when used in combination with factor 1, 2, and 4, correlated significantly with the use of only compensation and social strategies, only these two categories of learning strategies were included in the table. The table shows that paired associates failed to be significant predictors of both compensation and social strategies. Words in sentences, on the other hand, were shown to be a significant predictor of compensation strategies, but not of social strategies. Therefore, while language aptitude when used in combination

with anxiousness about English learning, attitudes and learning orientation, and personality traits, proved to be a relatively significant predictor of social strategies as mentioned in section 8.2.7, neither words in sentences nor paired associates proved to be a significant predictor. Thus, another spurious finding was obtained from the present study.

Table 8.30 Predictability of Learning Strategies by Variables of Language Aptitude

PREDICTOR	CRITERION	
	Compensation	Social
Words in sentences	++	-
Paired associates	-	-

Legend: ++ = significant at .05; - = not significant

To summarise, generally speaking, the present study found that relative to language aptitude and personality traits, the attitude/motivational attributes, which were described by the factors of anxiousness in English learning and attitudes and learning orientation, turned out to be the best predictors of learning strategy use.

In the next chapter, the contribution of learning strategy use on the prediction of proficiency was reported. In this case, instead of working with the six a priori categories of strategies, a posteriori classifications, which were obtained from a factor analysis, were used. The resultant factors were used in the regression analysis to measure how the two sets of variables were correlated.

Chapter Nine  
RESEARCH FINDINGS 4:  
LEARNING STRATEGIES, LANGUAGE APTITUDE,  
PERSONALITY TRAITS AND LANGUAGE  
PROFICIENCY

While in Chapter Eight learning strategies were used as the dependent variables predicted from attitude, motivation, language aptitude, and personality traits, in this chapter they were treated as the predictors of proficiency attainment, which was measured in the four macro-language skills: listening, speaking, reading, and writing. However, as mentioned in Chapter Five, no test was specifically designed to assess the participants' English language proficiency. Instead, they were asked to assess their perception of their own proficiency on a rating scale of 0 to 7.

To measure the predictability of proficiency attainment from learning strategies, standard regression analyses were carried out. In this case, however, instead of using the six a priori strategy categories, a posteriori factors resulting from a factor analysis were used as the predictor variables. Thus, the 50 strategy items of the SILL were first factor analysed and the resultant factors were used in the subsequent regression analyses.

The a posteriori factors were used in the regression analyses because the six a priori strategy categories were found to correlate significantly with one another, as already presented in Chapter Five. Consequently, treating them as predictor variables in regression analyses is not useful since they may explain the same variance in the criterion variable. A good regression analysis should include predictor variables that are highly correlated with the criterion variable, but have low correlations among themselves (Hinkle et al., 1988).

In addition, language aptitude and personality traits, which were not found to correlate significantly with learning strategies as reported in Chapter Eight, together with learning strategies, were regressed against overall proficiency attainment. This was to measure whether language aptitude and personality traits correlated with proficiency despite their insignificant correlation with learning strategies. Also, this regression was carried out to find which of the three - language aptitude, personality traits, or learning strategies - was the best predictor of proficiency attainment.

In line with what was done earlier, in the application of the regression analysis, the correlation between the linear combination of the factors as the predictor variables and perceived proficiency as the criterion variable was first measured. The amount of variance shared by the combination of the predictor variables and the criterion variable was also measured based on the obtained multiple-correlation coefficient (*Multiple R*). This coefficient was then tested for its significance. Finally, the relative importance of each independent variable in predicting the dependent variable was investigated. In this case, a predictor variable was interpreted to show a very strong contribution to the prediction when it was significant at .01 level. A strong contribution and a moderate contribution were assumed when it was significant at .05 and at .10 levels respectively.

### 9.1 Factor Analysis of English Learning Strategies

As explained in Chapter Eight, Pallant (2001) mentions three criteria for a good factor analysis including the correlation coefficient among the variables, Bartlett's test of sphericity and the Kaiser-Meyer-Okin measure of sampling adequacy. As found in the computer solution to the factor analysis in Appendix J, 195 coefficients of higher than .3 were present suggesting that criterion one for factor analysis was met. The Kaiser-Meyer-Okin (KMO) measure of sampling adequacy resulted in a value of .896 and Bartlett's test of sphericity found an approximate Chi-Square value of 6385.751 with a significance level of .000. Thus, a good factor analysis could be carried out on the data of the students' learning strategies.

Table 9.1 Rotated Component Matrix of Learning Strategy Factors

Loading	Item	Category/Strategy Item
<i>Factor 1: Strategies for Active Use of English (22%)</i>		
.388	8	MEM Reviewing lessons
.407	13	COG Using words in different ways
.632	14	COG Starting conversation
.303	15	COG Watching TV shows or movies
.683	16	COG Reading for pleasure
.661	17	COG Writing notes/letters/reports etc.
.376	23	COG Making summaries of new information
.308	27	COM Reading without looking up every unknown words
.504	34	MET Making learning plans
.501	35	MET Looking for people to talk to
.572	36	MET Looking for opportunities to read
.317	43	AFF Writing down feelings in a diary
.538	47	SOC Practicing English with other students
.558	49	SOC Asking questions in English
.565	50	SOC Learning the culture of native speakers of English
<i>Factor 2: Metacognitive, Analytic Strategies (5.4%)</i>		
.357	1	MEM Relating old and new language items
.305	8	MEM Reviewing lessons
.315	12	COG Practicing the sounds
.327	13	COG Using words in different ways
.420	18	COG Skimming first, then reading carefully
.344	21	COG Dividing words into parts to understand meaning
.318	23	COG Making summaries of new information in English
.462	30	MET Finding as many ways as possible to use English
.548	31	MET Noticing mistakes
.640	32	MET Paying attention when others speaking
.741	33	MET Finding ways to be a better learner
.317	34	MET Making learning plans
.453	35	MET Looking for people to talk to
.440	36	MET Looking for opportunities to read
.621	37	MET Setting clear goals for language skill development
.546	38	MET Thinking about the progress
.334	48	SOC Asking for help from speakers of English
<i>Factor 3: Affective and Social Strategies (5.1%)</i>		
.304	39	AFF Trying to be relaxed
.404	40	AFF Encourage self to speak
.421	44	AFF Talking to others about feelings
.699	45	SOC Asking others to slow down or repeat
.733	46	SOC Asking others to correct mistakes
.616	48	SOC Asking for help from speakers of English
<i>Factor 4: Memory Strategies (4.1%)</i>		
.493	1	MEM Relating old and new language items
.533	2	MEM Using new words in sentences
.786	3	MEM Connecting the sound of a word with an image or picture of it
.624	4	MEM Making a mental picture of a situation where words are used
.419	5	MEM Using rhymes
.433	7	MEM Acting out words

Table 9.1 (continued)

Loading	Item	Category/Strategy Item
<i>Factor 5: Compensation and Anxiety Management in Speaking (3.6%)</i>		
.378	15	COG Watching TV shows or movies
.670	24	COM Making guesses to understand unfamiliar words
.619	25	COM Using gestures
.654	26	COM Making up new words
.437	29	COM Using synonyms
.327	39	AFF Trying to be relaxed
.308	40	AFF Encouraging self to speak
<i>Factor 6: Memory and Formal Practice Strategies (3%)</i>		
.539	8	MEM Reviewing lessons
.563	9	MEM Remembering location words on page, board, or street sign etc.
.726	10	COG Saying or writing new words
.308	11	COG Talking like native speakers
.315	12	COG Practicing sounds
<i>Factor 7: Analytic Strategies (2.5%)</i>		
.711	19	COG Looking for similar words in first language
.623	20	COG Finding patterns
.488	21	COG Dividing words into parts to understand meaning
<i>Factor 8: Anxiety Elimination Strategies (2.3%)</i>		
.343	39	AFF Trying to be relaxed
.743	41	AFF Giving self-rewards when doing well
.584	42	AFF Noticing if nervous when using or studying English
.397	44	AFF Talking to others about feelings
<i>Factor 9: Cognitive and Compensation Strategies in Reading (2.3%)</i>		
.407	18	COG Skimming first, then reading carefully
.583	22	COG Not translating word-for-word
.391	27	COM Reading without looking up every unknown word
.410	29	COM Using synonyms
-.383	34	MET Making learning plans
.350	49	SOC Learning the culture of native speakers of English
<i>Factor 10: Formal Practice Strategies without Memorisation (2.3%)</i>		
.523	11	COG Talking like native speakers
.565	12	COG Practicing sounds
.357	13	COG Using words in different ways
.487	15	COG Watching TV shows or movies
-.304	27	COM Reading without looking up every unknown word
-.308	43	AFF Writing down feelings in a diary
<i>Factor 11: Visual Memory and Anxiety Management Strategies (2.3%)</i>		
.737	6	MEM Using flashcards
-.402	39	AFF Try to be relaxed
.409	43	AFF Writing down feelings in a diary
<i>Factor 12: Acting out Words and Guessing in Speaking Strategies (2.1%)</i>		
.471	7	MEM Acting out words
.635	28	COM Guessing what others are going to say

The Principal Component Analysis (PCA) revealed the presence of twelve components or factors with initial eigenvalues greater than 1 explaining a cumulative variance of 56.8%. Since the factor analysis was not intended to verify

the construct validity of the instrument, but only to regroup the strategy items, all of the twelve factors were used in the rotation, in spite of the fact that some of the factors explained a very small percentage of variance. The rotation was carried out using the Varimax with Kaiser Normalisation Method and the results are summarised in Table 9.1, which also contains the loading as well as the item number in the SILL of each strategy. The number of factors was greater than that found in other studies as reported by Oxford and Burry-Stock (1995), in which a nine factor solution was selected. Even Nyikos and Oxford (1993) reported the presence of only five factors of the 121 items of SILL.

Factor 1 was the most explanatory factor as it accounted for 22% of the total variance in learning strategies. This factor obtained high loadings (more than  $\pm 3$ ) from 15 strategy items which chiefly deal with the practice of using the language for enhancing language skills. These include strategies for developing: 1) reading skills such as *reading for pleasure in English, reading without looking every unknown word and seeking opportunities to read in English*; 2) listening skills such as *watching TV shows or movies in English*; 3) writing skills such as *using words in different ways, writing letters, notes, or reports in English, making summaries of new information*, and 4) speaking skills such as *starting conversations in English, looking for people to talk to in English, practicing English with other students, and asking questions in English*. Thus, this factor was described as the factor of active use of English.

Factor 2 accounted for 5.4% of the variance. All of the nine metacognitive strategy items provided high loadings on this factor. In addition, this factor also obtained high loadings from two memory strategies, five cognitive strategies, and one social strategy. These strategies including *relating old and new language items, reviewing English lessons, using words in different ways, dividing words into parts to understand meaning* are analytical in nature. Thus, this factor was described as the factor of metacognitive, analytic strategies.

Factor 3, which explained 5.1% of the variance in learning strategies, obtained high loadings from six strategy items. Three affective strategies including *trying to be relaxed when afraid of using English, encouraging self to*

*speak even when afraid of doing so, and talking to others about feelings* provided high loadings on this factor. The other three strategies were from the social category, including *asking others to slow down or repeat, asking others to correct mistakes, and asking for help from English speakers*. This factor was then described as the factor of affective and social strategies.

Factor 4 accounted for 4.1% of the variance and it obtained high loadings only from strategies of the memory category. In this case, six out of nine memory strategies provided high loadings on this factor. The strategies were *relating old and new language items, using new words in sentences, connecting word sound and image or picture, creating a mental picture of situation, using rhymes, and acting out words physically*. Thus, this factor was best described as the factor of memory strategies.

Factor 5 explained 3.6% of the variance in learning strategies and it attracted high loadings from seven strategies, mainly compensation and affective strategies for speaking skill development. *Guessing unfamiliar words, using gestures when stuck, making up new words when stuck and using synonyms* are strategies of compensation category which loaded highly on this factor. In addition, two affective strategies including *trying to relax when afraid of using English* and *encouraging self to speak even when afraid of doing so* also provided high loadings to this factor. *Watching TV shows or movies* was the only cognitive strategy that gave a high loading to this factor. Thus, this factor was best described as strategies of compensation and anxiety management in speaking.

Factor 6 accounted for 3% of the variance and it obtained high loadings from five strategies: two memory and three cognitive strategies. The memory strategies were *reviewing English lessons* and *remembering location of words on page, board, or street signs etc.* The cognitive strategies were *saying or writing new words, talking like native speakers of English, and practicing the sounds of English*. These cognitive strategies have undertones of formal practice of the language. Thus, this factor was described as the factor of memory and formal practice strategies.

Factor 7 explained 2.6% of the learning strategy variance. It had high loadings from three cognitive strategies: *looking for words in the first language similar to English, finding patterns of language items, and trying to find meaning by dividing words into parts*. These strategies are analytic in nature. Therefore, this factor was described as analytic strategies.

Factor 8 explained 2.3% of the variance and it obtained high loadings from four affective strategies. They were *relaxing when afraid of using English, giving self-rewards for doing well, noticing if nervous when using or studying English, and talking to others about feelings in learning English*. These strategies have to do with anxiety elimination in using or learning English. Thus, this factor was called the factor of anxiety elimination strategies.

Factor 9 also explained 2.3% of the learning strategy variance. This factor obtained high loadings from six strategies: two cognitive, two compensation, one metacognitive, and one social. *Skimming first, then reading carefully and not translating word-for-word* were the two cognitive strategies and *reading without looking up every unknown word and using synonyms* were the two compensation strategies. Moreover, *making learning plans and learning the culture of the native speakers of English* were metacognitive and social strategies respectively. As three of these strategies mainly deal with reading skill improvement, this factor is described as the factor of cognitive and compensation strategies in reading.

Factor 10, also explaining 2.3% of the learning strategy variance, obtained high loadings from four cognitive strategies including *talking like native speakers of English, practicing English sounds, using words in different ways, and watching TV shows or movies in English*. In addition, one compensation strategy - *reading without looking up every unknown word* - and one affective strategy - *writing down feelings in a learning diary* also provided moderate loadings on this factor. This factor was quite similar to factor 6 as described above in the sense that the cognitive strategies of the two factors were formal practice related strategies. The difference was that while factor 6 contained elements of memory strategies, factor 10 did not. Thus, this factor was named formal practice strategies without memorisation.

Factor 11 obtained high loadings from three strategies: one memory and two affective strategies and it also accounted for 2.3% of variance. The memory strategy - *using flashcards* - was visual in nature. The affective strategies were *trying to be relaxed when afraid of using English* and *writing down feelings in a learning diary*. Therefore, this factor was called the factor of visual memory and anxiety management strategies.

Finally, two strategies provided high loadings to the last factor - factor 12 - which explained 2.1% of the variance in learning strategy. They were *physically acting out new words*, which was within the memory category, and *guessing what others are going to say*, which was within the compensation category. Therefore, this factor was described as the factor of acting out words and guessing in speaking strategies.

These twelve factors of learning strategies were then treated as the predictor variables in the regression analyses using perceived proficiency as the dependent variable.

## 9.2 The Predictability of Language Proficiency from Learning Strategies

To assess the predictability of English proficiency from learning strategies, standard regression analyses were performed. These analyses were carried out several times since the English proficiency was treated in two stages. In the first stage, the scores of the students' perceptions of their own proficiency in each of the four language skills - listening, speaking, reading and writing - were added to form a single score of overall proficiency. The twelve factors of learning strategies were regressed against this overall proficiency. This analysis came up with a finding for the correlation between learning strategies and overall proficiency. In the second stage, the students' score on each of the four language skills was treated separately in the regression analyses. These analyses resulted in findings about the predictive power of learning strategies on each of the four language skills.

The results of the first stage of the regression analysis are summarised in Table 9.2. As the table shows, the linear combination of the twelve identified factors of learning strategies was found to correlate significantly with proficiency attainment. In this case the analysis of variance found an F-value of 13.377 ( $p < .000$ ). The total variance of the overall English proficiency accounted for by the combination of these factors was about 30% (*R Square*) since the correlation coefficient between the linear combination of these factors and English proficiency (*Multiple R*) was .549.

Further analyses to measure the relative importance of each factor in predicting proficiency attainment revealed that all of the predictors, with the exception of analytic strategies and anxiety elimination strategies, contributed significantly to the prediction. Among the factors with a significant contribution, only two turned out to be moderate predictors, while the rest proved to be very strong predictors. The two moderate predictors were *formal practice strategies without memorisation* ( $\beta = .076, t = 1.753, p < .080$ ) and *acting out words and guessing in speaking strategies* ( $\beta = -.073, t = -1.677, p < .094$ ).

Table 9.2 Regression of the Twelve Factors of Learning Strategies against Overall Proficiency

Dependent Variable: Overall Proficiency						
<i>Multiple R</i>	.549	<i>Analysis of Variance</i>				
<i>R Square</i>	.301		d.f	Sum of Squares	Mean Square	
<i>Adjusted R Square</i>	.278	Regression	12	1293.997	107.833	
<i>Standard Error</i>	2.840	Residual	373	3006.676	8.061	
		Total	385	4300.674		
		F = 13.377		Significance F = .000		
Coefficients						
Predictor Variables		B	SE B	Beta	t	Sig.
F1	Strategies for active use of English	1.043	.145	.312	7.206	.000
F2	Metacognitive, analytic strategies	.491	.145	.147	3.391	.001
F3	Affective and social strategies	-.560	.145	-.167	-3.869	.000
F4	Memory strategies	.443	.145	.133	3.064	.002
F5	Compensation & anxiety management in speaking	.611	.145	.183	4.222	.000
F6	Memory & formal practice strategies	.422	.145	.126	2.919	.004
F7	Analytic strategies	.063	.145	.019	.432	.666
F8	Anxiety elimination strategies	.145	.145	.043	.999	.318
F9	Cognitive & compensation strategies in reading	.823	.145	.246	5.688	.000
F10	Formal practice strategies without memorisation	.254	.145	.076	1.753	.080
F11	Visual memory & anxiety management strategies	-.382	.145	-.114	-2.640	.009
F12	Acting out words and guessing in speaking strat.	-.243	.145	-.073	-1.677	.094
	Constant	16.155	.145			

Moreover, the factors which showed a very strong contribution to the prediction factors were: *strategies for active use of English* (beta = .312,  $t = 7.206$ ,  $p < .000$ ), *cognitive and compensation strategies in reading* (beta = .246,  $t = 5.688$ ,  $p < .000$ ), *compensation and anxiety management in speaking* (beta = .183,  $t = 4.222$ ,  $p < .000$ ), *affective and social strategies* (beta = -.167,  $t = -3.869$ ,  $p < .000$ ), *metacognitive, analytic strategies* (beta = .147,  $t = 3.391$ ,  $p < .001$ ), *memory strategies* (beta = .133,  $t = 3.064$ ,  $p < .002$ ), *memory and formal practice strategies* (beta = .126,  $t = 2.919$ ,  $p < .004$ ), and *visual memory and anxiety management strategies* (beta = -.114,  $t = -2.640$ ,  $p < .009$ ).

The other two predictors, on the other hand, were found not to contribute significantly to the prediction. These factors were *analytic strategies* with a beta value of .019 ( $t = .432$ ,  $p < .666$ ) and *anxiety elimination strategies* with a beta value of .043 ( $t = .999$ ,  $p < .318$ ).

In short, although the linear combination of the twelve factors of learning strategies proved to be a significant predictor of overall proficiency attainment, factors of *analytic strategies* and *anxiety elimination strategies* failed to show significant contribution to the prediction. In other words, overall proficiency attainment was best predicted from ten factors of learning strategies, of which eight factors provided very strong contributions to the prediction and two factors provided moderate contributions.

The same procedure as above was repeated four times when the students' score for each of the four language skills was treated separately in the second stage of the regression analyses. The results of these analyses are presented in the following sections.

### 9.2.1 The Predictability of Listening Proficiency

Table 9.3 contains the summary of the regression analysis of the twelve factors of English learning strategies against listening proficiency. As the table shows, the multiple correlation between the combination of these twelve independent variables of learning strategies and listening self-rating proficiency (*Multiple R*) was .455 suggesting that these independent variables and the

dependent variables shared a common variance (*R Square*) of about 21%. With this value of correlation, the combination of the independent variables turned out to be a significant predictor of listening proficiency as the analysis of variance found an F-value of 8.110 ( $p < .000$ ). In other words, listening proficiency can be predicted from the combination of these twelve predictors.

Table 9.3 Regression of the Twelve Factors of Learning Strategies against Listening Proficiency

Dependent Variable: Listening Proficiency						
<i>Multiple R</i>	.455	<i>Analysis of Variance</i>				
<i>R Square</i>	.207		d.f	Sum of Squares	Mean Square	
<i>Adjusted R Square</i>	.181	Regression	12	82.567	6.881	
<i>Standard Error</i>	.920	Residual	373	316.438	.848	
		Total	385	399.005		
		F = 8.110		Significance F = .000		
<i>Coefficients</i>						
<i>Predictor Variables</i>		<i>B</i>	<i>SE B</i>	<i>Beta</i>	<i>t</i>	<i>Sig.</i>
F1	Strategies for active use of English	.268	.047	.263	5.706	.000
F2	Metacognitive, analytic strategies	.134	.047	.131	2.848	.005
F3	Affective and social strategies	-.157	.047	-.154	-3.347	.001
F4	Memory strategies	.091	.047	.089	1.940	.053
F5	Compensation & anxiety management in speaking	.139	.047	.136	2.954	.003
F6	Memory & formal practice strategies	.115	.047	.113	2.457	.014
F7	Analytic strategies	-.013	.047	-.012	-.268	.789
F8	Anxiety elimination strategies	.002	.047	.002	.050	.960
F9	Cognitive & compensation strategies in reading	.164	.047	.161	3.494	.001
F10	Formal practice strategies without memorisation	.074	.047	.073	1.576	.116
F11	Visual memory & anxiety management strategies	-.142	.047	-.139	-3.025	.003
F12	Acting out words and guessing in speaking strat.	-.081	.047	-.080	-1.736	.083
	Constant	4.088	.047			

Further analyses of the relative importance of these predictors showed that nine factors proved to be significant predictors of listening proficiency. Among them, seven factors were found to be very strong predictors as they were significant at .01 level. These factors, together with their beta values, were *strategies for active use of English* (beta = .263,  $t = 5.706$ ,  $p < .000$ ), *cognitive and compensation strategies in reading* (beta .161,  $t = 3.494$ ,  $p < .001$ ), *affective and social strategies* (beta = -.154,  $t = -3.347$ ,  $p < .001$ ), *visual memory and anxiety management strategies* (beta = -.139,  $t = -3.025$ ,  $p < .003$ ), *compensation and anxiety management in speaking* (beta = .136,  $t = 2.954$ ,  $p < .003$ ),

*metacognitive, analytic strategies* (beta = .131,  $t = 2.848$ ,  $p < .005$ ), and *memory and formal practice strategies* (beta = .113,  $t = 2.457$ ,  $p < .014$ ).

In addition, one factor was found to be a strong predictor of listening proficiency since it was significant at .05 level. This was *memory strategies* and its beta value was .089 ( $t = 1.940$ ,  $p < .053$ ). The other one was found to be significant at .10 level, so it was called a moderate predictor. This was the factor of *acting out words and guessing in speaking strategies* with a beta value of -.083 ( $t = -1.736$ ,  $p < .083$ ).

Factors of *analytic strategies, anxiety elimination strategies, and formal practice strategies without memorisation*, however, failed to prove to be significant predictors when used in combination with the other nine predictors since their beta values were -.012 ( $t = -.268$ ,  $p < .789$ ), .002 ( $t = .050$ ,  $p < .960$ ), and .073 ( $t = 1.576$ ,  $p < .116$ ) respectively.

To summarise, although the linear combination of the twelve factors of learning strategies was found to be a significant predictor of listening proficiency attainment, factors of *analytic strategies, anxiety elimination strategies, and formal practice strategies without memorisation* failed to provide significant contribution to the prediction. In other words, listening proficiency was best predicted from nine factors of learning strategies. These factors contained seven very strong predictors, one strong predictor, and one moderate predictor.

### 9.2.2 The Predictability of Speaking Proficiency

Again, a regression analysis was carried out to measure the predictability of speaking proficiency from the twelve factors of learning strategies. The results of the computer solution to the analysis are summarised in Table 9.4. As shown in the table, a similar result to that regarding the effect of learning strategies on listening was obtained, that is, learning strategies proved to be significant predictors of speaking proficiency attainment. This inference was made as the statistical analyses revealed that the coefficient of the correlation between the linear combination of the twelve factors of learning strategies as the independent variables and speaking proficiency as the dependent variable was (*Multiple R*)

.427. This indicated that the amount of variance shared by the independent and the dependent variables (*R Square*) was about 18%. A test of the significance of the correlation coefficient obtained an *F*-value of 6.944 ( $p < .000$ ) suggesting that the combination of the twelve factors of learning strategies was a significant predictor of speaking proficiency attainment.

Table 9.4 Regression of the Twelve Factors of Learning Strategies against Speaking Proficiency

Dependent Variable: Speaking Proficiency						
		Analysis of Variance				
		d.f	Sum of Squares	Mean Square		
<i>Multiple R</i>	.427					
<i>R Square</i>	.183					
<i>Adjusted R Square</i>	.156	Regression	12	82.207	6.851	
<i>Standard Error</i>	.990	Residual	373	367.972	.987	
		Total	385	450.179		
		F = 6.944		Significance F = .000		
Coefficients						
Predictor Variables		B	SE B	Beta	t	Sig.
F1	Strategies for active use of English	.245	.051	.226	4.832	.000
F2	Metacognitive, analytic strategies	.123	.051	.114	2.435	.015
F3	Affective and social strategies	-.147	.051	-.136	-2.914	.004
F4	Memory strategies	.141	.051	.131	2.791	.006
F5	Compensation & anxiety management in speaking	.163	.051	.151	3.219	.001
F6	Memory & formal practice strategies	.087	.051	.081	1.723	.086
F7	Analytic strategies	.026	.051	.024	.516	.606
F8	Anxiety elimination strategies	.087	.051	.080	1.708	.088
F9	Cognitive & compensation strategies in reading	.187	.051	.173	3.689	.000
F10	Formal practice strategies without memorisation	.096	.051	.089	1.900	.058
F11	Visual memory & anxiety management strategies	-.084	.051	-.078	-1.658	.098
F12	Acting out words and guessing in speaking strat.	-.058	.051	-.053	-1.137	.256
	Constant	3.915	.051			

Further analyses of the relative importance of the twelve factors in predicting speaking proficiency attainment revealed two factors that did not provide significant contribution to the prediction. These factors were *analytic strategies* with a beta value of .024 ( $t = .516, p < .606$ ) and *acting out words and guessing in speaking strategies* with a beta value of -.053 ( $t = -1.137, p < .256$ ).

The other ten factors, on the other hand, proved to be significant predictors. Out of them, five factors were found to be very strong predictors as they were significant at .01 level. These factors were *strategies for active use of English* (beta = .22,  $t = 4.832, p < .000$ ), *affective and social strategies* (beta = -

.136,  $t = -2.914$ ,  $p < .004$ ), *memory strategies* (beta = .131,  $t = 2.791$ ,  $p < .006$ ), *compensation and anxiety management in speaking* (beta = .151,  $t = 3.219$ ,  $p < .001$ ), and *cognitive and compensation in reading* (beta = .173,  $t = 3.689$ ,  $p < .000$ ).

In addition, one factor, *metacognitive, analytic strategies*, was found to be a strong predictor as it was significant at .05 level. Its beta value was .114 ( $t = 2.435$ ,  $p < .015$ ). Then, the other four factors were considered to be moderate predictors as they were significant at .10 only. These factors were *memory and formal practice strategies* (beta = .081,  $t = 1.723$ ,  $p < .086$ ), *anxiety elimination strategies* (beta = .080,  $t = 1.708$ ,  $p < .088$ ), *formal practice strategies without memorisation* (beta = .089,  $t = 1.900$ ,  $p < .058$ ), and *visual memory and anxiety management strategies* (beta = -.078,  $t = -1.658$ ,  $p < .098$ ).

In short, despite the finding that the combination of all of the twelve factors was found to be a significant predictor of speaking proficiency attainment, two factors - *analytic strategies* and *acting out words and guessing in speaking strategies* - failed to provide significant contribution to the prediction. In other words, speaking proficiency attainment was best predicted from the other ten factors of learning strategies. These ten factors consisted of six very strong predictors, one strong predictor, and four moderate predictors.

### 9.2.3 The Predictability of Reading Proficiency

Another regression analysis was performed to measure the predictive power of learning strategies on reading proficiency. The results of the computer solution are summarised in Table 9.5 below. As seen in the table, the correlation of the combined twelve factors of learning strategies and reading proficiency (*Multiple R*) was .427, suggesting that 18.3% of the variance was shared by the combination of the independent variables and the dependent variables. The correlation value of .427 was found to be statistically significant as indicated in the result of the analysis of variance, which resulted in an F-value of 7.909 ( $p < .000$ ). Thus, it was inferred that the combination of the twelve factors of learning strategies was a set of significant predictors of reading proficiency attainment.

Table 9.5 Regression of the Twelve Factors of Learning Strategies against Reading Proficiency

Dependent Variable: Reading Proficiency						
Multiple R	.450	<i>Analysis of Variance</i>				
R Square	.203		d.f	Sum of Squares	Mean Square	
Adjusted R Square	.177	Regression	12	84.176	7.015	
Standard Error	.940	Residual	373	330.819	.887	
		Total	385	414.995		
		F = 7.909		Significance F = .000		
<i>Coefficients</i>						
<i>Predictor Variables</i>		B	SE B	Beta	t	Sig.
F1	Strategies for active use of English	.284	.048	.274	5.920	.000
F2	Metacognitive, analytic strategies	.120	.048	.116	2.508	.013
F3	Affective and social strategies	-.136	.048	-.131	-2.828	.005
F4	Memory strategies	.140	.048	.134	2.909	.004
F5	Compensation & anxiety management in speaking	.129	.048	.124	2.687	.008
F6	Memory & formal practice strategies	.081	.048	.078	1.689	.092
F7	Analytic strategies	.063	.048	.060	1.305	.193
F8	Anxiety elimination strategies	.031	.048	.030	.655	.513
F9	Cognitive & compensation strategies in reading	.188	.048	.181	3.914	.000
F10	Formal practice strategies without memorisation	.089	.048	.086	1.851	.065
F11	Visual memory & anxiety management strategies	-.118	.048	-.114	-2.464	.014
F12	Acting out words and guessing in speaking strat.	-.014	.048	-.014	-.297	.766
	Constant	4.135	.048			

When the relative importance of each of the factors was assessed, it was found that out of the twelve factors, seven proved to be very strong predictors as they were significant at .01 level. These factors were *strategies for active use of English* (beta = .274,  $t = 5.920$ ,  $p < .000$ ), *metacognitive, analytic strategies* (beta = .116,  $t = 2.508$ ,  $p < .013$ ), *affective and social strategies* (beta = -.131,  $t = -2.828$ ,  $p < .005$ ), *memory strategies* (beta = .134,  $t = 2.909$ ,  $p < .004$ ), *compensation and anxiety management in speaking* (beta = .124,  $t = 2.687$ ,  $p < .008$ ), *cognitive and compensation strategies in reading* (beta = .181,  $t = 3.914$ ,  $p < .000$ ), and *visual memory and anxiety management strategies* (beta = -.114,  $t = -2.464$ ,  $p < .014$ ).

In addition, two factors were found to be moderate predictors as their significance was at .10 level. They were *memory and formal practice strategies* (beta = .078,  $t = 1.689$ ,  $p < .092$ ) and *formal practice strategies without memorisation* (beta = .086,  $t = 1.851$ ,  $p < .065$ ).

The other three factors, on the other hand, did not turn out to be significant predictors. These factors were *analytic strategies* (beta = .060,  $t = 1.305$ ,  $p <$

.193), *anxiety elimination strategies* (beta = .030,  $t = .655$ ,  $p < .513$ ), and *acting out words and guessing in speaking strategies* (beta = -.014,  $t = -.297$ ,  $p < .766$ ).

In short, although the linear combination of the twelve factors of learning strategies proved to be a combined predictor of reading proficiency, three factors among them did not provide significant contribution to the prediction. Of the factors with significant predicting power, seven were found to be very strong predictors and two were moderate predictors.

#### 9.2.4 The Predictability of Writing Proficiency

The last regression analysis was performed to measure the predictability of writing proficiency from learning strategies. Table 9.6 below summarises the results of the computer solution to the analysis. As indicated in the table, the coefficient of the correlation between the combination of the twelve factors of learning strategies and writing proficiency (*Multiple R*) was .468. This indicates that 21.9% of the total variance of writing proficiency was accounted for by the twelve factors of learning strategies. An analysis of the significance of the combination of the learning strategy factors in predicting writing proficiency resulted in an F-value of 8.702 ( $p < .000$ ), showing that they were a combination of significant predictors.

However, when the relative importance of each factor was analysed, it was found that five factors failed to prove to be significant contributors to the prediction. These factors included *memory strategies* (beta = .069,  $t = 1.503$ ,  $p < .134$ ), *analytic strategies* (beta = -.013,  $t = -.287$ ,  $p < .774$ ), *anxiety elimination strategies* (beta = .023,  $t = .512$ ,  $p < .609$ ), *formal practice strategies without memorisation* (beta = -.005,  $t = -.112$ ,  $p < .911$ ), and *visual memory and anxiety management strategies* (beta = -.036,  $t = -.797$ ,  $p < .426$ ).

Among the seven significant factors, five of them were found to be very strong predictors as they were significant at .01 level. These factors were *strategies for active use of English* (beta = .237,  $t = 5.181$ ,  $p < .000$ ), *affective and social strategies* (beta = -.115,  $t = -2.515$ ,  $p < .012$ ), *compensation and anxiety management in speaking* (beta = .174,  $t = 3.797$ ,  $p < .000$ ), *memory and formal*

practice strategies (beta = .134,  $t = 2.920$ ,  $p < .004$ ), and cognitive and compensation strategies in reading (beta = .274,  $t = 5.985$ ,  $p < .000$ ).

Table 9.6 Regression of the Twelve Factors of Learning Strategies against Writing Proficiency

Dependent Variable: Writing Proficiency						
Multiple R	.468	<i>Analysis of Variance</i>				
R Square	.219		d.f	Sum of Squares	Mean Square	
Adjusted R Square	.194	Regression	12	90.742	7.562	
Standard Error	.930	Residual	373	324.131	.869	
		Total	385	414.873		
		F = 8.702		Significance F = .000		
<i>Coefficients</i>						
<i>Predictor Variables</i>		B	SE B	Beta	t	Sig.
F1	Strategies for active use of English	.246	.047	.237	5.181	.000
F2	Metacognitive, analytic strategies	.113	.047	.109	2.386	.018
F3	Affective and social strategies	-.119	.047	-.115	-2.515	.012
F4	Memory strategies	.071	.047	.069	1.503	.134
F5	Compensation & anxiety management in speaking	.180	.047	.174	3.797	.000
F6	Memory & formal practice strategies	.139	.047	.134	2.920	.004
F7	Analytic strategies	-.014	.047	-.013	-.287	.774
F8	Anxiety elimination strategies	.024	.047	.023	.512	.609
F9	Cognitive & compensation strategies in reading	.284	.047	.274	5.985	.000
F10	Formal practice strategies without memorisation	-.053	.047	-.005	-.112	.911
F11	Visual memory & anxiety management strategies	-.038	.047	-.036	-.797	.426
F12	Acting out words and guessing in speaking strat.	-.089	.047	-.086	-1.882	.061
	Constant	4.018	.047			

Of the other two significant factors, one was found to be significant at .05 level so that it was regarded a strong predictor and the other one was significant at .10 level so that it was considered to be a moderate predictor. The former factor was *metacognitive, analytic strategies* with beta value of .109 ( $t = 2.386$ ,  $p < .018$ ) and the latter factor was *acting out words and guessing in speaking strategies* with a beta value of  $-.086$  ( $t = -1.882$ ,  $p < .061$ ).

In short, although the combination of the twelve factors of learning strategies proved to be a combination of significant predictors of writing proficiency, not all of them showed substantial significance when the relative importance of each factor was analysed. In terms of their predictive power, five factors were found to be very strong predictors, one strong, and one moderate. The other five factors were not found to be significant predictors.

### 9.3 Learning Strategies, Language Aptitude, Personality Traits, and Language Proficiency

In the section above it has already been shown how well learning strategies predicted success in learning a foreign language as measured by the students' perceived proficiency attainment. The predictive power of learning strategies on proficiency was measured in terms of the factors that made up the learning strategy construct.

Table 9.7 Regression of Learning Strategies, Language Aptitude, and Personality Traits against Language Proficiency

Dependent Variable: Overall Proficiency					
<i>Multiple R</i>	.384	<i>Analysis of Variance</i>			
<i>R Square</i>	.147		d.f	Sum of Squares	Mean Square
<i>Adjusted R Square</i>	.141	Regression	3	633.281	211.094
<i>Standard Error</i>	3.10	Residual	382	3667.393	9.601
		Total	385	4300.674	
		F = 21.988		Significance F = .000	
<i>Coefficients</i>					
<i>Predictor Variables</i>	<i>B</i>	<i>SE B</i>	<i>Beta</i>	<i>t</i>	<i>Sig.t</i>
Learning Strategies	2.588	.351	.349	7.381	.000
Language Aptitude	.366	.158	.109	2.315	.021
Personality Traits	.386	.158	.116	2.446	.015
Constant	7.511	1.182			

In this section, the 50 learning strategy items were treated as a single variable. Together with variables of language aptitude and personality traits, which were found not to correlate with learning strategies, it was used in a regression analysis to measure how the combination of these three variables correlated with proficiency and which of the three was the best predictor of it. The scores of language aptitude and personality traits were obtained from a factor analysis as reported in section 8.1 (Chapter Eight). That is, scores of factor 3, language aptitude, and factor 4, personality traits, were used. The results of the regression analysis are summarised in Table 9.7.

The table shows that the correlation between the linear combination of learning strategies, language aptitude, and personality traits and overall proficiency attainment (*Multiple R*) was .383. This suggests that the combination

of these three variables accounted for about 15% (*R Square*) of the variance of proficiency attainment. This correlation coefficient was highly significant as the analysis of variance found an F-value of 21.988 ( $p < .000$ ). Thus, the three variables were significant predictors of proficiency attainment.

Further analysis to measure the relative importance of each these three predictors revealed that all of them provided significant contributions to the prediction, with the variable of learning strategies being the best predictor. The beta value of this predictor was .351 ( $t = 7.381, p < .000$ ), suggesting that it was a very strong predictor of proficiency. This was followed by personality traits with a beta value of .116 ( $t = 2.446, p < .015$ ) and language aptitude with a beta value of .109 ( $t = 2.315, p < .021$ ), suggesting that these two variables were strong predictors of proficiency. Thus, relative to personality traits and language aptitude, learning strategies provided the most powerful prediction of overall language proficiency attainment.

#### 9.4 Summary of the Findings

A factor analysis of the 50 items of learning strategies revealed the presence of twelve factors, which cumulatively explained 56.8% of learning strategy variance. A linear combination of these factors turned out to be a set of significant predictors of language proficiency attainment. About 30% of the variance of overall proficiency was accounted for by the twelve factors of learning strategies. When language proficiency was discretely analysed in terms of listening, speaking, reading, and writing skills, the factors explained about 21%, 18%, 20%, and 22% of the total variance of each of the four language skills respectively.

However, not all of the factors of learning strategies proved to contribute significantly to the prediction of proficiency. Table 9.7 above summarises the predictive power of each factor upon proficiency attainment. The *analytic strategies* factor was found to be a variable which did not provide a significant contribution to the prediction of the proficiency of any one of the four language skills. The *anxiety elimination strategies* factor was also a variable which did not

provide significant contribution to the prediction of language skills, except to speaking. Both *formal practice strategies without memorisation* and *acting out words and guessing in speaking strategies* contributed to the prediction of two language skills. The former predicted speaking and reading, while the latter was a predictor of listening and writing. The other factors were considered to be good predictors of all language skills, except *memory strategies* and *visual memory and anxiety management strategies*, which failed to significantly contribute to the prediction of writing proficiency. In short, this study found that all of the twelve factors of learning strategies, with the exception of *analytic strategies* and *anxiety elimination strategies*, were significant predictors of proficiency attainment.

When learning strategies were taken together as a single variable and this was used in a regression analysis together with language aptitude and personality traits, it was found that the combination of these variables significantly correlated with overall proficiency attainment. The variable of learning strategies, however, proved to be the best predictor despite the fact the other two variables also provided significant contributions to the prediction.

Table 9.8 Predictability of Language Proficiency by the Twelve Factors of Learning Strategies

PREDICTOR	CRITERION				
	Overall	List.	Speak	Read	Write
F1 Strategies for active use of English	+++	+++	+++	+++	+++
F2 Metacognitive, analytic strategies	+++	+++	++	+++	++
F3 Affective & social strategies	+++	+++	+++	+++	+++
F4 Memory strategies	+++	++	+++	+++	-
F5 Comp. and anxiety management in speaking	+++	+++	+++	+++	+++
F6 Memory & formal practice strategies	+++	+++	+	+	+++
F7 Analytic strategies	-	-	-	-	-
F8 Anxiety elimination strategies	-	-	+	-	-
F9 Cog. & comp. Strategies in reading	+++	+++	+++	+++	+++
F10 Formal practice strat. without memorisation	+	-	+	+	-
F11 Visual memory & anxiety management strat.	+++	+++	+	+++	-
F12 Acting out words & guessing in speaking str.	+	+	-	-	+

Legend: +++ = significant at .01; ++ = significant at .05; + = significant at .10  
 - = not significant

Up to this point, all of the quantitative findings on the profile of learning strategies, the predictability of learning strategy use from variables of individual differences, and the correlation between learning strategies and language proficiency have been reported. In the next chapter, more findings of the learners' learning strategies obtained from the protocol analysis are reported.

Chapter Ten  
MORE ON LEARNERS' ENGLISH LEARNING  
STRATEGIES: A PROTOCOL ANALYSIS

As described in Chapter Five, in addition to the use of the structured questionnaire called the Strategy Inventory for Language Learning (SILL), data on the students' English learning strategies were also elicited by conducting interviews. Nine students, three from each institution, were interviewed, of whom one was a low achiever, another a moderate achiever, and the last one a high achiever as perceived by their lecturers. Thus, three students were interviewed as representatives of each of these groups.

In the analysis of the data obtained from the interviews, codes were assigned to differentiate one student from another. Codes G, M, and P referred to students with high, moderate, and low proficiencies respectively. Codes 1, 2, and 3 were used to refer to the institutions from which the students came. 1 was used for UNISMA, 2 for UNIGA, and 3 for UNIBRAW. Thus, G1, for example, refers to the good student from UNISMA, while G3 to the good student from UNIBRAW. Similarly, M2 refers to the moderate student from UNIGA and P1 to the poor student from UNISMA.

This chapter is devoted to the presentation of the findings related to the results of this protocol analysis. Prior to the presentation of the students' strategies in developing the four macro skills, their perceptions of motivation and potential in learning English as well as their strategies in learning two language components, namely grammar and vocabulary, are reported.

### 10.1 Motivation and Potential in Learning English

In terms of motivation to learn English, most of the respondents reported that they were instrumentally motivated, that was, they learned English to get a good job. The respondents from the English Department of the UNISMA mentioned that they wanted to be teachers of English. This reason is not surprising as the English Department at the UNISMA is a teacher training department that trains the students to be teachers of English at the secondary school level. Student G1, for example, stated,

Pewawancara : Alasan apa sebenarnya yang membuat Anda belajar bahasa Inggris di UNISMA ini?

Mahasiswa G1: Alasannya sangat praktis sekali. Saya semenjak dari SMA itu harus sudah mencari biaya sendiri, sehingga saya berpikir bagaimana saya setelah lulus SMA itu meneruskan kuliah yang memungkinkan saya untuk bisa secepatnya bekerja. Nah, akhirnya dari berbagai pertimbangan saya memutuskan bahasa Inggris yang paling memungkinkan bagi saya.

(Translation)

Interviewer : What is actually the reason for you to learn English here at UNISMA?

Student G1 : The reason is very practical. Since I was at the secondary school, I have had to pay myself for my study; therefore when finishing my secondary school, I thought of choosing a department that enabled me to quickly find a job. Through careful consideration, eventually I decided that English department was the best for me.

Similarly, student P1 is learning English because he thought that teachers of English had a better future prospect of life than did teachers of other subject matters.

Pewawancara : Mengapa Anda belajar bahasa Inggris di UNISMA ini?

Mahasiswa G1: Karena guru bahasa Inggris itu masih kurang Pak. Kurang tenaga pengajar bahasa Inggris. Jadi kelihatannya prospeknya lebih cerah jadi guru bahasa Inggris.

(Translation)

Interviewer: Why do you study English here at UNISMA?

Student P1: Because the number of teachers of English is still inadequate. Not enough teachers of English. So it seems that the future prospect is better for teachers of English.

On the other hand, students from the UNIGA and UNIBRAW stated that they learned English because they wanted to work in foreign companies. Student P2 when asked about the reason for studying English said,

- Mahasiswa P2 : Karena bahasa Inggris itu penting sekali terutama di kalangan dunia kerja. Sebagai bahasa internasional, bahasa Inggris sebagai salah satu syarat untuk bisa bekerja di instansi-instansi baik pemerintah maupun swasta. Apalagi sekarang ini, banyak perusahaan asing yang masuk ke Indonesia
- Pewawancara : Jadi orientasinya lebih banyak ke pekerjaan?
- Mahasiswa P2 : Ya.
- Pewawancara : Pekerjaan apa sih yang sebenarnya Anda harapkan?
- Mahasiswa P2 : Ya pekerjaan yang sesuai dengan keahlian yang diperoleh dari jurusan bahasa Inggris di sini. Kerja di perusahaan asing terutama.

## (Translation)

- Student P2 : Because English is very important, especially in the workplace. As an international language, English stands as a requirement to be able to find a job in both governmental and private offices. Even now, more foreign companies come to Indonesia.
- Interviewer : So, the orientation is more on finding a job?
- Student P2 : Yes.
- Interviewer : What kind of job do you actually expect?
- Student P2 : A job suitable to the expertise I obtain from this English department. A job in a foreign company, particularly.

In addition to the instrumental motivation of getting a job, interest in foreign languages, which is supposed to be a composite of integrative motivation (Gardner, 1985) also plays a role in learning English. Student G3 explained her reason for studying English as follows,

- Mahasiswa G3 : Karena saya menyukai bahasa dan lagian biar tidak kalah saing.
- Pewawancara : Kalah saing dalam hal apa?
- Mahasiswa G3 : Maksud saya kalau mencari pekerjaan paling nggak saya punya nilai plus dari bahasa.
- Pewawancara : Jadi belajar bahasa Inggris untuk mencari pekerjaan.
- Mahasiswa G3 : Juga kesenangan Pak.
- Pewawancara : Senang belajar bahasa. Mengapa kok senang belajar bahasa?
- Mahasiswa G3 : Ya nggak tahu juga alasannya yah. Tapi sejak kecil itu saya memang suka belajar bahasa. Kalau didengar itu rasanya aneh, tapi kalau dicoba itu kok ya enak.
- Pewawancara : Sekarang sudah bisa berbicara pakai berapa bahasa sing Mbak?
- Mahasiswa G3 : Cuma dua yah. Jepang juga. Tapi pasif yah.

## (Translation)

- Student G3 : Because I like languages and also in order not to lose in competition.
- Interviewer : What competition?
- Student G3 : I mean, when I seek a job, I will have an additional point from the language.
- Interviewer : So you learn English for getting a job?
- Student G3 : Also, because I like it.
- Interviewer : You like languages. Why?
- Student G3 : I don't know. But since I was a child, I've been interested in learning new languages. It sounds strange when heard, but nice when tried.
- Interviewer : How many foreign languages do you speak now?
- Student G3 : Only two. Japanese, too. But still passive.

However, student P3 mentioned that he learned English simply because it was stated in the curriculum and he had no other choice except studying it in order to complete his studies.

Mahasiswa P3 : Saya sendiri ya dasarnya dari SMP SMA itu kurang. Jadi mau masuk ke sini juga agak takut begitu. Takut adanya jadwal paket itu. ... Kecuali kalau saya dari SMP SMA itu menguasai, no problem.

Pewawancara : Sehingga di sini Anda belajar bahasa Inggris lebih karena sudah ada dalam paket itu?

Mahasiswa P3 : Ya.

(Translation)

Student P3 : I myself do not have enough English background since my secondary school. So when I got in here, I was afraid. Afraid of the packed compulsory subjects. If I had mastered English from my secondary schools, it would be no problem.

Interviewer : So you learn it because it is on the list of subjects?

Student P3 : Yes.

In the subsequent interview the student also stated,

Mahasiswa P3: Jadi karena merasa sudah kurang,... otomatis membuat takut dengan sistem pengajaran seperti itu. Kemudian, semester dua dalam perjalanan, otomatis kan ya masa gitu terus. Terpaksa kan, ini harus dilalui. Kembali pun nggak bisa. Harus diterjang. Kalau kita tunda, ya besok akan ketemu lagi. Jadi harus dilewati.

(Translation)

Student P3 : So, because I have felt that I didn't have enough, automatically, I was afraid of the teaching system. Then, in semester two, I felt it shouldn't be like this forever. Forcedly, I had to go ahead with it. I couldn't even turn back. I had to face it. Even if I postponed it, I still had to face it some day. So, it had to be dealt with.

In terms of the potential for learning English, the good and moderate students considered good memory and courage to use English as their basic capacities. Student M2, for example, mentioned his courage as follows,

Pewawancara : Apakah Anda merasa mempunyai kemampuan khusus dalam belajar bahasa Inggris?

Mahasiswa M2: Ya kalau khusus sih nggak ada. Cuma, mungkin karena saya sering ngomong itu saja dalam conversations. Kalau pun salah tata bahasanya, pokoknya berani ngomong. Itu saya seneng banget.

(Translation)

Interviewer : Do you think you have a special potential for learning English?

Student M2 : No special potential. But, perhaps because I speak often in conversations. Even if I make grammatical mistakes, the point is that I dare to speak. I like it very much.

Student G1, moreover, mentioned both good memory and courage as his advantages.

Pewawancara : Apakah Anda merasa mempunyai kemampuan khusus dalam belajar bahasa Inggris?

Mahasiswa G1 : Saya merasakan.

Pewawancara : Bisa dijelaskan lebih lanjut potensi yang dirasakan itu seperti apa?

Mahasiswa G1 : Yang pertama daya ingat. Nah, belajar bahasa Inggris itu kan perlu menguasai kosa kata juga. Daya ingat saya, saya pikir cukup menunjang ini. Kemudian yang kedua adalah keberanian. Keberanian untuk mengungkapkan isi pikiran saya.

(Translation)

Interviewer : Do you feel you have specific capacities to learn English?

Student G1 : I feel so.

Interviewer : Can you explain what capacities they are?

Student G1 : The first thing is good memory. To learn English needs to memorise words. To me, my memory helps me in this case. Secondly is courage. Bravery to express what is in my mind.

The students with low proficiency attainment, on the other hand, failed to mention anything they could claim as advantageous characteristics for learning English.

Student P3, for example, mentioned as follows,

Pewawancara : Apakah sebenarnya Anda merasa punya kemampuan khusus untuk belajar bahasa asing (Inggris) itu?

Mahasiswa P3 : Sulit.

Pewawancara : Maksudnya?

Mahasiswa P3 : Ya itu untuk menghafal. Untuk mengingatnya itu sulit. Kemungkinan daya ingatnya itu kurang.

Pewawancara : Oh, Anda merasa mempunyai daya ingat yang kurang?

Mahasiswa P3 : Ya.

Pewawancara : Kalau begitu, apakah Anda pernah membayangkan seandainya mempunyai daya ingat yang bagus gitu?

Mahasiswa P3 : Ya. Otomatis itu. Otomatis.

(Translation)

Interviewer : Do you actually think that you have a specific ability to learn English?

Student P3 : Difficult.

Interviewer : What do you mean?

Student P3 : To remember. Memorising is difficult. Perhaps, I have a poor memory.

Interviewer : You feel you do not have good memory?

Student P3 : Yes.

Interviewer : In that case, do you sometimes wish you had a good memory?

Student P3 : Yes. That's certain. Automatically.

The finding that the students, especially the good ones, considered good memory as a potential for learning English is interesting because the quantitative finding of the use of the six strategy categories as described in Chapter Six

indicates that memory strategies were used at the second lowest frequency of use. An interpretation of these two seemingly contradictory findings is that although they think of good memory as an advantage, they do not merely rely on the power of memory. Understanding and comprehension is very important as described by student G2,

- Pewawancara : Dengan kemampuan daya ingat yang tinggi, apakah anda sudah merasa cukup sebagai bekal untuk belajar bahasa asing?
- Mahasiswa G2 : Saya pikir, kalau cuma gampang hafal itu sih, nggak mendukung banget. Paling kalau sehari dua hari ya. Jadi, misalnya kalau saya baca sesuatu, saya hafal, terus saya juga mengerti gitu. Jadi sekali saya mengerti saya mengerti terus. Andai kata pun saya lupa, kalau buka lagi, saya pasti ingat. Jadi kalau cuma ingat saja, itu nggak menjamin suatu ketika saya masih bisa mengungkapkannya lagi. Tapi kalau saya mengerti, saya pasti bisa, karena pasti ingat gitu lo.

(Translation)

- Interviewer : With your good memory, do you think you have got enough basic competence to learn a foreign language?
- Student G2 : I think, finding it easy to remember alone is not very supportive. It is supportive for one or two days. So, if I am to read something, I remember, then I have to understand. Once I understand, I will understand forever. Even if I forget, once I open it again, I will remember it again. So, remembering alone does not guarantee that I will still be able to explain it again some time. But, if I understand, I must be able, because I still remember.

In short, instrumental motivation turned out to be the main reason of Indonesian learners in this study to learn English. This type of motivation is reflected in their practical reasons for learning English, such as getting a job or completing a course of study. Moreover, good memory and courage to use English were considered to be helpful characteristics for learning a new language.

## 10.2 Strategies in Learning English Grammar

Preferences for the medium of instruction to be used by the teacher when explaining a grammatical rule of English were found to be different among learners. While student G1 mentioned that he preferred English as the medium of instruction, student G2 stated that she liked it to be in Indonesian. She explained the reason as follows,

Mahasiswa G2: Karena pada tahap penjelasan itu kan dasar. Kalau sampai dasarnya salah, selanjutnya akan salah. Jadi untuk menghindarkan kesalahan itu, saya pikir lebih baik dalam bahasa Indonesia, jadi saya nggak salah mengerti. Baru setelah itu, pengembangannya itu bisa diterangkan dalam bahasa Inggris.

(Translation)

Student G2 : Because the explanation stage is fundamental. If the base is wrong, it will be wrong forever. Therefore, to avoid such a mistake, I think the explanation should be in Indonesian, so I do not misunderstand it. Later on, at the development stage, English can be used.

Student M2 expressed a similar idea to that of student G2, asserting the importance of the use of Indonesian, instead of English, by the lecturer when explaining grammatical rules. He stated,

Mahasiswa M2: Masalah penjelasan, bagi saya masih sangat diperlukan. Dan penjelasan itu saya lebih suka dalam bahasa Indonesia, karena penangkapan saya dalam bahasa Inggris masih kurang. Kalau dalam bahasa Indonesia, itu jadi jelas.

(Translation)

Student M2: I still need explanation very much. And, the explanation is given, I prefer in Indonesian because my comprehensibility in English is still not good enough. When it is in Indonesian, it becomes very clear.

Moreover, student P3 was also in favour of the use of Indonesian, as he claimed that, when the teacher used English when explaining a new grammatical item, this just added to his confusion. He admitted that the use of English merely added a new list of grammatical items that he did not understand.

Other students claimed that they preferred a mixture of both English and Indonesian with English being used first, then translated into Indonesian, for example students M3 and P2. Following is an excerpt of an interview with student P2,

Pewawancara : Saat dosen mengajar butir tata bahasa baru di kelas, Anda lebih suka dijelaskan dalam bahasa Inggris atau Indonesia?

Mahasiswa P2 : Digabung. Supaya tidak terjadi misunderstanding dalam memahami maksud penjelasan dosen itu.

Pewawancara : Maksudnya digabung bagaimana?

Mahasiswa P2 : Ya penjelasan itu dalam bahasa Inggris dulu, lalu ditranslate ke bahasa Indonesia.

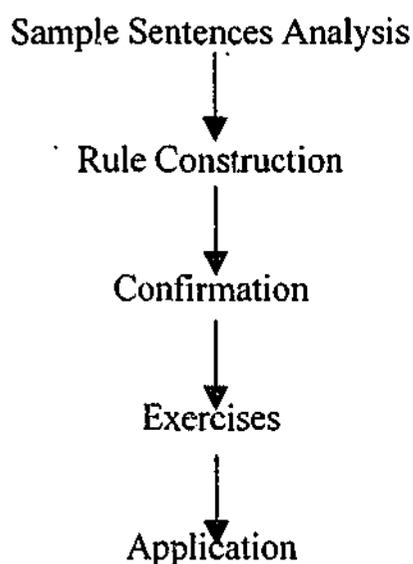
(Translation)

Interviewer : When a lecturer explain a new grammatical item in the classroom, do you prefer having the explanation in English or Indonesian?

- Student P2 : Being combined. So that there will not be any misunderstanding of the lecturer's explanation.  
Interviewer : What do you mean by being combined?  
Student P2 : The explanation is first delivered in English, but then translated into Indonesian.

In terms of the sequence of learning stages, a clear distinction between the good students and the other groups of students was obtained. The good students, at least as reported by students G1 and G2, were found to favour analysing sample sentences so that they themselves could construct the rules. Student G1, for example, reported that after the teacher pointed out what grammatical item was to be discussed, what he needed was a few sample sentences that he could analyse to draw the grammatical rule underlying them. The rule that he constructed was then confirmed by referring to the rule in the textbook or by asking the lecturer. An explanation of the rule was expected from the lecturer at this stage. When the rule that he constructed was correct, he continued with the exercises, which were usually already provided in the grammar textbook. When it was not correct, on the contrary, a further analysis was done to find in what ways it was wrong. The last stage was applying the learned grammatical item into sentences that he made up. In short, the stages can be illustrated in Figure 10.1 below.

Figure 10.1 Stages of Learning Grammatical Items by the G Learners



The other two groups of students - the M and P students - reported that they preferred to be given the grammatical rule with some explanation first, followed by examples of the sentences using that particular grammatical item and exercises. Student M1, for example, reported it in the following excerpt.

Pewawancara : Tata bahasa itu kan berkaitan dengan aturan-aturan bahasa. Nah, bagaimana cara Anda dalam mempelajari tata bahasa Inggris itu?

Mahasiswa M2 : Biasanya saya belajar dengan melihat rulanya dulu, baru contoh-contoh. Biasanya contoh itu saya ambilkan dari buku. Jadi rulanya dulu saya pelajari, baru contoh-contoh.

Pewawancara : Kalau belajar tata bahasa di kelas, yaitu saat dosen memperkenalkan butir tata bahasa baru, bagaimana?

Mahasiswa M2 : Kalau dosen itu biasanya memberi contoh-contoh dulu diambilkan dari buku Structure, lalu mahasiswa diminta merumuskan rulanya.

Pewawancara : Apakah Anda suka dengan model seperti itu?

Mahasiswa M2 : Kurang suka. Saya lebih suka rulanya dulu, baru contoh, kemudian latihan.

(Translation)

Interviewer : Grammar deals with the rules of a language. How do you learn the grammar of English?

Student M2 : Usually I learn it by looking at the rule first, and then examples. Usually I take the examples from a book. So, I learn the rule first, then examples.

Interviewer : What about when you learn it in the classroom, when the lecturer introduces a new grammatical rule? How?

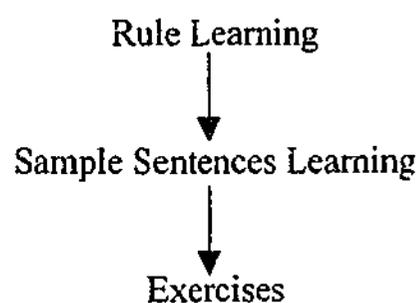
Student M2 : The lecturer usually gives some examples of sentences taken from Structure books, then asks the students to construct the rule.

Interviewer : Do you like that teaching model?

Student M2 : Not really. I prefer the rule first, then examples, then exercises.

Moreover, unlike the G students, none of these M and P students reported applying the learned grammatical rules in sentences of his or her own. Thus, the steps contain only three stages of learning as depicted in Figure 10.2 below.

Figure 10.2 Stages of Learning Grammatical Items by the M and P Learners



The learning stages as reported by the students above clarified the use of a strategy item of Oxford's (1990) SILL (item 20), which says "*I try to find patterns in English*". The interview result showed that such a strategy was favoured by the good students more than by the weaker students.

### 10.3 Strategies in Learning Vocabulary Items

There seems to be a different mode of learning vocabulary between the G students and the P students. All of the G students reported that they learned new words better by listening to the words first, then seeing how the words were written. On the contrary, all of the P students mentioned that they learned new words more effectively by seeing the writing of the words first, then listening to how they were pronounced. Student G2, for example, described it as follows,

Pewawancara : Untuk mengenal kosa kata baru, apakah Anda merasa lebih mudah dengan mendengar bunyi kata itu dulu baru melihat tulisannya atau melihat dulu baru mendengar?

Mahasiswa G2 : Dengar dulu, baru melihat. Kalau dengar begitu, di sini itu {*menunjuk ke benak*} sudah ada konsep maknanya. Tapi kalau baca, masih blank apa ini maksudnya. Kadang-kadang sesuatu yang saya tahu artinya waktu saya mendengarkan, waktu saya baca saya nggak tahu. Tapi kalau ada yang mengucapkan, oh itu toh, gitu.

(Translation)

Interviewer : To know new words, do you think it is easier for you to listen to the pronunciation of those words first, then see how they are written, or see first, then listen?

Student G2 : Listen first, then see. When I listen to a new word, there has been a concept of its meaning here {*pointing to brain*}. But, when I read, it is still blank. Sometimes a word that I know its meaning when I listen to it turns out to be unfamiliar to me when I read it. But, when someone pronounces it, I know it.

Meanwhile, among the M students, two students (M1 and M3) described that they preferred the *listen then see* mode, while the other one (M2) said that he preferred the *see then listen* mode.

Moreover, in order to understand the meaning of a new word, students G1 and G2 reported that they sometimes analysed the words from the morphemes that made them up. Such a strategy is measured by item 21 in the SILL *I find the meaning of an English words by dividing it into parts that I understand*. Student G2, for example, provided an example of the word *unbreak* taken from a phrase *unbreak my heart*.

- Pewawancara : Pada saat menemui kata baru, pernahkah Anda menganalisis dari unsur-unsur pembentuk kata itu?
- Mahasiswa G2 : Ya, seperti *unbreak my heart*. Kata *unbreak* itu apa. Oh kayaknya dari *break* sama *un*. *Un* itu penegas. Lalu berarti maknanya ini. Jadi, pertama saya analisis sendiri, baru kalau nggak yakin saya tanya sama dosen.

(Translation)

- Interviewer : When you find a new word, have you ever analysed it from its elements?
- Student G2 : Yes, like *unbreak my heart*. What is *unbreak*? It seems that it is from *break* and *un*. *Un* is a negator. Oh, it means this. So, at first I analyse it by myself, but then when I am not sure, I ask the lecturer.

Dictionaries are also sources of information to help understand the meaning of new words. Even if guessing of meaning is done, a dictionary is still used to check whether the guess is correct or not. Student G3 stated,

- Pewawancara : Apakah yang anda lakukan saat Anda mendapatkan kata baru yang masih asing bagi Anda, misalnya saat Anda sedang membaca?
- Mahasiswa G3 : Menuliskan dulu sama artinya kira-kira bagaimana. Dari kalimat itu biasanya saya kan biasa menerka. Saya terka. Dan untuk menerka itu, biasanya kalau lagi baca novel yah, sampai satu bab dulu baru saya cek.
- Pewawancara : Mengeceknya ke mana?
- Mahasiswa G3 : Ya ke kamus.

(Translation)

- Interviewer : What do you do when you find a new word, which is unfamiliar to you, for example when you are reading?
- Student G3 : Write it together with its possible meaning. Usually I guess the meaning from the sentence. I guess. And in guessing, usually when I read a novel, I do it till I finish one chapter, then I check.
- Interviewer : How do you check them?
- Student G3 : In a dictionary.

The excerpt above also provides a qualitative support of the use of SILL' strategy (item 24), which says *I make guesses to understand unfamiliar words*. As described by student G3 above, the guesses were based on the sentential context.

In the case of the use of dictionary, the monolingual English dictionary was found to be the first preference. If a difficulty was still encountered in understanding the words, a bilingual English-Indonesian dictionary was used as described by student G1.

- Mahasiswa G1 : Saya mempergunakan kamus besar, Kamus Oxford yang Inggris-Inggris itu. Tapi ya kadang terbentur kendala kesulitan memahaminya, walaupun toh tidak sering. Dan penjelasan dari Oxford yang Inggris-Inggris itu masih harus saya support dengan buka kamus yang Inggris-Indonesia.

(Translation)

Student G1 : I use a big dictionary, the Oxford English-English dictionary. But, sometimes I find it difficult to understand, although it is not frequent. And, the explanation from Oxford, which is English-English, is still supported by opening the English-Indonesian dictionary.

Unfortunately, the SILL does not cover a strategy of using a dictionary for developing mastery of vocabulary items.

When a list of new words was obtained, it was put in a place for easy reference, such as on the wall of the studying room, as described by student M1 in the following excerpt. The excerpt also clarifies the use of strategy item 2 of the SILL, which says *I use new words in sentences*.

Pewawancara : Setelah Anda mendapatkan daftar kata-kata baru itu, apa yang Anda lakukan untuk mengingatnya?

Mahasiswa M1 : Biasanya ya saya tempel di tembok gitu, beberapa kata. Terus dihafal.

Pewawancara : Caranya bagaimana?

Mahasiswa M1 : Ya dipraktekkan dalam kalimat. Cuma kadang-kadang juga lupa ya, karena kata yang ditulis ditembok itu sudah saya ganti. Biasanya kan saya ganti, tidak ditulis terus memanjang gitu. Lalu saya cari lagi.

(Translation)

Interviewer : After having a list of new words, what do you do to remember them?

Student M1 : Usually I put them on the wall, a few words. Then, I memorise them.

Interviewer : How to memorise them?

Student M1 : I use them in sentences. But, sometimes I forget, because I have replaced the words on the wall. Usually I replace them. If this happens, I have to find them again.

Another SILL strategy that emerged from in the interview data was *making an image or a picture of the word*, as described by student P1 as follows,

Pewawancara : Nah, untuk mengingat kata-kata baru itu, apa lalu dibaca sering atau bagaimana?

Mahasiswa P1 : Biasanya ya itu saya praktekkan dengan membayangkan. Seperti misalnya kata cry, menangis, gitu ya kira-kira menangis itu bagaimana, oh itulah cry.

Pewawancara : Oh jadi membayangkan, membentuk image bagaimana orang menangis itu kayak apa. Nah itulah cry gitu?

Mahasiswa P1 : Yah.

(Translation)

Interviewer : To remember new words, do you read the words often or how?

Student P1 : Usually I practice them by imagining. For example, the word cry. I imagine how someone is crying. And, that's crying.

Interviewer : So you imagine, make an image how someone who is crying looks like? And, that's crying?

Student P1 : Yes.

In short, in some instances, the data obtained from the interviews produced examples of SILL strategies. These strategies were *making guesses of unfamiliar words, analysing words from their parts, looking for similar words in first language, using words in sentences, and making a mental picture of words.*

#### 10.4 Strategies in Developing Reading Skills

The interview data indicated that the students being interviewed used textbooks, references, novels, newspapers, and magazines as the source of materials for developing reading comprehension skills. A very common reading strategy reported in the interview sessions by the G and M students was skimming then reading carefully. This means that they first read the text quickly to get the general idea without bothering about the difficult words. Then they read it again and again thoroughly to get the details. At this stage, the meanings of unfamiliar words are predicted from their sentential contexts. Student G2, for example, reported as follows,

Pewawancara : Kalau dalam hal membaca, bagaimana Anda biasanya melakukannya?

Mahasiswa G2 : Maksudnya?

Pewawancara : Katakanlah ada sebuah teks yang belum pernah Anda baca. Nah, untuk bisamemahami isi teks itu bagaimana cara Anda membacanya?

Mahasiswa G2 : Biasanya saya cepat sekali kalau baca itu. Biasanya satu kali saya baca itu, paling nggak di sini ada gambaran ide pokoknya gitu, cuman belum sampai ke detil-detilnya. Jadi cuman gambaran umunya saja. Setelah itu kalau ada waktu saya baca lagi. Perlahan gitu. Kalau sudah ada gambaran yang lebih jelas, ulangi lagi untuk mencari kata-kata yang nggak ngerti itu. Biasanya kalau ada kata yang nggak ngerti itu, saya lihat konteks kalimatnya. Oh ini mungkin yang dimaksud kata ini.

Pewawancara : Pada saat membaca pertama tadi itu, apakah tidak merasa terganggu dengan kata-kata yang sulit?

Mahasiswa G2 : Nggak.

(Translation)

Interviewer : In the case of reading, what do you do?

Student G2 : What do you mean?

Interviewer : Let's say you have got a text to read. How do you read it to understand its content?

Student G2 : Usually it's very quick for me to read. Usually, just after reading once, I have got the general idea of the text, but not the details. So, only a general picture. After that, if I have got time, I read it again. Slowly. When I have got a clearer idea, I read it again to search for the difficult words. Usually, when I get a difficult word, I look at its sentential context. Oh, this is what is meant by this.

Interviewer : When reading for the first time, aren't you bothered by difficult words?

Student G2 : No.

At least three of the SILL strategies are covered in the excerpt above: *skimming an English passage, then go back and read carefully* (item 18), *making guesses to understand unfamiliar words* (item 24), and *reading without looking up every unknown word* (item 27). This study's quantitative analysis found that these three strategies were used at the medium level of frequency as presented in Chapter Six. Its qualitative analysis, moreover, provided further evidence that that these strategies were employed by the good and moderate students more frequently than by the poor students.

In addition to guessing the difficult words, referring to a dictionary is another strategy being reported in reading. Moreover, not all of the difficult words are consulted in dictionaries. Student G1 reported that only when they were key words did he refer to a dictionary. Otherwise, he just left them out. This strategy of using a dictionary, however, is not covered in the 50-item SILL strategies.

Pewawancara : Kalau ternyata masih juga kesulitan dalam memahami kata sulit itu dari konteks kalimatnya, bagaimana?

Mahasiswa G1 : Kamus.

Pewawancara : Merujuk ke kamus. Apakah untuk semua kata yang tidak bisa ditebak itu lalu merujuk ke kamus? Atau barang kali ada pemilahan kata?

Mahasiswa G1 : Pemilahan bagaimana?

Pewawancara : Ya misalnya, antara kata kunci dan bukan kata kunci?

Mahasiswa G1 : Oh ya, saya pilahkan juga. Saya pilah benarkah itu kata yang menentukan secara keseluruhan dari isi teks itu apa nggak. Kalau memang kata kunci ya saya harus tahu.

Pewawancara : Kalau bukan kata kunci?

Mahasiswa G1 : Saya lewati saja.

(Translation)

Interviewer : If it turns out that you still find it difficult to guess the meaning of a difficult word from its sentential context, how?

Student G1 : Dictionary.

Interviewer : Referring to a dictionary. Do you look at the dictionary for every word that you cannot guess? Or, do you classify the words?

Student G1 : What classification?

Interviewer : For example, between key words and non key words?

Student G1 : Oh yes. I also classify the words. I select if a word determines the whole content of the text or not. If it is a key word, I have to know it.

Interviewer : If it is not a key word?

Student G1 : I just leave it out.

The P students, on the other hand, do not seem to use effective reading strategies. Student P1, for example, described how he usually read the text several

times with the first reading being directed at pinpointing the difficult words. Thus, while the G and M students reported that their first reading was to get the general idea of the text, student P1 did so to list the unfamiliar words.

Pewawancara : Pada saat membaca, mungkin saja Anda menemui satu atau beberapa kata yang tidak Anda pahami. Apa yang Anda lakukan?

Mahasiswa P1 : Biasanya sih terus saja baca. Kalau ada kata yang nggak ngerti gitu diberi coretan di bawahnya pakai pensil. Terus dicari dulu. Maksud saya, kata itu dicari dulu artinya dalam kamus kalau tidak bisa. Nanti kalau sudah selesai dibaca ulang lagi.

Pewawancara : Kalau begitu setelah membaca pertama itu tetap belum tahu apa isi teks itu karena memang hanya untuk mencari kata-kata sulit begitu?

Mahasiswa P1 : Ya. Jadi baca dulu untuk cari kata-kata sulit dan artinya, lalu baca lagi.

(Translation)

Interviewer : When reading, it is possible that you find one or several difficult words. What do you do then?

Student P1 : Usually I just continue reading. When I get a word that I don't know the meaning of, I put a mark with a pencil underneath. Then, I look for its meaning first. I mean, I first look for the meaning of that word in a dictionary if I don't know the meaning. Then, when I am finished, I read the text again.

Interviewer : In that case, after the first reading you still don't understand what the text is about because it is just to find the difficult words. Is that right?

Student P1 : Yes. So, I read first to find the difficult words and their meaning, then read again.

Student P2 tries to understand text when reading by translating the text into Indonesian, especially when he thinks he has not got much time to read. Comprehending the text is done after the translation is completed. He reported this as follows,

Pewawancara : Kalau dalam hal membaca untuk memahami sebuah teks, misalnya. Bagaimana cara Anda itu?

Mahasiswa P2 : Untuk memahami itu pertama itu saya baca santai, itu kalau waktunya banyak. Saya berlatih membaca. Tapi kalau waktunya singkat, itu langsung saya menterjemahkan ke dalam bahasa Indonesia. Dan setelah saya tahu bahasa Indonesianya langsung saya mencoba untuk memahaminya. Oh maksudnya begini.

(Translation)

Interviewer : What about in reading to comprehend a text, for example. How do you do it?

Student P2 : To comprehend a text, firstly I read it slowly, if I have got much time. But, if I don't have much time, I translate it into Indonesian straight away. And, when I have understood the Indonesian, I try to comprehend it. Oh, this text means this.

Student P3, moreover, mentioned that he reads texts available in the textbooks used by the lecturer only. Despite his report that he first skims the text

to get the general idea, his main focus is on reading carefully sentence by sentence with every single difficult word in each sentence being marked and looked up in the dictionary. When all of the difficult words have been translated into Indonesian, rereading is carried out to understand the details of the text.

To sum up, skimming to get the general idea of a reading text is a common strategy reported by the G and M students. To get the details, rereading is done several times with difficult words being predicted from their sentential contexts. If guesses fail to help, referring to a dictionary is carried out only if the difficult word is the key word. Otherwise, they are just left out. The P students also report skimming, but for a different purpose. It is for finding the difficult words, all of which are then looked up in the dictionary.

### 10.5 Strategies in Developing Listening Skills

All of the respondents reported that they tried to improve their listening skills by listening to English songs and watching English films both in cinemas and on television. Student G1, for example, explained what he did while listening to music as follows,

- Pewawancara : Pada saat mendengarkan music itu, apakah Anda memegang teks lagunya?  
 Mahasiswa G1 : Nggak, makanya kalau ditanya kata ini tadi apa, saya bisa jadi tidak bisa. Tapi secara keseluruhan arti makna lagu itu, paham saya.  
 Pewawancara : Lalau ada keinginan untuk tahu detailnya nggak?  
 Mahasiswa G1 : Kata per kata ya.  
 Pewawancara : Nah, untuk itu, mendengarkan seksama terhadap lagu itu atau langsung lihat saja teksnya gitu?  
 Mahasiswa G1 : Mendengarkan dengan seksama, lalu coba menuliskan.  
 Pewawancara : Setelah selesai?  
 Mahasiswa G1 : Biasanya ya dicocokkan dengan yang asli.

#### (Translation)

- Interviewer : When listening to music, do you have the text of the song at hand?  
 Student G1 : No, that is why, when asked what the word is, I probably can't answer. But, I understand the general meaning of the song.  
 Interviewer : Don't you want to know the details after that?  
 Student G1 : Word by word, yes.  
 Interviewer : For that purpose, do you listen to it again carefully or do you just look at the text?  
 Student G1 : Listen very carefully, then write it down.  
 Interviewer : When finished?  
 Student G1 : I compare with the original text.

The excerpt above indicates the use of listening and transcribing songs as a strategy to develop listening skills. When there was no original text available to compare with, student G3 reported that she asked a friend to listen and transcribe the same song and then compared her transcription and her friend's.

Pewawancara : Hasil catatan Anda itu dicocokkan dengan teks yang asli nggak?

Mahasiswa G3 : Ya kadang sih. Tapi kalau nggak ada teksnya, kadang sama teman. Teman itu saya ajak ndengarin dan nulisin juga, lalu dibandingkan.

(Translation)

Interviewer : Do you compare the result of your transcription with the original text?

Student G3 : Yes, sometimes. But, when the text is not available, sometimes I compare it with my friend's. I ask her to listen to and transcribe the song too, and the results are compared.

Student P3, however, described that he did not do any transcription activities. Instead, he listened to the song with the text in hand.

Pewawancara : Anda tadi menyebutkan bahwa Anda mendengarkan lagu-lagu berbahasa Inggris untuk meningkatkan kemampuan listening Anda. Apa yang Anda lakukan saat mendengarkan itu? Hanya menikmati alunan lagunya atau bagaimana?

Mahasiswa P3 : Dengan membawa teksnya.

Pewawancara : Pegang teksnya gitu?

Mahasiswa P3 : Ya. Saya itu kalau hanya mendengarkan saja, tambah nggak karu-karuan. Semakin nggak jelas saja. Wong jadinya cuma musiknya. Tapi dengan teksnya itu, oh ngomongnya gini toh.

(Translation)

Interviewer : You've just mentioned that you listen to English songs to improve your listening skills. What do you do when you are listening? Do you just enjoy the song or what?

Student P3 : Bring the text.

Interviewer : You hold the text?

Student P3 : Yes. For me, when I just listen to it, it becomes worse. It becomes unclearer. I just get the music. But, when I have the text with me, oh that's the pronunciation.

Student M1 admitted that she was not good at listening and she stated that she did not listen to music very much because she could not catch the song because of the music. Instead, she used English cassettes specially designed for listening exercises and transcribed the text.

Pewawancara : Untuk mengatasi kelemahan dalam listening itu, berlatihnya bagaimana? Apakah Anda mendengarkan musik?

Mahasiswa M1 : Kalau lagu, kurang banyak pakai. Yang saya pakai itu ya kaset-kaset yang memang untuk latihan itu. Soalnya kan tidak ada gangguannya. Kalau lagu kan,

keganggu musiknya itu. Sering saya nggak mengerti karena musiknya. Paling-paling hanya satu, dua kata saja.

(Translation)

Interviewer : To overcome your problems in listening, what do you do? Do you listen to music?

Student M1 : Music, not much. I use cassettes intentionally composed for listening excercises. Because there is no disturbance. When I listen to music, I am disturbed by the music. I often do not understand it because of the music. Perhaps, I get only one or two words.

In the following intevieew she described what she did while listening to the cassettes.

Pewawancara : Kalau mendengarkan, itu sambil mengikuti teksnya atau bagaimana?

Mahasiswa M1 : Pertama itu, ya saya ikuti. Biasanya kan diberi tahu page berapa ini. Lalu saya dengarkan dan buku itu saya tutup. Nah, saya bikin transkripsinya. Saya ulang-ulang. Lalu saya buka lagi buku itu, sama nggak dengan bikinan saya, gitu. Bahasa itu.

(Translation)

Interviewer : When you are listening, do you have the text at hand or how?

Student M1 : First, I follow it. Usually they say what page it is. Then I listen to it and I close the book. I make the transcription. I repeat it again-again. Then I open the book to see if it is the same as the transcription I make. The language I mean.

As mentioned earlier, in addition to listening to English songs, watching English films at cinemas or on television is another strategy to improve listening skills. When asked whether they like English films which are complemented with Indonesian subtitles, most of them agreed. Student G1, for example, described the reason for liking English films with Indonesian subtitles as follows,

Pewawancara : Dalam hal nonton film, Anda lebih suka film yang mana? Film barat yang dilengkapi dengan sari kata bahasa Indonesianya atau yang nggak pakai sari kata bahasa Indonesia itu?

Mahasiswa G1 : Untuk saat ini saya masih lebih suka yang pakai sari kata bahasa Indonesia. La bagaimana lagi, wong kemampuan listening saya itu saya akui memang masih broken.

Pewawancara : Kalau dibandingkan dengan film, misalnya, film Cina yang didub ke bahasa Inggris , Anda lebih suka yang mana, film barat dengan sari kata bahasa Indonesia, atau film Cina didub ke Inggris tanpa sari kata bahasa Indonesia?

Mahasiswa G1 : Saya lebih suka yang Inggris, eh dari Cina yang didub ke Inggris.

Pewawancara : Mengapa begitu?

Mahasiswa G1 : Pemahamannya. Pemahamannya itu lebih mudah. Artinya, bahasa Inggris dalam film yang didub itu saya akui sesuai dengan standard yang saya miliki. Kalau saya mengucapkannya ya memang begitu.

(Translation)

- Interviewer : When watching a film, which one do you like? A western film with Indonesian subtitles or one without Indonesian subtitles?
- Student G1 : For the time being, I like ones with Indonesian subtitles better. Because I admit that my listening skills are still broken.
- Interviewer : Compared to a film, say, a Chinese film which is dubbed into English, which one do you like better, a western film with Indonesian subtitles or a Chinese film dubbed into English without subtitles?
- Student G1 : I like the English one better, ehm from Chinese dubbed into English.
- Interviewer : Why?
- Student G1 : Understanding. It's easier to understand. I mean, the English in the dubbed film, I admit, is at the standard of my English. If I were to say the dialog, it would be like that.

Student G2, moreover, reported that she referred to the subtitles only when there was a problem in understanding the dialogues because of the words she did not know. Once the problem was overcome, she paid attention to the conversation again. When asked about English films with Indonesian subtitles and Asian films dubbed into English, however, she responded as follows,

- Pewawancara : Kalau film-film Asia yang didub ke dalam bahasa Inggris itu?
- Mahasiswa G2 : Saya nggak suka film Asia yang didub itu. Em, bahasanya aneh, jadi bukan seperti bahasa Inggris, tapi justru anehlah. Saya nggak suka itu, nggak suka sama sekali. Itu jadi lucu. Seperti kalau orang ngomong bahasa Inggris pakai logat Jawa gitu. Saya nggak suka.

(Translation)

- Interviewer : What about Asian films dubbed into English?
- Student G2 : I don't like the dubbed Asia films. Em, the language is strange, not like the speaking of native speakers of English. It's strange. I don't like it, not at all. That becomes funny. Like someone speaking English with a Javanese accent. I don't like it.

Finally, listening to English radio broadcasts was also reported as a strategy to improve listening skills. However, it was not done consistently since the English programs on Indonesian radios were not very frequent as reported by student P3.

- Pewawancara : Pernah mendengarkan acara radio yang berbahasa Inggris nggak?
- Mahasiswa P3 : Pernah.
- Pewawancara : Seberapa sering?
- Mahasiswa P3 : Ya nggak sering. Wong acaranya itu kan otomatis memang nggak sering ya. Asal ketemu saja. Kalau ketemu, wah iki kok. Lalu dengarin gitu.

(Translation)

- Interviewer : Have you ever heard English programs on a radio station?
- Student P3 : Yes, I have.

Interviewer : How often?

Student P3 : Not often, because the programs are not often. Just when I find it. When I find it, aha this is English. Then I listen to it.

However, the use of all strategies mentioned above requires the availability of such electronic media. If the media are not available, the use of such strategies is impossible. Student P2 described how he found it difficult to improve his listening skills because he did not have any radio, tape recorder, or television set.

Mahasiswa P2 : Listening itu bagi saya sulit karena dalam listening itu yang bicara langsung native speaker dan saya sendiri kurang dalam fasilitas untuk berlatih di rumah karena tidak punya media elektronik, seperti radio, tape atau TV. Itu kan membutuhkan setiap hari latihan. Dan saya kurang dengan fasilitas untuk latihan itu.

Pewawancara : Kalau nonton films? Films berbahasa Inggris maksudnya?

Mahasiswa P2 : Di bioskop, jarang sekali. Sedang kalau di TV, ya menonton juga kalau sedang main ke rumah teman atau rumah saudara yang ada TVnya.

(Translation)

Student P2 : Listening is difficult for me because in listening the speaker is a native speaker and I lack facilities for practice at home because I don't have any electronic media, like radio, tape recorder, or television. Listening needs practice every day. And, I don't have enough facilities to practice.

Interviewer : What about watching films? I mean, films in English?

Student P2 : In movies, very rare. About films on TV, I watch them when I am visiting a relative or a friend who has a TV set.

In short, to improve listening skills, the respondents reported that they used a number of strategies, such as listening and transcribing English songs, watching English films on television or in movies, and listening to English radio broadcasts. Unfortunately, only one item in the SILL (item 15) deals with such strategies. The item says *I watch TV shows spoken in English or go to movies spoken in English*. The quantitative finding indicates a high frequency of use of this strategy since the computed mean score of use was 3.84 as described in Chapter Six.

## 10.6 Strategies in Developing Writing Skills

The students reported that they started learning writing skills by writing simple matters, such as daily activities, experiences, and hobbies. Even, student

M1 explained that she also often wrote short stories although at first she wrote them in Indonesian and then she translated them into English. She described as follows,

- Mahasiswa M1 : Saya itu senengnya berkhayal gitu, dan itu saya tulis. Cerita gitu.  
Pewawancara : Oh ngarang cerita, berupa cerpen begitu?  
Mahasiswa M1 : Ya, berupa cerpen.  
Pewawancara : Sering melakukan itu?  
Mahasiswa M1 : Ya, cuma seringnya itu dalam bahasa Indonesia.  
Pewawancara : Kalau yang mengarang dalam bahasa Inggris?  
Mahasiswa M1 : Ya itu yang saya terjemahkan. Jadi ngarangnya ceritanya dalam bahasa Indonesia dulu, baru saya terjemahkan.

(Translation)

- Student M1 : I like imagining something. And I write it. A story.  
Interviewer : Oh, you write a story. A short story?  
Student M1 : Yes. In the form of a short story.  
Interviewer : How often?  
Student M1 : Yes, but often in Indonesian.  
Interviewer : What about writing in English?  
Student M1 : Yeah, I translate it. So I first write the story in Indonesian, then I translate it.

The newly learned words and grammatical points are found to be useful to improve writing skills. Student G3, for example, reported that when writing she tried to use words she had recently learned and to apply grammatical rules she had newly learned. Similarly, student G2 stated that she liked using synonyms and words that were not generally used. She felt she had made progress when she could do it.

- Pewawancara : Bagaimana cara Anda dalam meningkatkan kemampuan mengarang?  
Mahasiswa G2 : Mempergunakan kata-kata yang artinya sama tapi bentuknya berbeda. Juga, saya suka menggunakan kata-kata yang nggak umum dipakai orang. Yang unik gitu. Saya suka sesuatu yang unik dan saya akan mengingat-ingat terus. Dan itu menjadi nilai tambah.  
Pewawancara : Jadi bereksperimen dengan kata-kata yang jarang dipakai orang?  
Mahasiswa G2 : Ya. Jadi kalau saya mendapatkan kata baru yang aneh, saya pakai terus sekalian.

(Translation)

- Interviewer : What do you do to improve your writing skills?  
Student G2 : Use words that have a similar meaning, but different forms. Also, I like using words that are not generally used by others. Unique words. I like something unique and I will always remember it. That becomes an advantage.  
Interviewer : So you like experimenting with new rarely used words?  
Student G2 : Yes. So when I find new words that are strange to me, I use them right away.

When stuck due to limited vocabulary mastery, for example, referring to a dictionary is a reported strategy, with the bilingual (Indonesian-English) dictionary being used more often than the monolingual (English-English) one. This is understandable because the problem is actually finding an English word for an Indonesian one. Alternatively, asking friends or lecturers for help was also done. These strategies are used particularly when they have enough time to do so. Student G3 stated that prior to looking up a dictionary, she tried to define the words she did not know or underlined the part she was not sure about in her writing.

Pewawancara : Kalau dalam mengarang. Pada saat mengarang terbentur pada satu kata yang tidak tahu bahasa Inggrisnya. Apa yang Anda lakukan?

Mahasiswa G3 : Pakai definisinya.

Pewawancara : Maksudnya ganti ke dalam bahasa Indonesia?

Mahasiswa G3 : Nggak, maksud saya saya jelaskan, tetap dalam bahasa Inggris.

Pewawancara : Ada langkah-langkah tertentu nggak yang Anda lakukan untuk menunjukkan bahwa Anda ragu terhadap bagian itu?

Mahasiswa G3 : Kalau masih dalam naskah ya, bagian itu saya garis bawah dulu, kemudian saya cari benar-benar, saya cek di dictionary.

(Translation)

Interviewer : In the case of writing, when you are writing, but then stuck for a word you don't know in English, what do you do?

Student G3 : Use the definition.

Interviewer : Do you mean you change into Indonesian?

Student G3 : No. I mean I explain it, still in English.

Interviewer : Do you do something to indicate that you are not sure about that part?

Student G3 : If it is still a draft, I underline that part, and then I look for it. I check in a dictionary.

Similarly, student M3 explained that she used a dictionary as a final resource. When she was stuck in writing, she tried to describe the word so that the reader still understood what she meant.

Mahasiswa M3 : Saya berusaha menjabarkan, berusaha menjabarkan kata yang saya tidak ngerti itu sampai kira-kira yang membaca tulisan saya itu ngerti.

Pewawancara : Tidak membuka kamus?

Mahasiswa M3 : Saya jarang membuka kamus, males masalahnya.

Pewawancara : Kalau begitu kapan pakai kamus itu?

Mahasiswa M3 : Pakai kamus, bila sudah mentok sekali, gitu lo. Kalau sudah apa, itu nggak ketemu-ketemu, udah buka kamus.

(Translation)

Student M3 : I try to describe, try to describe the word that I don't know so that the reader will understand what I mean.

- Interviewer : You don't open a dictionary?  
Student M3 : I seldom open a dictionary because I am lazy to do it.  
Interviewer : So, when do you use a dictionary then?  
Student M3 : Use a dictionary, only if I am completely stuck. In that case, when I can't find the word, eventually I open a dictionary

The strategies reported by students G3 and M3 above are covered in the SILL, in item 29, *If I can't think of an English word, I use a word or phrase that means the same thing*. The quantitative analysis found that this strategy was used at a high frequency with a mean score of 3.59 as reported in Chapter Six.

Student G1 reported one strategy that was more sophisticated than simply using a dictionary. He described he liked playing with words when writing on a computer. He tried to use several words and checked using the thesaurus menu to see whether he used the words appropriately and whether he spelled them correctly.

On other occasions, however, when asking friends or lecturers or looking up a dictionary was considered to take too much time or was not allowed such as in an examination, two respondents mentioned that they used brackets to indicate the word or phrase they were not certain about. Student P2, for example, described what he did as follows,

Mahasiswa P2 : Ya kalau hari-hari biasa kalau dalam kelas gitu, ya tanya sama teman atau dosen. Tapi kalau waktu ujian, itu saya beri tanda kurung lalu tulis dalam bahasa Indonesia. Sesampai di rumah, saya buka kamus gitu.

(Translation)

Student P2 : If it is during regular daily classes, I ask friends or the lecturer. But, if it is in an examination, I put brackets and write it in Indonesian. Then, when I get home, I look up a dictionary.

Student M1 reported that in such a case, she also used brackets, but wrote the explanation in English, instead of Indonesian.

Once a piece of writing is produced, it is still considered as a draft. Student G1, for example, explained that sometimes he asked his friends for comments or to correct any mistakes. However, he admitted that it was hard to get the comments from friends because, according to him, they thought that his work must have been good in all aspects since he was the best student in the class.

Alternatively, he read it over and over to check any mistakes. Student G2, on the other hand, stated that she generally looked for correction from the lecturer. Moreover, the correction she pursued dealt with grammar.

Pewawancara : Kalau sudah selesai menulis, apakah Anda meminta masukan dari orang lain tentang tulisan Anda itu?

Mahasiswa G2 : Tata bahasanya saja. Yang lain nggak. Karena kelemahan saya di tata bahasa.

Pewawancara : Biasanya kalau minta masukan itu ke siapa?

Mahasiswa G2 : Dosen. Karena untuk dalam hal menulis itu, yang saya ajak bicara itu paling nggak harus mengerti apa yang saya maksudkan. Supaya dia memberi masukannya itu juga sesuai dengan yang apa saya inginkan. Karena kadang-kadang kalau tanya sama teman itu, saya maunya ke sana, dia memberitahunya ke sini, gitu.

(Translation)

Interviewer : When you finish writing, do you seek comments from others about your writing?

Student G2 : Only the grammar. Not the others. Because my weakness is in grammar.

Interviewer : From whom do you usually seek comments?

Student G2 : Lecturer, because in the case of writing, the person whom I talk to should at least understand what I mean so that he can give comments like what I want. Because sometimes when I ask comments from a friend, what I want to say is this, but he tells me a different thing.

In summary, several strategies are reported to develop writing skills. These include translating Indonesian short stories into English, using newly acquired words, applying newly learned grammar, consulting a dictionary, asking friends or lecturers, using synonyms, using explanations in English, using explanations in Indonesian, and asking others to correct mistakes. Of these reported strategies, such strategies as translating stories from the first language into English and consulting a dictionary are not included in the 50 item strategies of the SILL. Moreover, in regard to the use of *asking others to correct mistakes*, the SILL measures the use of this strategy in speaking only as represented by item 46 *I ask English speakers to correct me when I talk*.

### 10.7 Strategies in Developing Speaking Skills

A number of strategies are listed from the interview sessions, some of which are covered in the SILL, while others are not. Item 47 of the SILL, for example, says *I practice English with other students*. This turns out to be a common strategy reported in the interviews as all of the respondents mentioned

that they practiced speaking English with their friends in order to improve their speaking skills. In some cases, an invitation to use English was clearly offered to make an agreement that every one involved was willing to speak English. Student M1 described how she started the conversation in English as follows,

Pewawancara : Dalam berlatih berbicara dengan teman itu, apakah Anda lebih berinisiatif untuk memulai atau teman yang lebih sering?

Mahasiswa M1 : Sama-sama saja Pak. Jadi biasa saja siapa yang memulai dulu. Biasanya sih kalau saya yang memulai saya bilang "In English yuk". Takutnya kita sudah mulai dengan bahasa Inggris, dia nggak mau.

(Translation)

Interviewer : When practicing speaking English with friends, is it you or your friends who initiate the talk more?

Student M1 : Just the same, Sir. So, it doesn't matter who starts first. Usually if I start it, I say "let's speak in English". I am just afraid that when I have spoken English, it turns out that he or she doesn't want to.

The excerpt above provides a clear picture of how student M1 employed the strategy item 14 of the SILL, which says *I start conversations in English*. That is, she intentionally asks her friends to speak English.

Moreover, there seems to be a criterion applied in selecting which friends are to use English. Student M2, for example, mentioned that he spoke English only to friends of the same level to develop confidence and avoid feeling inferior. He stated,

Mahasiswa M2 : Saya cari teman yang satu angkatan dengan saya. Yang selevel, yang sama-sama belum begitu bisa. Soalnya kalau saya memilih lawan bicara yang tingkatannya di atas saya, saya akan down duluan. Kan kalau cari yang selevel kan, kurang percaya dirinya sama gitu.

(Translation)

Student M2 : I look for friends of the same generation. Of the same level, who are also not very proficient. Because if I choose those whose level is higher than mine, I will feel inferior. But, when I find those of the same level, we all have the same confidence level.

However, not all respondents agree to use English for all topics. Student P1 stated that he spoke English with his friends only when he discussed academic matters. Otherwise, he preferred Indonesian.

Pewawancara : Kadang ada orang yang merasa aneh kalau harus berbicara dengan bahasa asing. Apakah Anda juga merasa begitu?

- Mahasiswa P1 : Ya, ya juga.  
 Pewawancara : Merasa bagaimana?  
 Mahasiswa P1 : Ya begitu. Makanya hanya kalau untuk tugas-tugas saja. Tapi kalau hal-hal yang tidak ada kaitannya, misalnya ngomongin tentang negara-negara penghasil apa gitu, ngapain pakai bahasa Inggris.  
 Pewawancara : Jadi kalau nggak ada kaitannya dengan keperluan akademis, Anda merasa nggak perlu pakai bahasa Inggris?  
 Mahasiswa P1 : Nggak perlu. Kalau perlunya cuma mengisi waktu luang, ya bahasa Indonesia saja.

## (Translation)

- Interviewer : Sometimes there people who feel strange when they have to speak a foreign language. Do you think so?  
 Student P1 : Yes. Yes.  
 Interviewer : What do you think?  
 Student P1 : Like that. That is why, only if it is for assignments. But, if it is about things unrelated to assignments, for example, talking about what countries produce what, why should that be in English.  
 Interviewer : So, if it has nothing to do with academic purposes, you think it is not necessary to speak English?  
 Student P1 : Not necessary. If it is only for killing time, better in Indonesian.

In addition to practicing with friends, student G2 described that she always tried to speak English with lecturers. Even, self-talk was also reported as a strategy to improve her speaking skills.

- Pewawancara : Untuk meningkatkan kemampuan berbicara, Anda mengajak ngomong siapa?  
 Mahasiswa G2 : Dosen. Dan setiap ngomong dengan dosen, saya selalu berusaha dalam bahasa Inggris.  
 Pewawancara : Dengan teman bagaimana?  
 Mahasiswa G2 : Ya juga. Teman-teman di conversation club, karena saya suka memaksa mereka untuk ngomong bahasa Inggris.  
 Pewawancara : Pernahkah juga berbicara dengan diri sendiri, misalnya di depan cermin gitu?  
 Mahasiswa G2 : Ya, tapi bukan di depan cermin. Biasanya pas lagi masak. Kalau masak, karena saya biasa ngomong pada diri sendiri, saya mengatakan "I need this, this and this. Now I have to do this, this, this" dan seterusnya. Pokoknya juga kalau sedang melakukan kayak bersih-bersih.

## (Translation)

- Interviewer : To improve your speaking skills, whom do you speak with?  
 Student G2 : Lecturers. Every time I speak with a lecturer, I always try to use English.  
 Interviewer : What about with friends?  
 Student G2 : Also yes. Friends in the coversation club because I like asking them to speak English.  
 Interviewer : Have you ever spoken English to yourself, for example, in front of a mirror?  
 Student G2 : Yes, but not in front of a mirror. Usually I do that when I am cooking. When cooking, because I like talking to myself, I say "I need this, this, and this. Now I have to do this, this, this" and so on. Also when I am doing some cleaning work.

Moreover, G3 student reported that she also looked for English speaking tourists to practice her English. This is a manifestation of the use of item 35 of the SILL, which says *I look for people I can talk to in English*. The quantitative analysis of the use of this strategy was high with a mean score of 3.54 as presented in Chapter Six.

One aspect of speaking skills is pronunciation and the respondents reported several strategies to improve their pronunciation. Student M2 described his strategies as follows,

- Mahasiswa M2 : Dulu saya senang beli kaset lagu-lagu bahasa Inggris. Setelah itu kan mempraktekkannya. Saya cocokkan dengan lafadz, lafadz yang mereka ucapkan dengan di teks. Saya dulu suka menghafal lagu. Menghafal lagu itu kan pronunciationnya harus sama dengan yang di lagu. Kadang begitu. Kadang juga, melihat TV, TV yang film-film bahasa Inggris. Nah, di situ kadang menirukan kata-kata tertentu yang diucapkan oleh tokoh dalam film itu. Nah, biasa begitu Mas.
- Pewawancara : Bagaimana dengan membaca keras, bukan untuk memahami teks tapi untuk melatih pelafalan?
- Mahasiswa M2 : Pada awalnya sih begitu Mas, waktu masih duduk di semester I, II itu saya sering membaca keras. Tapi akhir-akhir ini kurang sudah.
- Pewawancara : Anda merasa efektif nggak cara seperti itu?
- Mahasiswa M2 : Ya, berguna sekali. Apa lagi kalau direkam Mas. Jadi kita bisa mendengarkan lagi. Kan tahu kesalahan-kesalahannya itu.

(Translation)

- Student M2 : I used to enjoy buying cassettes of English songs. I then practice them. I check the pronunciation with the text. I used to enjoy memorising songs. When memorising songs, the pronunciation should be the same as that of the singer. Somnetimes I do that. Sometimes I watch TV, TV with English films. When watching I sometimes imitate a few words spoken by the characters. It's usual to do that.
- Interviewer : What about reading aloud, not for comprehending, but for improving pronunciation?
- Student M2 : In the beginning, yes. When I was in semester I, II, I often read loudly. But, I rarely do it lately.
- Interviewer : Do you think that' effective?
- Student M2 : Yes, very useful. Especially when it is recorded. So we can listen to it again. We can know the mistakes.

The excerpt above shows the use of three strategies: listening to and imitating English songs, watching TV programs and imitating some expressions, and reading aloud. Of these strategies, only watching TV programs is included in the SILL. That is item 15, which says *I watch English language TV shows spoken in English or go to movies spoken in English*.

Another strategy being reported to improve pronunciation is by practicing the sounds of new words several times. Such a strategy is represented in two items in the SILL: item 10, which says *I say or write English words several times* and item 12, which says *I practice the sounds of English*.

When there was a communication breakdown due to a difficulty in finding an English word, the strategies reported were:

- using different phrases with the same meaning;
- inserting an Indonesian word;
- finding another word having a closest meaning;
- using a definition;
- using gestures, especially when talking with foreigners who do not speak Indonesian;
- ask what the English word is for the word the speaker does not know.

In regard with the strategies in the SILL, two of the SILL's compensation strategies are reported in the interviews. The first one is item 24, *When I can't think of a word during a conversation in English, I use gestures* and the other one is item 29, *If I can't think of an English word, I use a word or phrase that means the same thing*. The latter strategy is manifested in the use of phrases, definitions, or synonyms of the originally intended words. The other strategies, including inserting a word from the first language and asking others the English version for the word that the speaker does not know are not covered in the SILL.

### 10.8 Summary of the Findings

The students are found to be motivated more instrumentally than integratively in their attempts to learn English. Such purposes as to be English teachers and to work in foreign companies are the major reasons for them to learn English. Interest in foreign languages, which is an indicator of integrative motivation, also stands as a reason for learning English among the good learners. Good memory and courage to practice using English are reported as the good characteristics for learning.

A clear distinction in the steps of learning grammar is found between the good learners and the weaker learners. The former group learns a grammatical rule by analysing sample sentences, then constructing the rules, confirming them, doing the exercises, and applying the rules in speaking or writing. The other groups of students, on the other hand, learn this by understanding the rules, examining how the rules are applied in sentences, and doing the exercises.

Four of the SILL strategies emerge in the students' reports of their learning new vocabulary items. These strategies are making guesses about unfamiliar words, looking for similar words in first language, using words in sentences, and making a mental picture to remember new words. The strategy of looking for similar words in first language is inferred from the report that the students use bilingual dictionaries to understand the meaning of new words.

Skimming is found to be a strategy in reading, but the students use this strategy for different purposes. The good and moderate students use such a strategy for picking up the general idea of the reading text, whereas the poor students use it for pinpointing the difficult words. The former students also report that they make guesses to understand the meaning of an unfamiliar word from its sentential context. In other words, they do not look up every unknown word. The latter group, on the other hand, report that they mark every difficult word in the text and check it in the dictionary.

To improve listening skills, the reported strategies include listening and transcribing songs, watching English films, and listening to radio broadcasts. Of these strategies, only one is included in the SILL, that is, watching TV shows or going to movies spoken in English.

For writing skills, the reported strategies are translating Indonesian stories into English, using newly acquired words, and using newly learned grammar. When stuck, due to limited vocabulary mastery, for example, the strategies employed can include consulting a dictionary, using synonyms, using explanation in English, using explanation in first language, or asking friends or lecturers. Asking for correction from others is also a reported strategy once the draft is completed.

Finally, several strategies are also reported for improving speaking skills. The most common one is practising English with friends. In addition, trying to use English when speaking with lecturers all the time is also a reported strategy. Looking for people to talk to in English such as tourists is also done to develop speaking skills. Self-talk is even also used. To improve pronunciation, students used such strategies as imitating English songs or expressions from TV programs and reading aloud. Lastly, when there is a problem when talking, the reported strategies include using synonyms, description or definition, gestures, first language or asking the other person about the word.

The next chapter is devoted to the discussion of all of the findings concerning both quantitative and qualitative data as already reported in Chapters Six to Ten.

## Chapter Eleven

### DISCUSSION OF THE FINDINGS

This chapter is devoted to the discussion of findings, presented in Chapters Six to Ten. This discussion explores the position of these findings relative to both the available theories and previous research findings and it contains four major sections. The first section deals with strategies in learning English by Indonesian learners; it consists of three subsections: frequency of learning strategy use, intercorrelation of strategy categories, and variation of strategy use in relation to difference of course status. The other three sections are individual differences and learning strategies, learning strategies and proficiency, and protocol analysis. A summary of the discussion concludes this chapter.

#### 11.1 Learning Strategies by Indonesian Learners of English

##### *11.1.1 Frequency of Use of Learning Strategies*

As described in Chapter Six, the present study found that learners of English as a foreign language in Indonesian universities are moderate users of the nominated language learning strategies. This is indicated in the mean score of the overall strategy use of these strategies (mean 3.34) with compensation being used the least frequently (mean 3.07) and metacognitive strategies being used the most frequently (mean 3.81). This finding is not surprising as several studies on learning strategies carried out around the world that employed the SILL as an instrument for data collection obtained similar results. LoCastro (1994) found an average use of learning strategies of 2.94, suggesting a medium level of use, by Japanese learners of English with means of the six strategy categories ranging from 2.55 to 3.27. Park (1997) also reported a medium frequency level of use with means between 2.91 and 3.50 by Korean university students learning English. Indian college students were also found to use English learning strategies with

high to moderate frequency (Sheorey, 1999). A high frequency of use was found from students at Adult Migrant Education Service (AMES), Australia, who learn English as a second language, with social strategies being the highest (mean 3.82) and memory strategies being the lowest (mean 3.12) (Lunt, 2000). In a context of learning a foreign language other than English, Oxford, Park-Oh, Ito and Sumrall (1993) found that the use of learning strategies by American students learning Japanese through satellite programs was at the medium level. In this study the frequencies of use were found to range between 2.54 for memory strategies and 3.02 for cognitive strategies. Learners of Japanese and French in a Singaporean university were also found to use strategies at the medium frequency range with a mean of 2.93 (Wharton, 2000). An exhaustive review of findings of research dealing with the frequency of use of learning strategies measured by the SILL can be found in Oxford and Burry-Stock (1995) and Bedell and Oxford (1996).

As far as the strategy categories are concerned, the present study resulted in the interesting finding that the indirect strategies including metacognitive, affective, and social strategies were used more extensively than the direct strategies that cover memory, cognitive, and compensation strategies. This is interesting because the indirect strategies are supportive in nature, that is, they "provide indirect support for language learning through focussing, planning, evaluating, seeking opportunities, controlling anxiety, increasing cooperation and empathy and other means" (Oxford 1990a, p. 151). Although it might be an overgeneralisation, the less frequent use of the direct strategies rather than the indirect strategies may stand as a possible explanation for the poor results of English learning by Indonesian students. Thus, this finding implies that the learners still require more training in the use of direct strategies so that the employment of such strategies can be made optimal.

The necessity of such training for these particular groups of students is felt to be even stronger due to the finding that compensation strategies are used at the lowest frequency. Although the lowest use of compensation strategies may be interpreted as indicating that the students do not perceive any breakdowns to

occur when communicating, a more plausible explanation is that they find it difficult to overcome problems when there are communication breakdowns.

The high use of social strategies seems to relate to the characteristic of the subjects, about two-thirds of whom are majoring in English. This obliges them to engage in or create opportunities that enable them to practice and use English in communication because this communicative ability is the primary observable indicator of their learning success. Such an interpretation is warranted when the strategies of the students who learn English as a major and the strategies of those who learn English as a minor course are compared as discussed in 11.1.3. As presented in Chapter Seven, the former group of learners was found to exhibit strategies that deal with active initiation of communication more frequently than did the latter group of learners. Such strategies as starting conversations in English, looking for people to talk to in English, and practicing English with other students are just a few examples of the strategies reported as being used more frequently by the students with English as a major.

Another point that is worth noting concerns the use of memorisation as a learning strategy. Politzer and McGroarty (1985) assert that memorisation is a strongly preferred strategy among Asian students. This assertion is supported by LoCastro's (1994) finding that the main learning strategy used by Japanese learners of English was memorisation. The findings of this study, however, weaken such an assertion since it turns out that the use of memory strategy is ranked the second lowest. Lengkanawati (1997) found an even weaker use of memory strategies, as these were used at the lowest rank by English learners at IKIP Bandung, Indonesia. Lunt (2000) also found memory strategies to be used at the lowest frequency level by students at AMES, half of whom were from Asian origins such as Chinese, Khmer, and Vietnamese. Studying vocabulary learning strategies among non-English major learners in China, Gu and Johnson (1996) also found that Chinese learners of English generally did not rely on memorisation in their vocabulary learning. Instead, the researchers found that the learners used meaning-oriented strategies more frequently. Research reports in other parts of Asia suggest that memory strategy explains 3.3% of learning strategy variances by

learners of English in China (Oxford & Burry-Stock, 1995). A factor analysis applied in the present study revealed that 4.1% of the total variance of learning strategies was accounted for by the memory strategies.

As described in Chapter Three on factors affecting strategy choice, one probable cause that leads to the different findings regarding the use of memory strategies by Asian learners is the breadth of the category of Asian culture. As a result, it is actually difficult, if not impossible, to draw a single picture of the culture of Asia since there are many nations and even more cultures in the continent. In Indonesia alone, for example, there are around 500 subcultures as indicated by the fact that around 500 local languages with even thousands of dialectical varieties are spoken as first languages (Nababan, 1982). Consequently, it can be misleading to claim that Asians are in favour of memory strategies more than other types of strategies, particularly if the claim is based on one cultural origin only.

In terms of the use of individual strategy in the memory category, *using flashcards to remember new words* is a strategy with the lowest frequency of use. In fact, the mean score for the use of this strategy (mean 2.16) was in the low frequency range. On the other hand, *making a mental picture of a situation where words are used* is a memory strategy with the highest frequency of use. The mean score for the use of this strategy (mean 3.55) was within the high frequency level. The low use of flashcards as concrete learning aids and the high use of creating mental pictures seems to associate with the age of the learners involved in the study. As mentioned in the section describing the characteristics of the subjects participating in the study, the subjects were young adult learners, the majority of whom were between 19 and 23 years of age. Oxford (1993) claimed age as a significant factor affecting variation in the strategy use. She stated that learners of different ages use different learning strategies with older learners employing more sophisticated strategies. Likewise, when discussing the advantages of older learners over younger learners in learning a foreign or a second language, Oxford and Ehrman (1993) pointed out that older learners have the advantage of abstract

thinking. The ability to make a mental picture of a situation where words are used is a manifestation of the ability to think in an abstract way.

Within the cognitive strategy category, the use of *writing notes, letters, reports, messages etc. in English* as a learning strategy was the lowest although the mean score for its use (mean 2.71) was still within the medium range. This seems to be associated with the whole system of English teaching in Indonesia. In the current English curriculum of secondary schools, the 1994 curriculum, the order of priority of language skills is reading, listening, speaking, and writing (Huda, 1992). In the earlier curricula, writing skills were the third priority coming after listening skills. As such, writing skills seem to be neglected in English teaching in Indonesia. As a result, the students are not accustomed to putting ideas on paper. The situation remains unchanged when the students are at university level. That is why it is not surprising that writing notes, letters, or messages in English is not used very much as a learning strategy by Indonesian learners of English.

The use of English TV programs and movies for learning is very popular and this cognitive strategy was used at the highest level of frequency (mean 3.84). Lengkanawati (1997) obtained a similar finding, that is, the students participating in her study reported using this strategy very often. Moreover, Lunt (2000) highlighted the effectiveness of this strategy as she found that the learners of English at AMES, Australia, reported that they improved their listening skills a lot by watching TV or listening to radio programs such as advertisements, news broadcasts, and songs. However, it should be noted that the use of this strategy is related to the availability of such electronic media. An interview carried out with student P2, as alluded to in Chapter Ten, revealed that he found it difficult to improve his listening skills because he lacked such facilities as tape recorders, radios, or a television. Therefore, he watched TV programs only when he went to visit a friend or a relative who had a TV set.

Among strategies within the compensation category, an interesting finding was obtained. On the one hand, the students were found to use *reading without looking up every unknown word* strategy at a nearly low level (mean 2.51). This

suggests that they tend to look up nearly every unknown word when they are reading. On the other hand, the use of *making guesses to understand unfamiliar words* was found to be almost high (mean 3.44). An interpretation of these seemingly contradictory findings is that the two compensatory strategies above do not stand independently. Rather, they are related to one another, in the sense that the former is used when the latter fails. This interpretation is supported by the data obtained from the interview sessions as presented in Chapter Ten. Only one of the three supposedly poor students reported that he consulted a dictionary right away every time he found a difficult word. The remaining students - eight students - reported that they generally tried to predict the meaning of the difficult words from their sentential contexts and that they referred to a dictionary as the last resource.

The interpretation that looking up a dictionary for unfamiliar words is probably done after guessing attempts fail is also drawn from a finding that concerns the use of synonyms as a strategy when dealing with a problem in using English. This strategy was reported to be a compensation strategy with the highest frequency of use (mean 3.59). This suggests that to overcome the problem of finding a word in English, the students do not tend to refer to a dictionary immediately. This tendency probably also applies when compensating for a difficult word in reading activities.

The finding that the students made guesses in order to understand unfamiliar words when they were reading accords with the characteristics of good readers. One of the strategies that good second/foreign language readers tend to use as they read is that they "rely on contextual clues (preceding or following context), vocabulary analysis, and grammar to interpret unknown words" (Cohen, 1991, p. 116). Earlier, Goodman (1976) considered reading to be a "psycholinguistic guessing game" (p. 498) in the sense that meaning is constructed by hypotheses or predictions based on both linguistic clues in the text and prior knowledge of the reader about the topic of the text at hand.

With regard to the strategies within the metacognitive category, *making learning plans* is a strategy with the lowest frequency of use (mean 3.10) and

*thinking about progress in learning* the highest (mean 4.22). It should be noted, however, that the mean score of use of *making learning plans* is still in the medium range. These findings suggest that the students involved in the study to an extent have acquired some characteristics of good second/foreign language learners. Stern (1983) points out that one of the four basic sets of strategies in learning a second/foreign language is an active planning strategy. That is, learners should be active in formulating their own learning goals, participating in learning processes, and monitoring the development they have made. Earlier, Stern (1975) mentioned that good language learners are critical of the progress they make in learning a new language.

Among the six affective strategies, *writing down feelings in a diary* is a strategy used at the lowest frequency and the mean score for the use of this strategy is close to the low range (mean 2.55). This finding is in line with that regarding the use of a cognitive strategy *writing notes, letters, reports, messages etc. in English* as discussed earlier. Again, this finding suggests that the students may find it difficult to express ideas in writing. Mukminatien (1997) found that Indonesian students were hesitant about writing in English although they were competent enough in structure.

*Encouraging oneself to speak*, on the other hand, is an affective strategy used at the highest frequency (mean 3.68). This indicates that generally the students are not inhibited. Rubin (1975) mentions that good language learners are not inhibited, in the sense that they are willing to initiate conversations and take the risk of producing possible mistakes in communicating. The high use of the self-encouragement strategy suggests that the students possess a characteristic of good language learners. The finding on the high use of a social strategy *asking the interlocutor to slow down or repeat* (mean 3.91) supports the interpretation above. As such, the students are willing to start English conversations and to ask the interlocutors to repeat or slow down when the communicative situation demands them to do so to ensure that every one involved in the conversation understands what others are saying.

### 11.1.2 Intercorrelation of Strategy Categories

The intercorrelation of the six strategy categories - memory, cognitive, compensation, metacognitive, affective, and social strategies - revealed correlation coefficients ranging from very low (below .30) to moderate (.50 to .70) with the majority of coefficients being low (.30 to .50). The correlation with the lowest coefficient was between compensation strategies and social strategies ( $r = .235, p < .01$ ) and that with the highest coefficient was between metacognitive strategies and social strategies ( $r = .668, p < .01$ ).

Despite the fact that the correlation sizes vary from low to moderate, all of the coefficients were above the critical limit for significance at .01 level. Thus, the study rejected the null hypothesis, which says that the six strategy categories are not correlated with one another. In other words, it was found that the six categories of learning strategies correlated significantly and positively with one another. This means that the probability that the correlations are due to chance is less than one out of a hundred cases.

This finding implies that a change in the frequency for the use of one strategy category tends to be followed by a similar change in the frequency for the use of the other five strategy categories. The magnitude of the change in these five strategy categories depends on the size of their relationship with the first strategy category. When the use of cognitive strategies increases, for example, the tendency is that the use of the other five strategy categories also increases, with increases in the use of memory, metacognitive, and social strategies being greater than increases in the use of affective and compensation strategies. These tendencies happen because the sizes of the relationships between cognitive strategies and memory, metacognitive, and social strategies are greater than the sizes of the relationship between cognitive strategies and affective and compensation strategies.

This finding was consistent with the findings of previous studies. Oxford and Ehrman (1995) correlated each category of the SILL strategies with the overall mean and found that the correlations were all significant at  $p < .0005$ , with the lowest coefficient being .66 for memory strategies and the highest being .81 for

cognitive strategies. They also found that the coefficients for the other four strategy categories were .80, .76, .74, and .67 for metacognitive, affective, social, and compensation strategies. In terms of the intercorrelations among the six strategy categories, moreover, they found that all of the correlation coefficients were significant with the highest coefficient being between cognitive and metacognitive strategies ( $r = .61$ ) and the lowest coefficient being between compensation and memory strategies ( $r = .35$ ).

Park (1997) came up with even stronger correlation coefficients. Correlating each strategy category with the overall strategy, he found that the lowest was .72 for memory and compensation strategies and the highest was .86 for cognitive strategies. With regard to the interrelationships among the six strategy categories, he found that the lowest was between memory and social strategies ( $r = .46$ ) and the highest was between affective and social strategies ( $r = .64$ ). Again, all of the correlation coefficients were found to be significant at .01 level.

The finding that the six strategy categories were significantly and positively correlated among themselves has a valuable implication for strategy training. The program administrators can expect that a training program focussing on a particular type of learning strategy may also result in an increase in the use of the other strategy categories. Thus, the proverb 'killing two birds with one stone' applies in this context. Ultimately, if learners are able to execute all learning strategy types effectively, they will become autonomous learners, that is, those who can take charge of their own learning (Holec, 1981). Technical guidelines about how to implement strategy training instruction are, however, beyond the scope of this thesis. Instead, they may be found in Dickinson (1987), Harris (1997), Oxford (1990b), and Willing (1989).

The close relation between learning strategies and learner autonomy has been emphasised by Wenden (1987), who states that one of the goals of the research on second/foreign language learning strategies is to promote learner autonomy. In another article, Wenden (1991) further maintains that autonomous learners acquire effective learning strategies. Thus, the acquisition of effective

strategies, which may be obtained through training and experience, is crucial for autonomous learning. Little as cited by Harris (1997) also stresses the relationship between learning strategies and learning autonomy as he says,

If the pursuit of learner autonomy requires that we focus explicitly on the strategic component of language learning and language use, the reverse should also be the case: focus on strategies should lead us to learner autonomy (p. 9).

### *11.1.3 Variation in Strategy Use in Association with Course Status*

The English learning strategy use is found to associate with the status of English being studied. The overall use of learning strategies by learners of English as a major and those of English as a minor course was significantly different ( $t = 3.726, p < .000$ ). In this case, the former group of learners reported a higher frequency of use than the latter, with means of 3.40 and 3.23 respectively. Two possible reasons may explain such a finding.

One is that the motivational level of the two groups of students may be different. The students majoring in English may exhibit a different level of motivation to learn English from their fellow learners of English as a minor course. This can be so because motivation in learning is influenced by the goals of learning (Gardner, 1985) and the two groups of students may have different goals of English learning as they have been inferred from their career choices. Oxford (1993) has ascertained, "More motivated students tend to use more strategies than less motivated students, and the particular reason for studying the language (motivational orientation, especially as related to career field) is important in the choice of strategies" (p. 180). In the present study, the two groups of students show different career orientations. While the students with English as a major will certainly use their English proficiency as a main skill for seeking jobs, the second group will use it as a complementary skill, in addition to their primary skill, accounting.

Earlier studies have provided empirical evidence that students with different career orientation use strategies to a different extent. In these studies,

career orientation is generally operationally defined as a university major. Oxford and Nyikos (1989), for example, found that students majoring in humanities/social science/education used two kinds of strategies - functional practice strategies and resourceful, independent strategies - more often than students with other majors. Similarly, Politzer and McGroarty (1985) found that students majoring in social science/humanities and those majoring in engineering/science performed significantly different learning behaviours, especially the behaviours employed during individual study. Ehrman and Oxford (1990), however, came to a different conclusion as they found that occupation did not explain differences in the use of learning strategies.

In regard to the role of motivation in language learning, Gardner (1985, p. 56) mentions, "Attitude and motivation are important because they determine the extent to which individuals will actively involve themselves in learning the language". Schulz (1991) also acknowledges that the more motivated the students are, the more input they seek and the more communicative interactions they are willing to engage in. Research findings support the notion of the significance of motivation in affecting learning strategy use (MacIntyre & Noels, 1996; Oxford & Ehrman, 1995; Oxford & Nyikos, 1989) with more motivated students employing learning strategies more frequently than less motivated students (Wharton, 2000)

Another finding of this study supports the interpretation that motivation may explain the difference in the learning strategies by the two groups of students. As discussed in section 11.3, attitude and motivational attributes turn out to be better predictors of learning strategies than language aptitude and personality traits.

The other possible explanation for the finding is the different settings of English learning for the two groups. Students of the first group learn in an English Department with the teaching-learning activities mostly carried out in English as the medium of instruction. The students are strongly recommended to use English when communicating with their peers as well as with the lecturers both inside and outside the classroom. Thus, the students get much exposure to the target language and there is a strong communicative demand from the environment. This setting to

an extent resembles a second language environment. The case, however, does not apply in the setting where students of the second group learn. This setting is a typical foreign language situation, where exposure to the target language and communicative demand are very limited.

Research available so far suggests that the differences between second language and foreign language settings bring about differences of strategy use, with learners in second language learning environments using strategies more frequently than those in foreign language environments (Wharton, 2000). More explicitly, Oxford and Ehrman (1995, p. 372) have pointed out that "second language learners, who are learning a language in an environment where the language is the means of daily communication, typically use more learning strategies than do foreign language learners, who are learning a language in an environment where that language is not the everyday means of communication". Green and Oxford (1995) have also mentioned that on the average the typical second language learners report frequent use of 3.7 of the six strategy groups, while the typical foreign language learners less than 1. The data from the present study show that the students with English as a major reported using two strategy categories at high frequency, whereas the students with English as a minor course reported using only one.

In terms of the strategy categories, the two groups of students were found to use compensation strategies at non-significantly different levels of frequency ( $t = -.272, p < .785$ ). In other words, the two groups of students reported using this strategy category to more or less the same extent, with mean scores of 3.07 for the students with English as a major and 3.09 for the students with English as a minor. This may imply that the former group of students faces the same problems in learning English as does the latter group of students. Consequently, non-significantly different strategies are employed to cope with the problems.

The use of the other five categories was found to be significantly different, with  $t$ -values of 1.797 ( $p < .073$ ), 4.055 ( $p < .000$ ), 3.187 ( $p < .002$ ), 2.267 ( $p < .024$ ), and 4.866 ( $p < .000$ ) for memory, cognitive, metacognitive, affective, and social strategies respectively. Out of these differences, the difference in the use of

memory strategies ( $t = 1.797, p < .073$ ) is the weakest and the difference in the use of social strategies ( $t = 4.866, p < .000$ ) was the strongest. Moreover, while the difference in the use of affective strategies ( $t = 2.267, p < .024$ ) was significant at .05 level, the differences in the use of cognitive strategies ( $t = 4.055, p < .000$ ), and metacognitive strategies ( $t = 3.187, p < .002$ ) are significant at .01 level. Again, the differences show that the students with English as a major reported higher use of these strategy categories than did the students with English as a minor course.

The finding of these differences supports an earlier study by Oxford and Nyikos (1989), who have demonstrated that the status of English - as either an elective or required course - is a significant factor that brings about differences in the use of learning strategies. In this study, the students who learned English because of their own preference (elective status) were found to use functional practice strategies and general study strategies more often than did the students who took it as a graduation requirement (required status).

The finding that the two groups of students used memory strategies at weakly significantly different levels of frequency implies that the use of memory strategies by the two groups is in fact not very much different. In some other studies, a significant difference of .10 level is even considered to be insignificant. As discussed in section 11.1.1, the students participating in the present study reported using memory strategies at the second lowest level of preference. The weak difference in the use of memory strategies in association with the status of the English course can be interpreted as indicating that both groups of students are not very much different in their preference for memory strategies. That is, they show lower preferences for this strategy category than for the other strategy categories, except compensation strategies.

On the other hand, the two groups of students exhibit the strongest difference in the use of social strategies. This strategy category is used at a high frequency by the students with English as a major (mean 3.61) and at a medium frequency by the students with English as a minor course (mean 3.30). The very strong difference implies that the former group of students employs social strategies very much more frequently than the latter group of students. This high

difference may be associated with the different situation of English learning that the two groups of students encounter. Ellis (1994) has claimed that students involved in classroom learning perform different social strategies than those involved in a more natural context of learning. The setting where the first group of students learns provides a more natural context than that where the second group of students learns. Students in the former group engage themselves in natural English communicative interactions outside the classroom much more frequently than do those in the latter group.

The higher use of social strategies by the students with English as a major is also explained when the use of strategies is compared at the individual strategy level. The students with English as a major are found to employ strategies that require them to use English more frequently than their counterparts with English as a minor. Thus, such strategies as *using new English words in different sentences, starting conversations in English, reading for pleasure in English, writing notes etc. in English, making summaries of information in English, practicing English with other students, and asking questions in English* were used significantly less often by the students with English as a minor. This seems to have something to do with the proficiency of the students in using the language for learning. Although the present study did not compare the two groups in terms of their proficiency level, the difference can possibly be inferred from the time the students spent for formal learning in the classroom. As mentioned in Chapter Five, the students with English as a minor learn English 5 hours a week in 6 teaching sessions, the students with English as a major learn it about 18-20 hours a week. This difference may result in a difference in English proficiency between the two groups. Consequently, they use learning strategies that demand them to use English actively at significantly different levels of frequency.

A claim has been made that more proficient learners use different strategies than do less proficient learners (Gardner & McIntyre, 1992). Some research has supported the claim (Green & Oxford, 1995; Oxford & Nyikos, 1989; Wharton, 2000). Earlier, Oxford and Crookall (1989) have also ascertained

that more proficient learners use a wider range of strategies in a number of situations, although the relationship of the two variables is not simple.

## 11.2 Individual Differences and Learning Strategies

As described earlier, thirteen variables - elaborated from attitude/motivation, language aptitude, and personality variables - were covered in the present study. A factor analysis was applied to these variables and it resulted in four factors, including anxiousness about English learning, attitude and learning orientation, language aptitude, and personality traits, which together explain about 64% of the total variance of individual differences. These four factors were treated as predictors of the use of learning strategies.

The finding as presented in Chapter Eight shows that the multiple correlation coefficient between the linear combination of the four factors above and learning strategies was .599. This suggests that about 36% of the variance of learning strategies were accounted for by the variance in the four factors. When the significance of the correlation was investigated, an F-value of 53.266 ( $p < .000$ ) was obtained suggesting that it was statistically significant. In other words, the data show a strong possibility that language aptitude, personality traits, and attitude/motivational constructs together affect significantly the use of learning strategies.

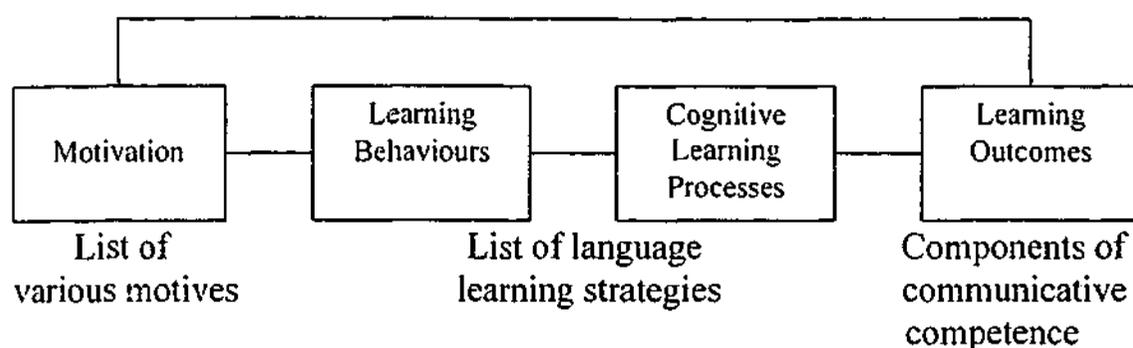
Consistent findings were obtained when further analyses were carried out to measure the predictability of each of the six strategy categories from the four factors of the predictor variables. The linear combination of the four factors explained total variances of 24%, 29%, 8%, 35%, 11%, and 23% of memory, cognitive, compensation, metacognitive, affective, and social strategies respectively.

Further analyses of the relative significance of each factor, however, revealed that only the factors of anxiety about learning English (factor 1) and attitude and learning orientation (factor 2), which were extracted from attitude/motivational attributes, were found to significantly correlate with learning strategy use. As presented in Chapter Eight, the attitude and learning orientation

(factor 2) was strongly predictive of the six strategy categories, since its predictive coefficients were all significant at .01 level. Similar results were obtained for the anxiousness about English learning (factor 1), except its relation with affective strategies. This factor was found to be able to predict the use of affective strategies with only a moderate power since its predictive coefficient was significant at .10 level ( $p < .094$ ).

Thus, in general the findings highlight the role of motivation in second/foreign language learning, a few of which have been discussed in section 11.1.2 above. Gardner (1985) defined motivation as "the combination of effort plus desire to achieve the goal of learning the language plus favourable attitudes toward learning the language" (p. 10). Root (1999) has claimed that the effects of motivation on learning are evident in three things, including learning perseverance, learning behaviours, and learning achievement. Several previous research studies have also demonstrated the significant role of motivation in predicting the use of learning strategies. Politzer and McGroarty (1985), for example, have asserted that the learner's goals in learning a new language apparently determine the use of learning strategies. Oxford and Nyikos (1989) have also found that expressed motivational level is the most powerful predictor of the learner's willingness to use a variety of strategies that range from formal rule-related practice strategies to conversational input elicitation strategies. In line with this, Gardner and McIntyre (1992) have attributed the differences in learning strategies to the differences in the degree of learning motivation. Recently, Wharton (2000), whose study dealt with learners of Japanese and French in Singapore, also found that the degree of motivation provided the most significant main effect on the use of learning strategies. Thus, in regard to the effect of attitude and motivation on the use of learning strategies, the finding of the present study agrees with what previous studies obtained. Dörnyei (1996) proposed a schematic relationship between motivation and learning strategies as well as learning outcomes as depicted in Figure 11.1.

Figure 11.1 Motivation-Learning Outcome Chain



Source: Dörnyei (1996, p. 79)

Furthermore, as described earlier, the attitude/motivational attributes were measured using the Attitude/Motivation Test Battery (AMTB) (Gardner et al., 1997) and consisted of nine measures derived from four categories, including integrativeness, motivation, language anxiety, and other attributes. These measures were attitudes toward native speakers of English, attitudes toward learning English, desire to learn English, English class anxiety, English use anxiety, interest in foreign languages, instrumental orientation, integrative orientation, and motivational intensity. Out of them, desire to learn English, which is a component of motivation, and interest in foreign languages, which is a component of integrativeness, were found to be the weakest predictors of learning strategies since the former was weakly connected to metacognitive strategies only and the latter was also weakly connected to compensation strategies only. In fact, these two variables fail to be significant predictors of overall learning strategies.

The other measures were significantly correlated with strategy categories, with integrative orientation and motivational intensity being equally the best predictors. Moreover, attitudes toward native speakers of English and attitudes toward learning English also showed equal importance to the prediction of learning strategies. The former was predictive of memory, cognitive, and compensation strategies, while the latter was predictive of cognitive, metacognitive, and social strategies. That is why, despite there being weak relationship between desire to learn English and interest in foreign languages and

compensation strategies, this finding supports the claim proposed by Gardner et al. (1997) that motivation plays a primary role in second language learning.

Gardner is the expert who grounds the distinction between integrative and instrumental motivation, although the distinction that he offered suffered criticisms in the last few years as it is perceived to be "somewhat false" (Oxford, 1996b, p. 3). Gardner and Lambert (1972) stated that a learner of a second or foreign language is said to be integratively motivated when he shows "a willingness or a desire to be like representative members of the other language community, and to become associated, at least vicariously, with that other community" (p. 14). On the contrary, a learner with instrumental motivation is characterised by his "desire to gain social recognition or economic advantages through knowledge of a foreign language" (p. 14). Of these types of motivation, Gardner and his colleagues have consistently contended that integrative motivation is a more powerful predictor of success in second language learning than is instrumental motivation (Clément, Smythe & Gardner, 1978; Gardner, 1985; Gardner & Lambert, 1972, Gardner & MacIntyre, 1993). Using learning strategies as the predicted variables, the present study seems to support Gardner's claim. That is, instrumental orientation was not found to be a significant predictor of the overall learning strategies although the subjects being involved in the study were learners of English as a foreign language. Further inspection of the predictive power of instrumental orientation indicated that it was a significant predictor of metacognitive and affective strategies only.

The low impact of instrumental motivation on learning strategies in this study may, again, be connected to the setting where the majority of the students are learning. Although the official status of English in Indonesia is a foreign language, so that it is not spoken for daily communication, two thirds of the students involved in the present study are learning English in English departments, where English is quite frequently used as a medium of communication among students and between students and lecturers. As such, the situation to some extent resembles a second language learning environment. There is a possibility then that the students develop some sort of integrative motivation.

It should be noted, however, that although instrumental orientation was not found to correlate with learning strategy use, this type of motivation occupies the students' reason for learning English more than integrative orientation as found from the protocol analysis, which is to be discussed in section 11.4.

As far as the variable of anxiety is concerned, the AMTB included two types: English class anxiety and English use anxiety, which contributed to factor 1, anxiousness about English learning. Despite Scovel's (1978) impression that research on foreign language anxiety suffers from ambiguities due to the complexity of the anxiety construct, Oxford (1990a) has stated, "A certain amount of anxiety sometimes helps learners to reach their peak performance levels, but too much anxiety blocks language learning" (p. 142). Williams (1991) agrees with this when suggesting that whether the effect of anxiety on learning a second/foreign language is facilitating or debilitating depends on its intensity, with a low anxiety state being facilitating and a high anxiety state being debilitating.

MacIntyre and Gardner (1989) correlated language anxiety with both the acquisition and production of French vocabulary measures. As they found that the variables under investigation were correlated, by referring to the three levels of language learning process - input, processing, and output - as proposed by Tobias (1986), they inferred that language anxiety correlated significantly with the input and output levels of French language learning. At the input level, anxiety causes attention deficits leading to poor initial processing of information. At the output level, moreover, anxiety oppresses the flow of retrieval process of previously learned information. Earlier, Young (1986) found that anxiety measures correlated significantly with measures of oral proficiency in a foreign language.

The present study has provided further evidence of the role of anxiety in language learning, particularly with regard to Tobias' (1986) second level - processing -, especially if the level is interpreted in terms of the learners' learning strategies. The two measures of anxiety turned out to be significant predictors of overall learning strategies with significance levels of  $p < .019$  for English class anxiety and  $p < .026$  for English use anxiety. This suggests that less anxious

learners tend to use learning strategies more frequently. On the contrary, high anxiety level is associated with low use of learning strategies.

When the role of these two types of anxiety was further investigated in terms of their effect on the use of each strategy category, however, interesting findings were revealed. English class anxiety was found to affect very strongly (significant at .01 level) the use of memory strategies and to affect weakly (significant at .10 level) the use of compensation, metacognitive, and social strategies. English use anxiety, moreover, was found to be associated very strongly with cognitive, and compensation strategies and strongly (significant at .05 level) with memory strategies, but it did not correlate with any of the indirect strategies - metacognitive, affective, and social strategies. The particularly interesting point is that neither English class anxiety nor English use anxiety affects the use of affective strategies. As a matter of fact, three of the six items of affective strategies deal directly with anxiety management. These items are 1) I try to relax whenever I feel afraid of using English, 2) I encourage myself to speak English even when I am afraid of making mistakes, and 3) I notice if I am tense or nervous when I am studying or using English. All of these three strategies were used at the high range of frequency with mean scores of use being 3.66, 3.68, and 3.51 respectively. This suggests that learners' awareness of their anxiety is not necessarily followed by their attempts to overcome such an affective state. Even if they manage to encourage themselves to learn or use the target language, the underlying reason for doing so is not the awareness of their anxiety. Probably it is learning orientations, either integrative or instrumental, that govern their anxiety lowering strategies. This interpretation was made since the study also found that both instrumental orientation and integrative orientation of English learning significantly affected the use of affective strategies with significance levels of  $p < .027$  and  $p < .044$  respectively.

Regarding the role of language aptitude, which happened to be factor 3 in this study, the finding shows that this factor is weakly connected (significant at .10 level) to the use of compensation and social strategies. The effects were found to be positive on compensation strategies and negative on social strategies. This

implies that students with higher language aptitude tend to use more frequent compensation strategies, but less frequent social strategies than do students with lower language aptitude. An earlier study (Oxford & Ehrman, 1995), on the contrary, indicated that compensation strategy use was linked with lower language aptitude. An interpretation they make is that low aptitude students are aware of their weaknesses in learning a new language so that they compensate with strategies such as guessing, making up new words and using synonyms. However, it should be noted that language aptitude and general intelligence share a common 45% variance as found by Wesche, Edwards, and Wells (1982). Earlier, Gardner and Lambert (1972) reported a variance of 16% shared by the two variables. Even Pimsleur considered intelligence as an important part of aptitude so that he includes verbal intelligence as a component of his Pimsleur Language Aptitude Battery (Pimsleur, 1966). Skehan (1989) ascertains, "It would seem therefore that intelligence and aptitude are related to one another, and that one can interpret language aptitude as consisting of specific components of intelligence which are especially relevant to learning situations" (p. 110).

If this relationship is considered, language aptitude should presumably correlate with the ability to engage in correct guessing or to create new words in a positive manner. In this regard, the present study, to a certain extent supports this presumption as language aptitude was found to significantly affect the use of compensation although the effect was considered weak. This finding agrees with Bialystok (1981), who considered the effect of language aptitude on strategy choice although she did not see it as being as influential as attitude.

That language aptitude correlated negatively with social strategies means that students with higher language aptitude tended to use fewer social strategies. On the contrary, those with lower language aptitude tended to use more social strategies. Again, this finding seems to be associated with the close relationship between language aptitude and intelligence. The substantial amount of the shared variance by language aptitude and intelligence suggests that learners with high language aptitude indicate that they possess high intelligence. Discussing the role of field dependence/independence as a cognitive style, Skehan (1989) mentioned

that field independence is in fact a "disguised measure" of intelligence (p. 115), so that learners with high intelligence tend to be field independent. As such, field-independent learners can probably be assumed to be those with high language aptitude. Skehan (1989) characterises field-dependent and field-independent individuals as follows,

Field-dependent individuals are thought to be person-oriented, interested in other people and sensitive to them, .... They are also thought to be outgoing and gregarious. In contrast, field-independent learners are more impersonal and detached, less sensitive and more aloof; they are cerebral and object-oriented (p. 111).

Theorising the relationship between field independence/dependence cognitive style and second language acquisition, Jamieson (1995) argues that field dependent persons have interpersonal orientation so that they are socially oriented and are apt to seek communicative activities. In other words, they tend to exercise more social strategies than the field-independent learners do.

This study's finding that language aptitude correlated with lower use of social strategies agrees with the close relationship between language aptitude and field-independence. The students with higher language aptitude are inclined to be field-independent so that they tend to be more self-oriented. As a result, developing interpersonal relations and communications with other learners does not interest them very much. This tendency is then manifested in the low use of such strategies as *I practice English with other students*, *I ask help from speakers of English*, and *I ask speakers of English to correct my mistakes when I talk*.

Previous research studies have also suggested a significant relationship between language aptitude and field-independence. Bialystok and Fröhlich (1978), for example, studied the effect of four predictor variables - language aptitude, attitude, learning strategy, and field independence - on classroom achievement in second language learning. Among the independent variables, they found that the correlation between language aptitude and field-independence was significant ( $r = .43, p < .01$ ). Ellis (1990) also found that there were significant correlations between aptitude measures of grammatical sensitivity, word memory

and sound discrimination, and field independence, with coefficients being around .30.

In the case of the relationship between personality and learning strategies, a common belief says that more successful language learners are those with outgoing, talkative personalities (McDonough, 1981). Individuals with these personal characteristics are referred to as extroverted. Earlier, Rubin (1975) mentioned that a good language learner is not inhibited. She describes a good language learner as willing to take the risk of possible mistakes they produce in communicating, to appear foolish when situation demands him/her to do so, and to live with a certain amount of uncertainty in their learning process.

Research studies, however, show some conflicting findings. Ehrman and Oxford (1990) reported that extroverts prefer social strategies as they like social contact, whereas introverts prefer metacognitive strategies. This finding is in line with Strong's (1983) claim that extroversion was an advantage for developing communicative skills. Another study (Ehrman & Oxford, 1989), on the contrary, found that extroverts preferred visualisation strategies more than did introverts. Introverts, on the other hand, reported more frequent use of strategies for searching for and communicating meaning. For this reason, some experts are doubtful about the role of personality in language learning. Although the relationship between extroversion and proficiency in a foreign language is widely held by teachers, researchers, and students of second languages (Busch, 1982), Griffiths (1991) clearly states that "the relationship is however very far from being definitely established, and reviewers have consequently arrived at generally pessimistic conclusions as to the importance of personality variables in SLA" (p. 104). Ellis (1985) also questions the significance of personality variables in second or foreign language learning because the available research findings thus far fail to provide evidence of the effect of personality on second language learning and Ellis suspects that the instrument used to measure personality lacks validity.

The present study underscores the role of personality traits in predicting the use learning strategy of any kind. None of the strategy categories correlated

significantly with personality traits. In other words, degrees of extroversion and degrees of emotional stability were not found to correlate with learning strategies. Thus, this finding supports the notion of the absence of the role of personality variables in the use of language learning strategies.

Research findings have suggested the inconsistency of the relationship between personality traits and success in second/foreign language learning. Whereas Rossier (1975) obtained a significant correlation between extroversion/introversion and oral proficiency, Naiman et al. (1978) found no significant relationship between degrees of extroversion and proficiency. When the effect of the degree of extroversion was analysed in terms of its seven components of sociability, responsibility, impulsiveness, activity, expressiveness, reflectiveness, and risk-taking, Djwandono (1998) found that only expressiveness was a reliable predictor of oral communication proficiency. Kiany (1998) found a negative, though not significant, relationship between extroversion and both grade point averages and the scores on TOEFL and IELTS of Iranian non-English major students. An even more surprising finding comes from Busch (1982) who found that extroversion showed a significantly negative correlation with pronunciation. Thus, more evidence is still required on this matter to permit a conclusive result. McDonough (1981) has admitted,

The association of particular personality traits and language learning must be regarded as inconclusive at the moment. What research there has been has looked at language students on course; it is possible that personality variables would be more relevant either to the choice of language study in the first place, or to the use of language once learnt (p. 136)

### 11.3 Learning Strategies and Proficiency

In addition to describing and discussing the profile of learning strategies in terms of the six a priori categories, a factor analysis was also employed. This was used to regroup the 50 strategies covered by the SILL into a posteriori categories and to find which strategies the students favoured.

The factor analysis as presented in Chapter Nine revealed the presence of twelve factors, which together explain 56.8% of cumulative variance of learning strategies. This finding suggests that more than a half of the learners' total learning strategy use is measured in this study. This amount of variance turned out to be the highest of all other studies employing the 50 item SILL reviewed by Oxford and Burry-Stock (1995). They mentioned that 51.6% of variance was found in a study carried out in Puerto Rico, 51.9% in Taiwan, 43.7% in the People's Republic of China, 53.3% in Japan, 44.4% in Egypt, and 51.9% in combined US.

Out of the twelve factors, six of them explained a total variance of more than 3% each, while the other six factors explained less than 3% each. Belonging to the first category are strategies for active use of English (22%), metacognitive, analytic strategies (5.4%), affective and social strategies (5.1%), memory strategies (4.1%), compensation and anxiety management in speaking (3.6%), and memory and formal practice strategies (3%). The second category includes analytic strategies (2.5%), anxiety elimination strategies (2.3%), cognitive and compensation strategies in reading (2.3%), formal practice strategies without memorisation (2.3%), visual memory and anxiety management strategies (2.3%), and acting out words and guessing in speaking strategies (2.1%).

Thus, the most significant factor is *strategies for active use of English*, which by itself explains 22% of the variance. This suggests that more than one fifth of the total variance of learning strategies deal with strategies that require the learners to use the language actively. This is understandable because the majority of the participants involved in the study are students of English departments. As such, their ultimate target of language learning is the attainment of proficiency in using the language for both spoken and written communication rather than merely getting good grades. Nyikos and Oxford (1993) assert that learners in communicative-competence oriented contexts prefer strategies that involve active use of the target language, while learners in grade-oriented contexts exhibit more strategies that deal with formal, rule-related processing strategies. In the present study, the latter strategies are manifested in *memory and formal practice*

*strategies* (factors 6), which explain only 3%, and *formal practice strategies without memorisation* (factor 10), which explain only 2.3% of the total variance of learning strategies.

*Metacognitive, analytic strategies* (factor 2) and *affective and social strategies* (factor 3) together explain 10.5% of the learning strategy variance. The considerable variance explained by these factors suggests that the students, to an extent, seem to have been aware of the importance of coordinating their learning process by doing such things as making learning plans and evaluating their progress. Analyses of the use of the strategies within these factors revealed that out of the 17 strategies providing high loadings to factor 2, ten of them were used at a high frequency level. Similarly, five out of six strategies that provide high loadings to factor 3 were used at the high frequency level. Stern (1975) mentions that good language learners are critical of the progress they make in learning a new language. In regard to factor 3, moreover, the students seem to have employed appropriate strategies for controlling their emotions and feeling. When defining the characteristics of good language learners, Rubin (1975) also states that good language learners are not inhibited.

The factor of *acting out words and guessing in speaking strategies* is the one explaining the least variance (2.1%). Two strategies formed this factor, including *acting out new words* and *guessing what others are going to say*. The fact that acting out words is not a preferred strategy seems to relate to the age of the participants, all of whom are adult learners. Oxford (1993) claims that students of different ages use different strategies with more sophisticated strategies often being employed by older students. Cook (1991) mentions that teaching methods should vary according to the age of the students. This seems to be associated with different learning strategy preferences by students of different age groups. Cook further states that students of adolescent ages are not in favour of teaching strategies that expose them in public, such as role-play and simulation because these techniques are against their anxieties. Similarly, adult learners may feel that they cannot learn effectively in play-like situations. At this point, the finding of

the low use of *acting out new words* supports Cook's claims on the relationship between age and language teaching and also between age and language learning.

Regarding the predictive power of learning strategies on proficiency attainment, broadly speaking, the finding supports the generally accepted notion that the learners' choice of learning strategies, both in type and quantity, determines learning outcomes, which may be measured in terms of rate, level of achievement or proficiency (Ellis, 1994). In this study, the linear combination of the twelve factors of learning strategies accounted for 30% of the proficiency variance. Moreover, this finding is also in line with the findings of the majority of studies correlating learning strategies and proficiency. In addition to studies already reviewed in the previous section, Green and Oxford (1995), for example, found a statistically significant relationship between overall strategy use and proficiency. Wharton (2000) in a study with Singaporean learners of Japanese and French came up with a similar finding that more frequent learning strategy use tends to go with higher proficiency. Likewise, Sheorey (1999), who studied strategies of Indian college students, found that more frequent use of learning strategies was reported by students with high proficiency than by students with low proficiency.

Unexpectedly, not all of the twelve factors were found to be significant predictors of proficiency. Further analyses of the relative importance of each factor indicated that two factors, *analytic strategies* (factor 7) and *anxiety elimination strategies* (factor 8) failed to provide significant contributions. In fact, other studies previously have found an insignificant relationship between learning strategies and learning success (Lengkanawati, 1997; Oxford & Ehrman, 1995; Politzer & McGrorty, 1985) as reviewed earlier. However, as this study does not try to further investigate why and how these insignificant contributions take place, this matter remains subject to further studies.

An even more striking finding deals with the role of *affective and social strategies* (factor 3), *visual memory and anxiety management strategies* (factor 11), and *acting out words and guessing in speaking strategies* (factor 12). The use of these factors, also unexpectedly, contributed to proficiency in a negative

manner. This means that the more frequently these strategies are used, the lower the proficiency is. Again, although some other studies resulted in a significant, negative relationship between strategies and achievement (Gardner et al., 1997), this matter is also subject to further investigation, because, as far as the use of these strategies is concerned, the present study contradicts the findings of the majority of learning strategy studies (Bacon & Finnemann, 1990; Bialystok & Fröhlich, 1978; Dreyer & Oxford, 1996; Park, 1997; Politzer, 1983; Politzer & McGroarty, 1985).

When further analyses were carried out to investigate the predictive power of the twelve factors over each of the four macro-language skills, the weakest factor was factor 7 (*analytic strategies*), which failed to be a significant predictor of proficiency in any of the four language skills. Factor 8 (*anxiety elimination strategies*) turned out to be the second weakest as it was a moderately significant predictor of speaking skill only. Next were factors 10 (*formal practice strategies without memorisation*) and 12 (*acting out words and guessing in speaking strategies*) with the former being a moderately significant predictor of speaking and reading, and the latter of listening and writing. Factors 4 (*memory strategies*) and 11 (*visual memory and anxiety management strategies*) were predictive of all of the language skills, except writing. The remaining factors were good predictors of the proficiency in all of the four language skills.

It should also be noted, however, that the significant contribution of *affective and social strategies* (factor 3) on the prediction of proficiency in the four language skills was in a negative direction. Similarly, the prediction of *visual memory and anxiety management strategies* (factor 11) on listening, speaking, and reading proficiency, and that of *acting out words and guessing in speaking strategies* (factor 12) on listening and writing were also in the negative direction. Again, this matter needs further studies because the nature of the strategies within these factors is supportive of learning achievement (Oxford, 1990a). Strategies of encouraging oneself to speak, asking others to slow down or repeat, and asking others to correct mistakes, all of which provided high loadings to factor 3, should lead to better proficiency. That is why a call is made here for more studies.

particularly to verify the role of *social and affective strategies, visual memory and anxiety management strategies, and acting out words and guessing in speaking strategies* in predicting success in language learning.

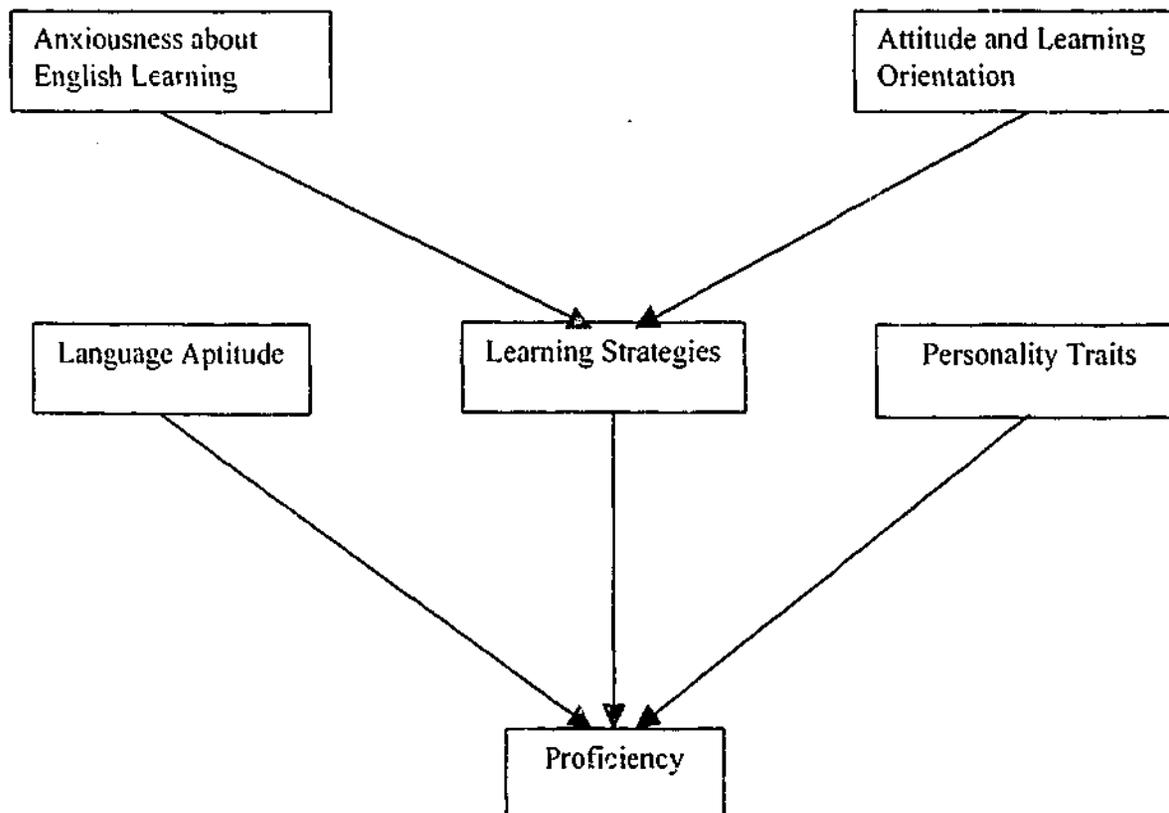
Although some factors of learning strategies were not found to correlate with proficiency and some others were found to correlate negatively, the overall finding that learning strategies correlate with proficiency in a positive way should be emphasised as a key finding. Even the predictive power of learning strategies on proficiency attainment is much stronger than that of language aptitude and personality traits.

As presented in Chapter Nine, this study also investigated the role of language aptitude and personality traits, which were in general found not to correlate with learning strategies, in predicting proficiency self-rating. In this case, these two variables, together with learning strategies were used as the independent variables and proficiency self-rating as the dependent variable. The regression analysis applied indicates that the correlation coefficient of the linear combination of the three predictors and the dependent variable was .383, suggesting that learning strategies, language aptitude, and personality traits together account for about 15% of the variance of proficiency. All of the three independent variables were found to be significant, with learning strategies being the best predictor ( $p < .000$ ), followed by personality traits ( $p < .015$ ) and language aptitude ( $p < .021$ ). Thus, although language aptitude and personality traits did not correlate with learning strategies, they were found to correlate with proficiency significantly. In other words, although the present study underscores the role of language aptitude and personality in determining learning strategies, it still considers these two variables as being significant variables for predicting proficiency attainment, as already accentuated by other researchers. Carroll (1981), Gardner (1985), Gardner and MacIntyre (1992), Horwitz (1987), and Skehan (1986) are among the researchers, who have shown the importance of language aptitude in predicting language learning outcomes. Littlewood (1984) ascertains that the role of language aptitude is prevalent in the context of classroom learning, the target of which is more on the acquisition of academic language skills.

With regard to the role of personality, as described earlier, inconclusive findings were obtained. Heyde's (1979) study on the relationship between self-esteem and French oral production and Rossier's (1975) study of extroversion were just two examples of studies that highlight the significance of personality in predicting second/foreign language learning success.

In summary, the interrelation among variables of the four factors of individual differences, learning strategies and proficiency as covered in the present study can be illustrated in Figure 11.2. Anxiousness about English learning and attitude and learning orientation correlate with learning strategies, which in turn, together with language aptitude and personality traits, determine proficiency. However, as no causal modelling was applied in the present study, the interrelationship should be considered as a preliminary hypothetical relationship, which needs to be tested using structural equation modelling analysis.

Figure 11.2 Interrelationship among Individual Differences, Learning Strategies, and Language Proficiency



#### 11.4 Protocol Analysis

Despite the small number of students involved in the interview sessions, the protocol analysis provides rich information dealing with learners' English learning strategies and other matters such as motivation, which is already reported to be the best predictor of learning strategies.

In terms of the motivation to learn, the analysis yielded that all of the respondents reported being driven by some sort of instrumental motivation, either for getting a job in foreign companies or for being English teachers. The finding supports a claim that highlights the dominance of instrumental motivation over integrative motivation in a foreign language learning context (Dörnyei, 1990). Dörnyei also states that in a foreign language context the effect of instrumental motivation on learning is prevalent among learners with intermediate proficiency and below, and that integrative motivation plays roles when the learners have been at the advanced level of proficiency. With regard to integrative motivation, integrativeness is defined as "the individual's willingness and interest in having social interaction with members of the L2 group" (Gardner et al., 1997, p. 345). They further maintain that integrativeness is manifested in three measures: attitude toward the language group, interest in foreign languages, and integrative orientation toward learning the language. Again, this study supports Dörnyei's hypothesis that in the foreign language context, integrative motivation may exist among students of an advanced level of proficiency. This study revealed that one good student (G3) mentioned that her interest in foreign languages also drove her to learn English.

In helping students learn a new language, explanations in the learner's first language may be beneficial and in some cases it is desired. The present study has revealed that in learning a grammatical rule in the classroom, some students reported that they want the teacher to explain it in the Indonesian language, not in English, to avoid misunderstanding. Others, moreover, want it to be delivered in a mixture of English and Indonesian. Yet other students prefer to have it in English entirely.

No matter in what language the linguistic items should be explained, the fact that the students are willing to learn grammar as a part of their language learning endeavour is worthy of comment. Ellis (1994) states that strategies that involve formal practice contribute more to the development of linguistic competence, which is in fact an element of global communicative competence (Tarone, 1983). Stern (1975) has mentioned a strategy type called formal strategy, by which good language learners have to acquire adequate linguistic rules of the language being learned so that they can face the complexities of the new language.

In the case of learning new vocabulary items, such strategies as guessing, analysing words from their parts, looking for similar words in first language, using words in contexts, and making mental pictures of words were revealed in the interview sessions in this study. These strategies are in line with strategies that Cohen (1991) reported to be very much preferred by second language learners, including:

- 1) examining how the word is constructed from its parts;
- 2) associating the sound of the new word with that of a similar word in another language;
- 3) analysing the meaning of a word from its parts that make it up;
- 4) composing a mental picture of the word;
- 5) associating the words with the situation where it appears;
- 6) putting the word in a group of words under a certain category;
- 7) associating the word with physical sensation;
- 8) putting the word in a context.

The strategies that the students reported using also suggest that they do not rely on rote-learning strategies. On the contrary, they seem to apply more meaning-oriented strategies. Contrary to popular beliefs about Asian learners, this finding provides further evidence on the low use of memory strategies as discussed in section 11.1.1. Gu and Johnson (1996) have reported a similar finding when they studied vocabulary learning strategies among Chinese learners

of English. Pure retention of decontextualised words fails to be an effective strategy for learning vocabulary items.

With regard to the use of context, Lawson and Hogben (1996) suggest a distinction between the use of contexts for generating meaning and the use of contexts for acquiring meaning for subsequent recall. Although the former use of contextual cues can lead the reader to be able to comprehend a sentence or a text containing an unknown word, the action does not necessarily entail vocabulary acquisition. The latter use requires more attention to the features of the unknown word as well as a variety of procedures, including some forms of elaboration. These attempts will lead to both comprehension of the sentence of a reading passage that contains an unknown word and acquisition of that unknown word. Thus, new vocabulary learning results.

In terms of strategies in reading, the study revealed that the good and moderate learners (the G and M students) were good readers and the poor learners (the P students) were poor readers. Despite the fact that all respondents reported that they engaged in skimming, that is, reading the reading text very quickly, it was apparent that they skimmed the text for different purposes. While the G and M students skimmed reading material to extract the general idea of the text, the P students did so to pinpoint the difficult words. The way the good and moderate students and the poor students deal with the difficult words is also different. The G and M students guessed the meaning of the difficult words from the contexts, whereas the P students looked them up in dictionaries, preferably bilingual ones. The latter students seemed to think that comprehension is achieved when they know and understand all of the words that constitute the text. As such, by referring to the reading approaches as proposed by Harris and Sipay (1980), it may be said that the G and M students are inclined to use a top-down approach in reading, where they make use of their knowledge for making predictions of the meaning of the text. On the contrary, the P students are inclined to use a bottom-up approach, where they rely on the printed symbols in the text.

In a similar vein, to distinguish good readers from poor readers, Smith (1971) makes an illustration of someone crossing a bridge, where one end

represents the surface structure of a collection of words into syntactical sentences and the other end is meaning. The poor readers cross the bridge from the surface structure side, attempting to identify all the constituent printed symbols and deduce meaning from them. The good readers, on the other hand, start crossing from the other end of the bridge, that is, the meaning side. They predict meaning prior to actual reading activity and the reading act is to confirm their predictions based on some selected surface structure. Rejection, confirmation, and refinement of their predictions take place along the reading process. That is why Goodman (1976, p. 498) considers reading as a "psycholinguistic guessing game".

Cohen (1991) lists ten strategies that good readers mostly employ as they read:

- 1) setting up the purpose of reading;
- 2) examining the organisation of the reading material;
- 3) singling out the important points from the not important details;
- 4) regressing when required to keep a good sense of the track;
- 5) utilising both general knowledge and linguistic knowledge to construct the meaning;
- 6) reading in larger chunks, not word by word.
- 7) utilising contextual clues to interpret unknown words, not referring to a dictionary all the time;
- 8) creating abstract summaries of what is already read;
- 9) making predictions of what is to come next in the text;
- 10) examining the cohesion markers.

Commenting specifically on the use of a dictionary, Robinson (1975) states,

One cannot depend on a dictionary as a major means of gaining vocabulary competence or looking up unknown words or expressions. A reader cannot possibly keep referring to a dictionary every time he or she is uncertain of a language unit. Aside from losing the train of thought in reading, it is downright boring (p. 59).

Concerning the strategies employed to develop listening skills, not very much information was revealed regarding the students' behaviours while listening to a spoken text. What came out was merely concerned with the ways the students

tried to improve their listening skills and these covered such activities as listening to songs, watching films on TV or cinemas, and listening to radio broadcasts. Geltrich-Ludgate (1984) classifies these attempts as active listening activities. Commenting on these activities, Schnell (1995) considers them as being very useful and relatively easy to do.

Regarding the actual behaviours the students do when listening to a spoken text, two points are worth discussing. First, the students may think that comprehension is attained when they are able to identify all the words spoken by the speaker. As such, they tried to make up a transcription of the spoken text being listened to as reported by students G1 and M1. Once the transcription was completed, they compared their own transcription with the original one. When no original transcription was available, one student (student G3) reported that she asked her friends to do the same thing, and then compared the results. Even student P3 described how he listened to the spoken text with the written text in hand.

Although transcribing activities may stand as a strategy in listening, such a strategy might not be effective to assist comprehension, since the students are focused on producing a printed representation of the spoken text, not on meaning. There is no guarantee that someone who can transcribe a spoken text correctly understands what the text is about because "understanding what is meant often involves going beyond the words used by the speaker" (Turner, 1995, p. 2).

The second point to note here is that the students in this study also reported making use of subtitles to enhance their comprehension when they were watching films. Student G2, for example, explained how she referred to the subtitles when encountering a problem to understand the dialogs, but once the problem was overcome, she returned to the conversation. Goh (1997) claims such a strategy as a good strategy for developing listening comprehension skills. Her list of strategies for developing listening includes:

- 1) talking with competent speakers often;
- 2) listening to different varieties of English accents;
- 3) using different kinds of materials;

- 4) increasing vocabulary mastery;
- 5) familiarising oneself with different types of text organisations;
- 6) familiarising oneself with pronunciation of words;
- 7) listening to things one enjoys or is interested in;
- 8) making use of subtitles in film to check interpretation.

The next learning strategies dealt with in the interview sessions were strategies to develop writing skills. The reported strategies include translating Indonesian short stories into English and applying newly learned grammar and vocabulary items. Moreover, strategies of referring to a dictionary, asking friends or lecturers, using synonyms, explaining in Indonesian, explaining in English, and putting a bracket to the word they were not sure about were also reported. Finally, when the first draft was completed, asking others to comment or to correct mistakes was found to be a reported strategy.

Two comments are to be made about these strategies. The first concerns the use of the dictionary, about which the students reported preferring a bilingual dictionary (Indonesian-English dictionary). The choice of this type of dictionary is understandable because they were looking for an English word for an Indonesian word. Leki (1992) has asserted "Tiny bilingual dictionaries may do students the greatest disservice, but students resort to them because sometimes the meanings given in English-English dictionaries only create more confusion" (p. 73). However, such a strategy should actually be used with care because this may lead to the wrong use of a word, especially if the dictionary being used does not provide examples of contexts where the word is used.

The second point is the students' awareness that writing is a continuing developmental process in the sense that a final product of writing is not achieved once a piece is completed. Rather, it is just a draft which needs several revisions. This metacognitive awareness is reflected in the students' report that once a piece of writing was completed, they asked friends or lecturers to read it and provide comments on it. In one case, student G1 even described how, when asking others' help was likely to be impossible, he read the draft several times to find the mistakes. Accordingly, revisions were made and multiple draft writing was done.

This strategy of writing multiple drafts was found to be a common strategy among second/foreign language learners. In support of this, Cohen (1991) describes three things that good second language writers do in the process of writing:

- 1) retrospective structuring, that is, reading over the last few sentences before continuing to write;
- 2) using key words and phrases sufficiently to hold the ideas together;
- 3) writing multiple drafts.

The last point to be discussed regarding the protocol analysis is the students' strategies in developing their speaking skills. The students seem to be fully aware that practice makes perfect. That is why all of the interviewed students reported that they tried to look for people to talk to in English and practiced speaking English with their friends and lecturers. In instances where no one was available to talk to, self-talk was used instead. Starting a conversation in English is another strategy commonly used to improve speaking skills. Such strategies as imitating English songs, imitating expressions obtained from English programs on TV films, and reading aloud were also reported being used to improve pronunciation in speaking. Finally, when they were involved in communication activities and faced a problem of finding an English word, they used its synonym, or inserted an Indonesian word, or used a definition, or gestures, or even asked the interlocutor the English word for the one that they did not know.

The use of these strategies implies that the students are concerned about the transfer of messages more than the form of their utterances. Research has indicated that successful speakers of a second language are willing to talk and are not afraid of making mistakes (Cohen, 1991). The behaviour of not being afraid of making mistakes and being willing to take all consequences such as a bad grade in a course or a personal embarrassment has been labelled as risk-taking (Beebe, 1983). It is believed that good language learners are ones who are willing to take risks (Willing, 1988). Ely (1986) found that risk taking proved to be a significant predictor of students' participation in classroom activities and mentioned four dimensions characterising learners who are considered to be risk takers:

a lack of hesitancy about using a newly encountered linguistic element; a willingness to use linguistic elements perceived to be complex or difficult; a tolerance of possible incorrectness or inexactitude in using the language; and an inclination to rehearse a new element silently before attempting to use it aloud (p. 8).

In short, in terms of their strategies in developing speaking ability, the students seem to have been good second language learners in the sense that they attend to meaning when communicating. If they do not know how to say something, they try to use some sorts of communication strategies to get the message across, rather than remaining silent.

### 11.5 Summary of the Discussion

The finding that Indonesian learners of English as a foreign language employed learning strategies at the medium level is not very surprising as most other studies carried out using the SILL in foreign language contexts obtained a similar result. Learners in a second language context have been reported using strategies at a higher frequency level. What is interesting is the finding showing that the indirect strategies were used at a higher frequency level than the direct strategies. Oxford (1990) has emphasised that indirect strategies are supportive of direct strategies. As such, the finding indicates that the supported strategies are used less than the supporting ones.

A consistent finding has also been reported for the intercorrelation among the six strategy categories. This is a valuable finding for strategy training programs, since a strategy training program aiming at an increase in one strategy category may affect a similar increase in the other categories. As far as the Indonesian learners of English are concerned, such a program seems to be more crucial for students learning English as a minor course than for those learning English as a major course because the former group has been found to use the strategies less frequently.

In the implementation of the strategy training programs, students' attitudes and motivation in learning should be a primary consideration, while language aptitude and personality traits are just secondary ones. This is so because the first two variables have been found to correlate with the use of the six strategy categories. In this study the two variables are reflected in two factors: anxiousness about English learning, and attitude and learning orientation. The role of motivation is also evident in the protocol analysis with instrumental motivation being more dominant than integrative motivation. These findings agree with those of previous studies.

Nevertheless, this does not mean that language aptitude and personality traits should not be taken into account in the overall teaching-learning activities. Although these two variables do not correlate with the use of learning strategies, they do correlate with students' proficiency attainment. Learning strategies, however, turn out to be more predictive of proficiency attainment than language aptitude and personality traits, implying that strategy training programs are very beneficial for the students.

The implications of the findings for strategy training as well as overall teaching-learning activities and recommendations of issues for further studies are discussed in the next chapter. Prior to these, conclusions of the key findings of the study are presented.

## Chapter Twelve

# CONCLUSIONS AND RECOMMENDATIONS

This last chapter contains two major sections. The first presents a very brief summary of the key findings in response to the research questions. Short explanations of each of the findings are also presented. The other section contains recommendations for practical classroom strategy training programs as well as overall teaching and learning activities. This section also recommends issues to be explored in future studies with reference to the limitations and the findings of the present study.

### 12.1 Conclusions

From the results of the data analyses as reported in Chapters Six to Ten and discussed in Chapter Eleven, the following conclusions are drawn. First, generally speaking the students involved in the present study were found to be moderate users of the 50 nominated English learning strategies as covered in the SILL. Several previous studies have also reported that learners of a foreign language use these strategies at the medium level. When the use of strategies was investigated in terms of each strategy category, moreover, it was found that compensation strategies were used the least and metacognitive strategies the most. This suggests that, on the one hand, the students have used a great deal of strategies to plan, monitor and evaluate their learning, but, on the other hand, they seem to find difficulties to overcome problems when they encounter communication breakdown. Furthermore, memory strategies were used at the second lowest frequency and this weakens a popular belief that memorisation is the most preferred strategy among Asian learners.

Second, the six strategy categories - memory, cognitive, compensation, metacognitive, affective, and social strategies - were found to correlate positively

with one another, in spite of the fact that the correlation sizes vary from low to moderate. This suggests that a change in the frequency of use of one strategy category may affect a similar change in the use of the other five strategy categories. This tendency represents an important consideration for strategy training program development.

Third, the status of the English course, whether it stands as a major or a minor, is a source of variation in the use of learning strategies, with the students with English as a minor using the strategies less frequently than the students with English as a major. However, this was not true with regard to the use of compensation strategies. The social strategies category was the one that showed the strongest difference. The setting, where the students with English as a major engaged themselves in natural English communicative interactions outside the classrooms more often than their fellow students with English as a minor do, may be a reason for the strong difference in the use of social strategies.

Fourth, attitude and motivation are more significant predictors of learning strategies than are language aptitude and personality traits. In the present study, these significant predictors were manifested in two factors: anxiousness about English learning, and attitude and learning orientation. The significance of these two factors was evident in the use of overall strategies as well as in the use of each strategy category. Language aptitude, moreover, was found to correlate with the use of compensation strategies in a moderately positive manner and of social strategies in a moderately negative manner. This suggests that the students with higher language aptitude tend to use more frequent compensation strategies, but less frequent social strategies than do their fellow students with lower language aptitude. Personality traits - extroversion and emotional stability - were not found to associate with the use of any of the six strategy categories, contradicting the notion that learners with different personality differ in the type and the extent of use of learning strategies.

Fifth, learning strategies are significant predictors of language proficiency attainment, in the sense that the more frequently the students use learning strategies, the higher their proficiency is likely to be. Unfortunately, when the role

of learning strategies was analysed in terms of the twelve factors which resulted from a factor analysis of the 50 strategy items, analytic strategies and anxiety elimination strategies failed to be significant predictors. More surprisingly, affective and social strategies, visual memory and anxiety management strategies, and acting out words and guessing in speaking strategies were found to contribute to the proficiency in a negative manner. These two findings should be subjected to further studies because they are contrary to previous findings.

Sixth, although language aptitude and personality traits were not found to be significant predictors of learning strategies, in some ways they turned out to contribute to proficiency. The contribution, however, was weaker than that of learning strategy. This probably suggests that the effect of language aptitude and personality traits on proficiency does not operate via learning strategies.

Finally, to develop proficiency in the four macro language skills, the students were found to report using some strategies, other than those covered in the SILL. Using a dictionary for learning new vocabulary items, transcribing when listening, and utilising subtitles to understand dialogs in films are examples of a few strategies not covered in the SILL.

## 12.2 Recommendations

### *12.2.1 Recommendations for Classroom Teachers*

In terms of practical benefits, the findings of this study suggest several implications for classroom teachers of English as a foreign language in Indonesia. First, the finding that the indirect strategies - metacognitive, affective, and social strategies - are used much more frequently than the direct strategies - memory, cognitive, and compensation strategies - suggests that the students still need some training in the use of direct strategies. Since Oxford (1990a) claims that indirect strategies are supportive of the effectiveness of the direct strategies, ideally the supported strategies should be exercised at least at the same frequency level as the supporting strategies. In other words, to be ideal the use of memory, cognitive, and compensation strategies should occur at least at the same frequency as that of

metacognitive, affective, and social strategies. To increase the use of direct strategies, strategy training should be designed and explicitly implemented.

As far as the significance of the strategy training is concerned, priority may be placed on the students who learn English as a minor course, because this study has demonstrated that this group of students appear to use these strategies at lower frequency levels than did their fellow students who learn English as a major course. However, this does not mean that the latter group of students does not need any training at all.

Viewed in terms of the strategies used for developing the four macro-language skills, training sessions in the use of effective strategies in listening to promote better comprehension should be the top priority. As revealed from interview sessions, only transcribing and utilising subtitles in the video were reported as being used as strategies to improve listening skills. Apart from the possible weaknesses of the assessment techniques, the students do not seem to know the availability of the diverse strategies for learning listening comprehension skills. This suggests that they need extensive training in the use of other strategies to enhance their listening comprehension ability. The following strategies may be considered for the training programs:

- 1) making use of available visual clues, such as pictures;
- 2) predicting what the discourse is about from the title;
- 3) leaving out unfamiliar words;
- 4) note-taking;
- 5) recognising discourse markers;
- 6) paying attention to tones or intonations;
- 7) guessing and inferring meaning for unknown words;
- 8) recognising repetitions;
- 9) imagining the setting;
- 10) utilising general knowledge to make interpretations (Goh, 1997).

Second, the finding that the learners involved in the study were in favour of strategies that deal with active use of English implies that ample opportunities to practice using English in real communicative situations should be provided.

Establishing conversation groups, reading groups, discussion groups and the like are just a few examples of forums where the students can involve themselves in real communicative activities. Requiring the students to use English when communicating with the lecturers outside the classrooms is also a way to provide wider opportunities for them to improve their English. Hamied (1997) suggests that "to assist our students to become effective participants in real-life communication in its truest sense, we teachers need to motivate them to work with the language, i.e., to attempt to communicate in the language" (p. 76).

Next, the students should be made aware of the necessity of employing a range of strategies in their learning because the use of strategies has been found to significantly influence their proficiency attainment. The more strategies they use, the better their English proficiency can be. Thus, strategies that might not be familiar to the students need to be introduced and instruction in the use of appropriate strategies is needed. Integrated strategy training (Nyikos & Oxford, 1993) is perhaps the best approach to strategy instruction, "in which explicit instruction on the use of the intended strategies is constantly woven into regular classroom activities" (p. 20). Detailed guidelines on how to implement such instruction can be obtained from Dickinson (1987), Harris (1997), Oxford (1990a), or Willing (1989).

In the implementation of strategy-training programs, the teachers do not need to worry about the students' personality traits since these were not found to correlate with the ways they learn the language. Therefore equal attention could be provided irrespective of what personality trait a particular student is supposed to have. Moreover, the finding that language aptitude only marginally correlate with the use of compensation and social strategies implies that teachers do not need to pay special attention to their students' language aptitude. In general, students with different levels of language aptitude will perform learning strategies more or less equally. Special emphasis may be placed on the training of the use of compensation and social strategies for the students that they think display lower language aptitude.

Above all, the first prerequisite for successful strategy training for students is that the teachers who are teaching should be first made aware of the diversity of strategies that can be used in learning a second/foreign language. It is very important because it is possible that the teachers also do not know or are not aware that there many possible ways that can be utilised to develop language proficiency. If they do not know and are not aware of these things, they will not be able to integrate strategy training programs into their instructional programs.

In spite of the finding that the predictability of learning strategies from language aptitude is of meagre significance and that from personality traits is not significant at all, these two variables significantly contribute to perceived proficiency attainment. Consequently, although students' language aptitude and personality traits may be put aside in considering implementing strategy training sessions, they have to be taken into account in the overall teaching-learning activities. Different learning activities may be devised for students with supposedly different aptitude levels or personality traits. Such different treatment may be best affordable for outside the classroom learning activities.

Finally, instructional activities should be carried out in such a way that the students develop or maintain favourable attitudes and their motivation is kept high. This recommendation is made since anxiousness about English learning and attitude and learning orientation, which are derived from attitude and motivation, turn out to be the best predictors of learning strategies. Thus, students with positive attitudes and high motivation are seen to employ learning strategies extensively, which in turn influence their learning success positively. This study has revealed that learning strategies have been more predictive of success in learning a new language than language aptitude and personality traits.

To maintain students' high level of learning motivation, four aspects are worth considering (Scarcella & Oxford, 1992): interest, relevance, expectancy of success, and outcomes. The students should perceive that the classroom activities they encounter are interesting and relevant to their need. A sense of optimism that they are successful learners should also be developed on the part of the students.

### *12.2.2 Recommendations for Future Studies*

Referring to the limitations and the findings of the present study, the following recommendations are presented for further investigation. First, since this study deals with Indonesian learners of English at the tertiary education level only, future studies can be broadened by including students at the secondary level. Learners studying at both public and private institutions in different regions in Indonesia should also be represented in the study. As such, a more comprehensive profile of learning strategies by Indonesian learners of English may be produced.

Second, as the SILL instrument does not measure how the strategies are actually used, further studies may investigate how they are employed in the students' real learning activities. As such, in addition to the SILL, task-based strategy elicitation procedures may be used to provide more information of how the reported strategy was utilised. Comparisons of the reported strategies and actual strategies can also be carried out.

Next, as this study covers only four predictor variables of learning strategies, including attitude, motivation, language aptitude, and personality traits, further studies may include more variables from cognitive, affective, biological, and socio-cultural domains. A structural equation modelling (SEM) should then be employed so that causal relationships among the variables under study can be traced and theorised more firmly.

Furthermore, as this study has demonstrated that attitude and motivation are influential in learning strategies, one possible next step would be how students' favourable attitudes toward English learning can be developed and how their motivation can be fostered and strengthened in the classroom. Action research may be an alternative research design to study such a matter.

Differences in the effect of attitude and motivation on the use of learning strategies across different learning stages may also be an area for further studies. It may be that the effect of attitude and motivation on strategy use is strongest among learners at beginning and intermediate levels, but weakens when the learners are at the advanced level. A longitudinal or cross-sectional design could be employed to investigate this.

Moreover, this study finds that the overall use of learning strategies correlates with proficiency attainment positively. However, such a finding was not obtained from an experimental study. Thus, experimental design may be used in further studies to provide more convincing evidence on the impact of learning strategies on proficiency attainment.

It is also found that three strategy factors, including affective and social strategies, visual memory and anxiety management strategies, and acting out words and guessing in speaking strategies correlate with proficiency negatively. This suggests the need for replications of this study in different learning settings in order to arrive at a finding that is more acceptable and consistent with theory and prior research. A more acceptable finding should be that these strategies correlate significantly with proficiency in a positive manner.

Finally, research on the nature of the effect of every learning strategy on learning success needs to be explored. Summarising their discussion on learning strategies, Gass and Selinker (1994) have asserted,

Research into learning strategies, though interesting and important, is perhaps best viewed as preliminary. When more of the problems involved with studying learning strategies are solved, then there will be a firmer basis for stating that use of certain learning strategies are truly helpful in learning a second language. This is clearly an important area and one hopes that a solid body of theoretically sound research becomes available soon (p. 267).

This assertion reflects my own view of learning strategy studies in second/foreign language learning. I hope that the present study provides a significant contribution to the body of research in the field of learning strategies.

## Appendix A

**List of Subjects Offered at the English Department  
Faculty of Teacher Training and Education  
Islamic University of Malang  
1999/2000**

No.	Code	Subject	Credit Load
<b>I. BASIC GENERAL SUBJECTS: 16 Credits</b>			
1.	MKU 401	Islam Education I*	1
2.	MKU 402	Islam Education II*	1
3.	MKU 403	Islam Education III*	1
4.	MKU 404	Islam Education IV*	1
5.	MKU 405	Islam Education V*	1
6.	MKU 406	Islam Education VI*	1
7.	MKU 407	Pancasila Education*	2
8.	MKU 408	National Defence System*	2
9.	MKU 409	Indonesian Language*	2
10.	MKU 410	Humanities*	2
11.	MKU 411	Basic Natural Science*	2
<b>II. BASIC EDUCATIONAL SUBJECTS: 13 Credits</b>			
1.	MDK 401	Introduction to Education*	3
2.	MDK 402	Psychology Learner Development*	2
3.	MDK 403	Instructional Planning	2
4.	MDK 404	Evaluation in Teaching	2
5.	MDK 405	Counselling in Education*	2
6.	MDK 406	Analysis of English Secondary School Textbooks	2
<b>III. PROFESSIONAL SUBJECTS (GROUP I): 85 Credits</b>			
1.	ING 401	Introduction to Linguistics	3
2.	ING 402	English Phonology	3
3.	ING 403	English Morphology	2
4.	ING 404	English Syntax	2
5.	ING 405	Structure I	4
6.	ING 406	Structure II	2
7.	ING 407	Structure III	2
8.	ING 408	Vocabulary	2
9.	ING 409	Semantics	2
10.	ING 410	Sociolinguistics	2
11.	ING 411	Psycholinguistics	2
12.	ING 412	Introduction to Literature	2
13.	ING 413	Prose, Poetry and Drama	4
14.	ING 414	Cross Cultural Understanding	2
15.	ING 415	Listening I	2
16.	ING 416	Listening II	2
17.	ING 417	Listening III	2
18.	ING 418	Pronunciation Practice	3
19.	ING 419	Speaking I	2
20.	ING 420	Speaking II	2
21.	ING 421	Speaking III	2
22.	ING 422	Reading I	3
23.	ING 423	Reading II	2

24.	ING 424	Reading III	2
25.	ING 425	Extensive Reading	2
26.	ING 426	Writing I	3
27.	ING 427	Writing II	2
28.	ING 428	Writing III	2
29.	ING 429	Translation I	2
30.	ING 430	Translation II	2
31.	ING 431	Translation III	2
32.	ING 432	Dictation	2
33.	ING 433	English for Specific Purposes	2
34.	ING 434	Thesis Writing Seminar	2
35.	ING 435	Thesis	4
36.	ING 436	KKN*	4
IV. PROFESSIONAL SUBJECTS (GROUP II): 16 Credits			
1.	ING 437	Research in ELT	2
2.	ING 438	Statistics	2
3.	ING 439	Seminar on ELT	2
4.	ING 440	Language Testing	2
5.	ING 441	Teaching EFL	2
6.	ING 442	Curriculum and Material Development	2
7.	ING 443	Micro-Teaching	2
8.	ING 444	Practice Teaching	2
V. SUPPLEMENTARY SUBJECTS: 20 Credits			
1.	TOU 441	English for Tourism I	2
2.	TOU 442	English for Tourism II	2
3.	ING 445	English for Accounting	2
4.	ING 446	Business Correspondence	2
5.	MAN 441	Mandarin I	4
6.	MAN 442	Mandarin II	4
7.	MAN 443	Mandarin III	4

Note: \*) Indonesian is used as the medium of instruction

## Appendix B

**List of Subjects Offered at the English Department  
Faculty of Letters  
Gajayana University  
1996/1997 - 2000/2001**

No.	Code	Subject	Credit Load
<b>I. BASIC GENERAL SUBJECTS: 10 Credits</b>			
1.	SDK 101	Religious Education*	2
2.	SDK 102	Pancasila Education*	2
3.	SDK 103	National Defence System*	2
4.	SDK 104	Basic Natural Science*	2
5.	SDK 105	Basic Social Science*	2
<b>II. BASIC PROFESSIONAL SUBJECTS: 27 Credits</b>			
1.	SDK 201	Indonesian Language I*	2
2.	SDK 202	Indonesian Language II*	2
3.	SDK 203	History of Indonesian Culture*	2
4.	SDK 204	Indonesians and Their Culture I*	2
5.	SDK 205	Indonesians and Their Culture II*	2
6.	SDK 206	Philosophy of Knowledge*	2
7.	SDK 209	Introduction to Research Methodology	2
8.	SDK 211	History of Modern Thinking I*	2
9.	SDK 212	History of Modern Thinking II*	2
10.	SDK 213	Indonesian Arts and Society I*	2
11.	SDK 214	Indonesian Arts and Society II*	2
12.	SDK 215	Linguistic Research	2
13.	SDK 216	Literary Research	2
<b>III. COMPULSORY PROFESSIONAL SUBJECTS: 111 Credits</b>			
1.	SSI 301	Integrated Course	4
2.	SSI 302	Structure I.	4
3.	SSI 303	Structure II	4
4.	SSI 304	Structure III	2
5.	SSI 305	Structure IV	2
6.	SSI 306	Speaking I	2
7.	SSI 307	Speaking II	2
8.	SSI 308	Speaking III	2
9.	SSI 309	Speaking IV	2
10.	SSI 310	Listening I	2
11.	SSI 311	Listening II	2
12.	SSI 312	Listening III	2
13.	SSI 313	Listening IV	2
14.	SSI 314	Reading I	2
15.	SSI 315	Reading II	2
16.	SSI 316	Reading III	2
17.	SSI 317	Reading IV	2
18.	SSI 318	Reading V	2
19.	SSI 319	Writing I	2
20.	SSI 320	Writing II	2
21.	SSI 321	Writing III	2
22.	SSI 322	Writing IV	2
23.	SSI 323	Writing V	2

24.	SSI 367	Vocabulary	2
25.	SSI 364	Introduction to Linguistics	3
26.	SSI 328	Phonology	2
27.	SSI 329	Morphology	2
28.	SSI 365	Syntax	3
29.	SSI 331	Semantics	2
30.	SSI 332	Sociolinguistics	2
31.	SSI 368	English Cultural Background I	3
32.	SSI 369	English Cultural Background II	3
33.	SSI 370	English Cultural Background III	3
34.	SSI 334	Introduction to Literature	4
35.	SSI 359	Poetry	2
36.	SSI 360	Prose	2
37.	SSI 361	Drama	2
38.	SSI 362	History of England	3
39.	SSI 344	Translation I	2
40.	SSI 345	Translation II	2
41.	SSI 366	Business English	4
42.	SSI 351	Linguistics Seminar	2
43.	SSI 352	Literary Seminar	2
44.	SSI 353	KKN*	3
45.	SSI 354	Thesis	6

#### IV. SUPPLEMENTARY SUBJECTS\*\*: 12 Credits

1.	SSI 460	Practical Secretary*	2
2.	SSI 461	Introduction to Computer*	2
3.	SSI 462	Language Teaching Methodology	2
4.	SSI 463	English for Tourism and Hotels	2
5.	SSI 464	English for Banking	2
6.	SSI 465	Japanese I	2
7.	SSI 466	Japanese II	2
8.	SSI 467	Japanese III	2
9.	SSI 468	Japanese IV	2
10.	SSI 469	France I	2
11.	SSI 470	France II	2
12.	SSI 471	France III	2
13.	SSI 472	France IV	2

Note: \*) Indonesian is used as the medium of instruction

\*\*\*) Students are required to take 12 credits only from this group of subjects

## Appendix C

## Tes Bakat Bahasa untuk Pembelajar Indonesia

BAGIAN I  
KATA DALAM KALIMAT

**Petunjuk:** Tes ini untuk mengukur kemampuan Anda memahami fungsi kata atau frase dalam kalimat. Untuk masing-masing butir tes ini Anda akan dihadapkan pada satu kalimat kunci dan satu atau lebih kalimat pilihan. Salah satu kata atau frase dalam kalimat kunci ditulis dengan huruf besar. Carilah kata atau frase pada kalimat pilihan yang fungsinya sama atau paling mendekati sama dengan fungsi kata yang ditulis dengan huruf kapital pada kalimat kunci tersebut. Kemudian, pada lembar jawaban yang telah disediakan, silanglah huruf A, B, C, D, atau E untuk masing-masing butir sesuai dengan pilihan Anda. Kerjakanlah semua butir soal dengan seksama.

Namun demikian, sebelum mengerjakan tes ini, pelajari lebih dulu keempat contoh yang ada berikut ini selama 5 menit. Pengawas akan memberitahu kapan Anda harus memulai mengerjakan tes ini.

i) LONDON adalah ibukota Inggris.

Dia suka pergi memancing di danau.  
A B C D E

Pada kalimat kunci butir contoh di atas kata LONDON ditulis dengan huruf besar dan ini menjadi pokok pembicaraan. Sedangkan pada kalimat pilihan yang menjadi pokok pembicaraan adalah 'Dia'. Jadi, kata 'dia' pada kalimat pilihan sama fungsinya dengan kata 'LONDON' pada kalimat kunci. Dengan demikian, jawaban yang benar untuk butir contoh i) adalah A.

ii) Maria sedang mengupas APEL.

Saudara saya Johan memukul anjing Amir dengan sebuah tongkat besar.  
A B C D E

Pada kalimat kunci butir contoh ii) di atas, APEL adalah benda yang dikupas, sedangkan pada kalimat pilihan anjing adalah benda yang dipukul. Oleh karena itu, jawaban C adalah pilihan yang benar untuk contoh ii) ini.

iii) UANGlah yang senantiasa ada dibenaknya.

Beberapa tahun yang lalu, sebagian besar pertanian masih dikerjakan  
A B C D  
dengan tangan.  
E

Jawaban yang benar untuk butir contoh iii) ini adalah pertanian sebab kata ini mempunyai fungsi yang sama dengan kata UANG pada kalimat kunci di atas. Dengan demikian, pilihan D yang harus disilang.

iv) Sudah banyak PEMBICARAAN yang dilakukan mengenai upaya penyelesaian pemberontakan.

Dimanakah Johan berada?

A

Sudah tidak ada lagi keraguan mengenai masalah ini.

B

Di sana tergeletak seekor kuda mati.

C

Di sanalah saya menemukan jawabnya.

D

Kalimat pilihan pada butir contoh di atas lebih dari satu. Oleh karena itu, Anda harus mencari kata yang digarisbawahi yang ada pada kalimat-kalimat pilihan tersebut yang mempunyai fungsi sama dengan kata PEMBICARAAN pada kalimat kunci itu. Untuk butir contoh iv) ini jawaban yang benar adalah B, keraguan, yang ada pada kalimat pilihan kedua.

**STOP**  
**JANGAN MEMULAI MENERJAKAN TES**  
**SEBELUM DIBERITAHU OLEH PENGAWAS**

Kerjakan tes ini sesuai dengan contoh di atas! (WAKTU: 15 menit)

1. Jeli terjatuh dari sepeda DAN Joko menabraknya dari belakang.  
Sekarang Anda boleh menunggu di luar atau Anda datang lagi besok pada hari  
A B C D  
Jum'at kalau Anda mau.  
E
2. Saya harap dia mengerjakan PEKERJAAN yang baik.  
Dalam perjalanannya menyeberang Amerika Serikat sampai ke Alaska, Fredi  
A B C  
berharap bisa melihat berbagai hal yang menarik.  
D E
3. Johan menjual sepedanya kepada DIKI.  
Jika pekerjaan mereka memenuhi standar, saya akan memberi bonus kepada  
A B  
mereka di akhir pekan ini.  
C D E
4. Sekolah LIBUR selama musim panas.  
Terlepas dari usaha-usaha yang telah kita lakukan untuk memperkuatnya,  
A B C  
bahan ini masih hancur dengan mudah di bawah tekanan yang paling ringan  
D E  
sekali pun.
5. DIA ada di sini.  
Karena besarnya permintaan atas produk ini, panitia harus memintanya sekarang.  
A B C D E
6. Bili pergi UNTUK menolong seseorang.  
Dua orang dibutuhkan untuk membawa kotak ini ke mobil karena terlalu berat  
A B C D  
untuk satu orang.  
E
7. Di tengah malam, LENGKINGAN sirine itu membangunkan saya.  
Melukis pemandangan merupakan hobi yang baik bagi kalangan eksekutif untuk  
A B C D  
menghilangkan kelelahan.  
E
8. Pintu itu TERBUKA dengan cepat sekali.  
Karena telah diikat dengan kencang, paket tersebut tiba tanpa ada kerusakan  
A B C D  
walaupun dibawa dengan ceroboh.  
E
9. Danau itu dipenuhi perahu-perahu yang INDAH.  
Kadang-kadang cara terbaik untuk belajar yang baik adalah latihan terus-menerus.  
A B C D E
10. Sebagai seorang PENGARANG yang paling berpengaruh di jamannya, dia sangat  
bangga atas hasil-hasil karyanya.  
Gockel, seorang fisikawan Swiss, mengirim sebuah elestrokop sampai pada  
A B C  
ketinggian 13.000 kaki dalam sebuah balon.  
D E
11. Orang-orang memanggil dia BILI.  
Karena keberhasilannya selama Perang Sipil, penduduk menjadikan Grant  
A B C D  
presiden Amerika Serikat.  
E

*Tes is adalah versi terjemahan yang telah disesuaikan (adapted translation) ke dalam Bahasa Indonesia dari Bagian IV dan V Modern Language Aptitude Test (AMTB) (Carroll & Sapon, 1958)*

12. Perusahaan tersebut menguasai setiap PETAK tanah kosong yang ada di kota ini.  
Sejak jaman dahulu, orang telah menanam jagung sama dengan apa yang kita  
tanam sekarang.  
A B C D E
13. Masalah ini tidak UNTUK disampaikan dengan sembunyi-sembunyi.  
Dia berbicara kepada saya mengenai cara bagaimana saya harus berusaha  
untuk meningkatkan kinerja perusahaan, bukan membiarkan segalanya  
berjalan secara alami.  
A B C D E
14. BEBERAPA tidak hadir pada rapat kemarin.  
Walaupun banyak proposal yang diajukan, hanya satu bisa diterima.  
A B C D E
15. Saya meminta dia untuk datang, TETAPI dia menolak.  
Jika pengujian dilakukan, sekalipun tampaknya tidak akan ada perubahan,  
sistem ini tetap akan menguntungkan, dan pelanggan kita akan menjadi yakin.  
A B C D E
16. Jari saya menjadi BENGGAK karena infeksi.  
Anak itu tumbuh matang karena pengalaman.  
Menara tinggi itu hampir saja tertutup dari pandangan oleh gedung-gedung.  
A B C D E
17. TEMAN saya pulang kampung.  
Di belakang rumah tapi dekat hutan berdiri sebuah gubuk.  
A B C D E
18. Itu rumah TERTUA di desa ini.  
Walaupun jaraknya lebih jauh dari rumah Anda, pengeboran ini adalah contoh  
terbaik dari pengeboran-pengeboran yang lebih dulu ada yang dilakukan oleh  
masyarakat kita yang paling awal menempati daerah ini.  
A B C D E
19. BEBERAPA telah kembali kemarin.  
Di tengah-tengah danau akan ditemui sebuah pulau kecil yang ditumbuhi satu  
pohon saja.  
A B C D E
20. Dia melihat beberapa ikan BERENANG kesana-kemari.  
Saat dia berjalan di sepanjang lorong, dia merasa dirinya sendiri bertanya-tanya siapa  
yang telah ada di tempat itu sebelum dia tiba.  
A B C D E
21. INI adalah perjalanan pertama saya.  
Walaupun surat-surat itu tiba sebelum yang ini, itu masih belum dijawab.  
A B C D E
22. Jagung itu tumbuh TINGGI selama musim panas.  
Dia menanam bunga tulip kuning di kebun sempit.  
Gelombang menjadi semakin jelek seiring dengan angin yang semakin kencang.  
A B C D E

23. TERUS TERANG, masalah ini sulit untuk dikatakan.  
Singkat kata, produk ini sama efisiennya dengan yang lain.  
 A B  
Percaya atau tidak, demikianlah kejadiannya.  
 C D  
Untuk menghidupkan mesinnya, tekan tombol ini.  
 E
24. Dia berkendara DARI Boston ke New York.  
Demi amannya, dia memutuskan untuk membeli suku cadang untuk segala  
 A B C D E  
 keadaan darurat.
25. Dia memaku papan itu KENCANG-KENCANG pada tembok rumah.  
 Dia selalu menyelesaikan pekerjaannya dengan baik.  
 A B C  
 Dia menuangi gelas penuh dengan air.  
 D E
26. Kerjakan SEBAGAIMANA yang saya jelaskan.  
Walaupun ramalan cuaca memperkirakan langit cerah untuk hari ini, hujan  
 A B C D  
 turun sepanjang hari.  
 E
27. Apakah ITU topi Anda?  
Ini tampaknya lebih pas bagi kamu walaupun baju yang itu lebih murah dari  
 A B C  
 pada baju yang dirak ini.  
 D E
28. Pertemuan mingguan, yang biasanya diselenggarakan Jum'at malam, merupakan  
KEGIATAN tetap paguyuban kita.  
Washington adalah presiden pertama Amerika Serikat; dia menolak  
 A B C  
kemewahan yang sebagian pengagumnya menghendaki dia memilikinya.  
 D E
29. Taruhlah barang ini DI MANA SAJA yang kelihatan paling pas.  
Saat tanda diberikan, lanjutkan pekerjaan tersebut sebagaimana yang telah  
 A B C  
 dijelaskan pada pelajaran yang lalu.  
 D E
30. TAK SEORANGPUN lebih giat dalam menyelesaikan persoalan ini dari pada  
 saya.  
Tugas pertama pemerintah adalah memeriksa resep-resep yang dikeluarkan  
 A B C D  
 oleh dokter.  
 E
31. ANDA mengerjakan apa?  
Ini barang kali milik saya.  
 A B  
Tolong bayar saya dulu sebelum melanjutkan perjalanan Anda.  
 C D E
32. Mesin HITUNG merupakan alat yang berguna bagi matematikawan.  
Berski adalah olah raga yang baik selama musim dingin.  
 A B C  
Melihat itulah yang meyakinkan.  
 D E

33. Saat dia duduk untuk beristirahat, RASA KANTUK menghinggapinya.  
Renang adalah olah raga yang baik untuk melatih keseimbangan bagi anak  
 A B C D  
 yang masih dalam masa pertumbuhan.  
 E
34. Saya akan membeli mobil BILA saya mempunyai uang.  
Setelah kamu pulang tadi malam, sebagian besar penonton masih bertahan sampai usai.  
 A B C D E
35. Dia bermain piano dengan BEGITU menakjubkan.  
Ditandai dengan hitungan ke lima, dia menapaki tangga, dipenuhi dengan kecemasan  
 A B  
 yang mendalam dan napas yang sangat tersengal-sengal.  
 C D E
36. BEBERAPA mengajukan lamaran untuk jabatan tersebut.  
Saya mengetahui banyak pelamar yang tidak bisa membuktikan pengalaman  
 A B C D  
 yang lebih dari dua tahun.  
 E
37. Istrinya membelikan DIA kopiah baru.  
 Mengapa kamu tidak memberitahu saya tentang dia lebih banyak dari pada  
 A B C D  
 yang kamu ceritakan kemarin?  
 E
38. APAKAH ini?  
 Saya tidak tahu buku apa yang kamu butuhkan.  
 A  
 Ini milik siapa?  
 B  
 Lelaki yang mana saudaramu?  
 C  
Ini adalah milikku.  
 D E
39. Mari kita buat kampanye ini menjadi suatu KEBERHASILAN.  
 Sebagian orang percaya bahwa dunia ini penuh dengan serpihan imaginasi;  
 A B  
 Ahli filsafat menyebut teori ini sebagai keragaman solipsisme.  
 C D E
40. KAMU paling suka warna apa?  
Ini lebih cocok bagi saya dibanding yang lain.  
 A B C  
 Ini tidak berbeda bagi saya.  
 D E
41. Kami berencana mengambil BARANG ITU itu hari ini.  
 Supaya dia bisa mengetahui kita, kita akan mengambil langkah-langkah untuk  
 A B C D  
 membuat perapian.  
 E
42. Mereka mengamati beberapa seniman MELUKIS pemandangan di sana.  
 Saat berusaha menangkap bola, dia merasa dirinya tersilaukan oleh sinar  
 A B C  
 matahari sehingga dia tidak melihat kayu yang menggelantung.  
 D E

43. Banyak orang suka MAKAN kerang.  
Saat menyibak jalan setapaknya menuju hutan belantara, dia menemukan  
A B  
sejumlah bukti-bukti adanya peradaban yang telah musnah.  
C D E
44. Tidak ada MANFAAT sama sekali untuk melanjutkan pekerjaan itu.  
Saat lampu berganti, dia menghentikan mobilnya.  
A B  
Air sungai mengalir sampai ke laut.  
C D E
45. Anak kecil itu melukai diri SENDIRI.  
Walaupun saya sendiri akan melakukan pekerjaan tersebut sendirian, Mariam  
A B  
mendapatkan sendiri bantuan dari beberapa temannya.  
C D E

**STOP DAN PERIKSA LAGI PEKERJAAN ANDA  
KALAU MASIH ADA WAKTU**

**BAGIAN II  
PASANGAN KATA**

**Petunjuk:** Pada bagian ini Anda dihadapkan pada sejumlah pasangan kosa kata bahasa Kurdi-Indonesia. Tugas Anda adalah menghafal kata-kata bahasa Kurdi tersebut beserta pasangannya dalam bahasa Indonesia. Anda diberi waktu dua menit untuk menghafalnya. Kemudian pada lembar pertanyaan Anda akan dihadapkan lagi dengan kata-kata bahasa Kurdi tersebut beserta lima pilihan padanannya dalam bahasa Indonesia. Pilihlah salah satu yang menurut Anda benar sesuai dengan ingatan Anda dengan menyilang pilihan A, B, C, D atau E. Sebelum mengerjakan pertanyaan, Anda masih diberi contoh untuk disimak selama dua menit. Anda masih diperbolehkan melihat ulang daftar kosa kata yang ada sambil memeriksa contoh itu.

**Kosa Kata (Hafalkan dalam 2 menit)**

<u>Kurdi</u>	-	<u>Indonesia</u>	<u>Kurdi</u>	-	<u>Indonesia</u>
hij	-	melukis	kete	-	onta
naq	-	bahwa	chie	-	beberapa
sidqu	-	berita	yong	-	elang
nente	-	wanita	hui	-	jatuh
ja	-	hari	xozo	-	mudah
ngoq	-	gelap	mep	-	di atas
tsep	-	masuk	lah	-	serigala
lohong	-	bertanya	wener	-	buku
mupa	-	kemarahan	mi	-	menyentuh
nung	-	katak	jate	-	matahari
chomco-	-	tubuh	e	-	mangkok
roo	-	seni	hon	-	dingin

Contoh:

- i) hij  
 A. katak  
 B. jatuh  
 C. dingin  
 D. melukis  
 E. buku

Karena kata 'hij' berarti melukis, maka Anda harus menyilang pilihan D pada lembar jawaban.

**STOP STOP STOP  
 JANGAN BUKA HALAMAN BERIKUTNYA.  
 BAGIAN BERIKUT INI HANYA UNTUK DIJAWAB BERDASARKAN INGATAN  
 SEMATA.**

Pilihlah padanan kata-kata bahasa Kurdi di bawah ini! (WAKTU: 4 menit)

- |  |  |   |
|--|--|---|
| 1. mep<br>A. di dalam<br>B. di atas<br>C. bahwa<br>D. masuk<br>E. seni           | 6. xozo<br>A. hari<br>B. mudah<br>C. berita<br>D. menyentuh<br>E. mangkok    | 11. chie<br>A. dingin<br>B. onta<br>C. mangkok<br>D. beberapa<br>E. katak |
| 2. e<br>A. bola<br>B. pada<br>C. tubuh<br>D. dingin<br>E. mangkok                | 7. chomco<br>A. seni<br>B. tubuh<br>C. dingin<br>D. berita<br>E. gelap       | 12. hon<br>A. di atas<br>B. dingin<br>C. di dalam<br>D. jatuh<br>E. bahwa |
| 3. lah<br>A. serigala<br>B. onta<br>C. gelap<br>D. terakhir<br>E. di atas        | 8. nente<br>A. masuk<br>B. kemarahan<br>C. wanita<br>D. beberapa<br>E. jatuh | 13. naq<br>A. tidak<br>B. hari<br>C. bahwa<br>D. seni<br>E. bertanya      |
| 4. tsep<br>A. bertanya<br>B. kemarahan<br>C. masuk<br>D. menyentuh<br>E. melukis | 9. mupa<br>A. peta<br>B. melukis<br>C. dingin<br>D. serigala<br>E. kemarahan | 14. ja<br>A. ya<br>B. hari<br>C. di atas<br>D. matahari<br>E. tidak       |
| 5. jate<br>A. katak<br>B. tubuh<br>C. elang<br>D. matahari<br>E. buku            | 10. yong<br>A. mudah<br>B. muda<br>C. beberapa<br>D. menyentuh<br>E. elang   | 15. roo<br>A. seni<br>B. melukis<br>C. bertanya<br>D. lari<br>E. unta     |

16. ngoz  
A. masuk  
B. wanita  
C. bahwa  
D. gelap  
E. di atas
17. wener  
A. tidak pernah  
B. buku  
C. kemarahan  
D. beberapa  
E. menyentuh
18. nung  
A. bertanya  
B. elang  
C. hari  
D. bahwa  
E. katak
19. lohong  
A. katak  
B. serigala  
C. tubuh  
D. bertanya  
E. dingin
20. hij  
A. jatuh  
B. hari  
C. mudah  
D. melukis  
E. matahari
21. kete  
A. layang-layang  
B. serigala  
C. onta  
D. bahwa  
E. menyentuh
22. sidqu  
A. mudah  
B. dingin  
C. berita  
D. gelap  
E. buku
23. hui  
A. bertanya  
B. serigala  
C. beberapa  
D. hari  
E. jatuh
24. mi  
A. menyentuh  
B. melukis  
C. hari  
D. mangkok  
E. masuk

**STOP STOP STOP  
TUNGGU PETUNJUK LEBIH LANJUT**

### Petunjuk Pelaksanaan Tes Bakat Bahasa untuk Pembelajar Indonesia

1. Sebelum pelaksanaan tes, periksalah semua lembar tes. Semua lembar tes harus bersih dari coretan-coretan yang mungkin dilakukan oleh pemakai sebelumnya.
2. Masing-masing lembar tes dimasukkan ke dalam map dan dilengkapi dengan lembar jawabannya.
3. Bila semua mahasiswa peserta tes telah duduk dengan rapi, bacalah:  
"Anda akan mengerjakan sebuah tes untuk mengukur seberapa tinggi tingkat bakat Anda untuk belajar bahasa asing. Usahakan untuk bekerja dengan sebaik-baiknya, tanpa terpengaruh perasaan apakah Anda merasa berbakat atau tidak."

Tes ini terdiri dari dua bagian yang akan dibagikan kepada Anda (tunjukkan kepada para mahasiswa). Masing-masing bagian ada di dalam map terpisah. Bagian I bernama 'Kata Dalam Kalimat' terdiri dari 45 butir soal yang memerlukan waktu 16.5 menit dan bagian II bernama 'Pasangan Kata' yang memerlukan waktu sekitar 6 menit. Dengan demikian, keseluruhan tes memerlukan waktu sekitar 25 menit termasuk penjelasan dari saya.

Saya akan segera membagi map-map ini yang telah berisi lembar soal dan lembar jawaban. Bila Anda telah menerimanya, jangan buka. Biarkan map tersebut di atas meja sampai Anda diminta membukanya. Jangan pula Anda memulai mengerjakan sampai Anda diberi tahu kapan memulainya. Dan bila Anda diberi tahu untuk menghentikan pengerjaan, segera letakkan alat tulis dan hentikan pengerjaan."

4. Bagikan lembar soal dan lembar jawaban sehingga masing-masing mahasiswa mendapatkannya. Periksa sekali lagi sehingga tidak ada mahasiswa yang tidak mendapatkan dua map.
5. Bila semua mahasiswa telah mendapatkannya, bacalah:  
"Sekarang bukalah map itu dan ambil lembar soal dan lembar jawaban bagian I saja. Buka halaman 1 dan pelajarilah petunjuk pengerjaannya serta keempat contoh yang ada pada halaman 1 dan 2. Jangan membuka halaman 3 dan seterusnya sebelum Anda saya diberi tahu. Anda TIDAK BOLEH bertanya apa pun mengenai petunjuk tersebut, maka dari itu pelajarilah dengan seksama hingga Anda benar-benar mengerti tentang bagaimana cara mengerjakan bagian ini. Anda mempunyai waktu 1.5 menit untuk mempelajarinya."
6. Beri waktu 1.5 menit hening, kemudian bacalah:  
"Sekarang buka halaman 3 untuk memulai mengerjakan Bagian I ini. Jangan lupa menjawab pada lembar jawaban dengan cara menyilang huruf A, B, C, D, atau E sesuai dengan jawaban Anda seperti contoh. Usahakan menjawab semua pertanyaan, dan bila Anda mengalami kesulitan, gunakan kemampuan menebak Anda. Waktu Anda 15 menit. Kerjakan mulai sekarang!"
7. Beri waktu tepat 15 menit. Periksa untuk mengetahui bahwa semua mahasiswa mulai mengerjakan soal bagian I ini.
8. Bila waktu telah habis, bacalah:  
"Waktu habis. Waktu habis. Hentikan pengerjaan dan masukkan lembar soal dan lembar jawaban Anda kembali ke dalam map dan tetapkan duduk dengan tenang."

*Tes is adalah versi terjemahan yang telah disesuaikan (adapted translation) ke dalam Bahasa Indonesia dari Bagian IV dan V Modern Language Aptitude Test (AMTB) (Carroll & Sapon, 1958)*

Beri waktu beberapa detik kepada mahasiswa untuk memasukkan kembali lembar soal dan lembar jawaban tes Bagian I ke dalam map. Bila semua mahasiswa telah memasukkan ke dalam map, bacalah:

**“Sekarang ambil map II yang berisi lembar soal dan lembar jawaban untuk Bagian II. Siapkan keduanya di hadapan Anda (beri waktu beberapa detik untuk menyiapkannya). Bukalah halaman 9 lembar soal dan pelajarilah petunjuknya selama satu menit**

Beri waktu 30 detik hening, lalu bacalah:

**“Sekarang lihat daftar kosa kata yang telah disediakan. Ingat, waktu Anda hanya 2 menit untuk menghafalnya. Anda akan dites mengenai hafalan ini nanti. Hafalkan mulai sekarang. Mulai!”**

9. Beri waktu 2 menit kepada mahasiswa untuk menghafal, dan bila waktu telah habis, bacalah:  
**“Waktu untuk menghafal telah habis. Sekarang, lihat dan pelajarilah contoh soal yang ada di bawah daftar kata itu. Cocokkan dengan tanda silang pada soal contoh yang ada pada lembar jawaban. Anda mempunyai waktu 2 menit untuk ini dan selama 2 menit ini Anda boleh melihat kembali daftar kata yang ada pada halaman 9. Jangan membuka halaman 11 dan 12.”**
10. Beri waktu 2 menit kepada mahasiswa untuk mempelajari contoh tersebut, lalu bacalah:  
**“Sekarang buka halaman 11 untuk memulai mengerjakan. Selama mengerjakan nanti Anda TIDAK BOLEH membuka kembali halaman 9. Anda mempunyai waktu 4 menit untuk mengerjakannya. Siap. Mulai!”**
11. Beri waktu 4 menit untuk mengerjakan. Bila telah habis, bacalah:  
**“Waktu habis. Waktu habis. Hentikan pengerjaan dan masukkan lembar soal dan lembar jawaban Anda kembali ke dalam map II dan tetaplah duduk dengan tenang. Saya akan datang kepada Anda untuk mengumpulkan map-map tersebut.**

## Appendix D

## Kuesener Kepribadian Eysenck

**Petunjuk:** Jawablah masing-masing pertanyaan berikut ini dengan melingkari jawaban *Ya* atau *Tidak*. Tidak ada jawaban yang benar atau salah dan juga tidak ada pertanyaan jebakan. Oleh karena itu, kerjakanlah dengan cepat dan jangan terlalu lama memikirkan makna kata-kata yang ada dalam pertanyaan tersebut.

1. Apakah perasaan Anda sering berubah-ubah? (*Ya Tidak*)
2. Apakah Anda sangat memperhatikan pikiran orang lain? (*Ya Tidak*)
3. Apakah Anda termasuk orang yang banyak bicara? (*Ya Tidak*)
4. Kalau Anda mengatakan akan melakukan sesuatu, apakah Anda selalu menepati janji tersebut walaupun mungkin hal tersebut tidak mengenakkan Anda? (*Ya Tidak*)
5. Apakah Anda pernah mearasa 'acak-acakan' tanpa suatu alasan yang jelas? (*Ya Tidak*)
6. Apakah Anda cemas kalau sedang punya utang? (*Ya Tidak*)
7. Apakah Anda agak periang? (*Ya Tidak*)
8. Apakah Anda pernah bersikap tamak dengan mengambil sesuatu lebih banyak dari hak yang seharusnya Anda ambil? (*Ya Tidak*)
9. Apakah Anda orang yang mudah tersinggung? (*Ya Tidak*)
10. Maukah Anda meminum obat-obatan yang bisa menimbulkan pengaruh yang aneh atau berbahaya? (*Ya Tidak*)
11. Apakah Anda senang berkenalan dengan orang-orang baru? (*Ya Tidak*)
12. Apakah Anda pernah menyalahkan orang lain atas sesuatu yang sebenarnya karena kesalahan Anda sendiri? (*Ya Tidak*)
13. Apakah perasaan Anda mudah terluka? (*Ya Tidak*)
14. Apakah Anda lebih suka bertindak sesuai dengan keinginan Anda sendiri dari pada berdasarkan aturan-aturan tertentu? (*Ya Tidak*)
15. Dapatkan Anda bersikap santai dan menikmati pesta yang meriah? (*Ya Tidak*)
16. Apakah semua kebiasaan Anda baik dan patut dilakukan? (*Ya Tidak*)
17. Apakah Anda sering merasa jenuh? (*Ya Tidak*)
18. Apakah sikap yang baik dan kerapian bermasalah bagi Anda? (*Ya Tidak*)
19. Apakah Anda biasanya memulai dalam berkenalan dengan orang lain? (*Ya Tidak*)
20. Apakah Anda pernah mengambil sesuatu (peniti atau kancing baju sekalipun) milik orang lain? (*Ya Tidak*)
21. Apakah Anda merasa sebagai orang yang mudah gugup? (*Ya Tidak*)
22. Apakah Anda merasa bahwa perkawinan merupakan pola hidup kuno dan tidak perlu dilakukan? (*Ya Tidak*)
23. Apakah Anda dapat dengan mudah berubah menjadi ceria dalam pesta yang menjemukan? (*Ya Tidak*)
24. Apakah Anda pernah merusakkan atau menghilangkan sesuatu milik orang lain? (*Ya Tidak*)
25. Apakah Anda seorang 'pencemas'? (*Ya Tidak*)
26. Apakah Anda senang bekerja sama dengan orang lain? (*Ya Tidak*)
27. Apakah Anda cenderung untuk berada di belakang dalam kegiatan-kegiatan sosial? (*Ya Tidak*)
28. Apakah Anda menjadi cemas saat mengetahui adanya kekeliruan-kekeliruan dalam pekerjaan Anda? (*Ya Tidak*)
29. Apakah Anda pernah mengatakan kejelekan orang lain? (*Ya Tidak*)
30. Apakah Anda menganggap diri Anda tegang atau 'mudah tersengat'? (*Ya Tidak*)
31. Menurut Anda, apakah orang lain menghabiskan terlalu banyak waktu untuk menjaga hari tuanya dengan menabung dan asuransi? (*Ya Tidak*)
32. Apakah Anda suka berbaur dengan banyak orang? (*Ya Tidak*)
33. Saat masih kecil, apakah Anda pernah rewel pada orang tua Anda? (*Ya Tidak*)

34. Apakah Anda cemas dalam waktu yang lama setelah mengalami sesuatu yang memalukan?  
( Ya Tidak )
35. Apakah Anda berusaha untuk tidak kasar terhadap orang lain? ( Ya Tidak )
36. Apakah Anda menyukai banyak kehirukpikuan yang ada di sekitar Anda? ( Ya Tidak )
37. Apakah Anda pernah curang dalam suatu permainan/perlombaan? ( Ya Tidak )
38. Apakah Anda menderita 'kegugupan'? ( Ya Tidak )
39. Apakah Anda menginginkan orang lain takut kepada Anda? ( Ya Tidak )
40. Apakah Anda pernah mengambil keuntungan atas orang lain? ( Ya Tidak )
41. Apakah Anda lebih banyak diam saat berkumpul dengan orang-orang lain? ( Ya Tidak )
42. Apakah Anda sering merasa kesepian? ( Ya Tidak )
43. Benarkah lebih baik mengikuti aturan-aturan masyarakat daripada mengikuti kemauan sendiri? ( Ya Tidak )
44. Apakah orang lain menganggap bahwa Anda adalah orang yang ceria? ( Ya Tidak )
45. Apakah Anda selalu mempraktekkan lebih dulu pidato Anda? ( Ya Tidak )
46. Apakah Anda sering terganggu oleh perasaan bersalah? ( Ya Tidak )
47. Apakah Anda kadang-kadang menunda-nunda sampai besok sesuatu yang harus Anda kerjakan hari ini? ( Ya Tidak )
48. Bisakah Anda berada dalam suatu pesta yang lama sekali? ( Ya Tidak )

## Appendix E

## Sikap/Motivasi dalam Belajar Bahasa Inggris

**Petunjuk:** Berikut ini adalah sebuah kuesener untuk mengukur sikap/motivasi dalam belajar Bahasa Inggris bagi pembelajar Indonesia. Butir-butirnya berupa pernyataan-pernyataan yang sebagian orang setuju dan sebagian yang lain tidak setuju. Masing-masing pernyataan itu diikuti oleh sejumlah pilihan yang menunjukkan seberapa jauh Anda setuju atau tidak setuju. Tidak ada jawaban yang benar atau salah karena masing-masing orang bisa mempunyai pendapat yang berbeda-beda.

Nyatakanlah pendapat Anda mengenai masing-masing pernyataan tersebut dengan melingkari pilihan yang paling menunjukkan rentangan kesetujuan atau ketidaksetujuan Anda. Pilihan-pilihannya adalah:

**STS** berarti Sangat Tidak Setuju  
**CTS** berarti Cukup Tidak Setuju  
**ATS** berarti Agak Tidak Setuju  
**NE** berarti Netral  
**AS** berarti Agak Setuju  
**CS** berarti Cukup Setuju  
**SS** berarti Sangat Setuju

Perhatikan sekali lagi bahwa tidak ada jawaban yang benar atau salah. Yang penting adalah bahwa Anda menyatakan pendapat pribadi Anda. Oleh karena itu, berikanlah reaksi pertama setelah Anda membaca masing-masing pernyataan. Jangan terlalu lama memikirkan makna masing-masing pernyataan. Tetapi, jangan pula ceroboh sehingga semua butir bisa Anda kerjakan.

1. Belajar bahasa asing bukanlah pengalaman yang menyenangkan.  
( STS CTS ATS NE AS CS SS )
2. Saya merasa saya kehilangan kemauan yang pernah saya miliki dalam belajar Bahasa Inggris.  
( STS CTS ATS NE AS CS SS )
3. Saya merasa percaya diri ketika diminta ambil bagian dalam kelas-kelas Bahasa Inggris.  
( STS CTS ATS NE AS CS SS )
4. Sebagian besar penutur asli Bahasa Inggris itu orang yang ramah dan mudah bergaul.  
( STS CTS ATS NE AS CS SS )
5. Saya benar-benar bekerja keras untuk belajar Bahasa Inggris.  
( STS CTS ATS NE AS CS SS )
6. Saya merasa malu kalau mengajukan diri menjawab pertanyaan-pertanyaan dalam kelas Bahasa Inggris.  
( STS CTS ATS NE AS CS SS )
7. Saya benar-benar ingin belajar banyak bahasa asing.  
( STS CTS ATS NE AS CS SS )
8. Saya cenderung merasa ingin berhenti saja belajar Bahasa Inggris kalau dosennya meloncat-loncat dalam penyampaian materi ajarnya.  
( STS CTS ATS NE AS CS SS )
9. Belajar Bahasa Inggris penting bagi saya karena akan membuat saya tampak lebih berbudaya.  
( STS CTS ATS NE AS CS SS )
10. Keramahan penutur asli Bahasa Inggris merupakan ancaman nyata bagi keutuhan bangsa kita.  
( STS CTS ATS NE AS CS SS )
11. Jika saya sudah selesai mata kuliah Bahasa Inggris ini, saya akan berhenti total dalam belajar Bahasa Inggris karena ternyata saya tidak tertarik.  
( STS CTS ATS NE AS CS SS )
12. Terus terang saja, saya sebenarnya mempunyai sedikit kemauan untuk belajar bahasa Inggris.  
( STS CTS ATS NE AS CS SS )

13. Saya benar-benar senang belajar Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
14. Saya tidak peduli untuk mengecek kembali tugas-tugas yang sudah dikoreksi dosen dalam perkuliahan Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
15. Semakin banyak saya mengenal penutur asli Bahasa Inggris, semakin besar keinginan untuk lancar dalam bahasa mereka itu.  
(STS CTS ATS NE AS CS SS)
16. Mahasiswa yang mengatakan bahwa mereka gugup berada dalam kelas Bahasa Inggris sebenarnya hanyalah mencari-cari alasan saja.  
(STS CTS ATS NE AS CS SS)
17. Saya benar-benar tidak mempunyai minat terhadap bahasa asing.  
(STS CTS ATS NE AS CS SS)
18. Saya benci Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
19. Semakin banyak saya mengenal penutur asli Bahasa Inggris, semakin tidak suka saya pada mereka.  
(STS CTS ATS NE AS CS SS)
20. Saya akan merasa santai saja seandainya diminta untuk menanyakan arah jalan dalam Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
21. Belajar Bahasa Inggris sebenarnya membuang-buang waktu saja.  
(STS CTS ATS NE AS CS SS)
22. Seandainya saya diminta untuk tinggal di negara lain, saya akan berusaha keras untuk belajar bahasa setempat walaupun dengan Bahasa Inggris saja sebenarnya sudah cukup.  
(STS CTS ATS NE AS CS SS)
23. Saya biasanya tidak gugup ketika saya harus menjawab pertanyaan dalam kelas-kelas Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
24. Saya berharap saya lancar dalam Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
25. Belajar bahasa Inggris penting karena akan memungkinkan saya untuk mendapatkan kenalan dari negara-negara penutur asli Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
26. Karena Bahasa Inggris merupakan bahasa internasional, saya pikir semua mahasiswa Indonesia harus mempelajarinya sampai mereka bisa menggunakannya untuk berkomunikasi.  
(STS CTS ATS NE AS CS SS)
27. Saya santai saja dalam berbicara Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
28. Saya tidak berharap banyak untuk bisa belajar lebih dari sekedar dasar-dasar bahasa Inggris saja.  
(STS CTS ATS NE AS CS SS)
29. Saya menjadi gugup dan bingung saat berbicara Bahasa Inggris di kelas.  
(STS CTS ATS NE AS CS SS)
30. Belajar Bahasa Inggris penting karena akan menjadi senjata bagi saya untuk bersaing dengan orang lain.  
(STS CTS ATS NE AS CS SS)
31. Saya merasa yakin atas diri saya ketika berbicara Bahasa Inggris di kelas.  
(STS CTS ATS NE AS CS SS)
32. Belajar Bahasa Inggris penting bagi saya karena akan memungkinkan bagi saya untuk berkenalan dan berbicara dengan orang dari berbagai ragam.  
(STS CTS ATS NE AS CS SS)
33. Saya cenderung mengerjakan pekerjaan rumah mata kuliah Bahasa Inggris dengan cara acak dan tak terencana.  
(STS CTS ATS NE AS CS SS)

34. Bahasa Inggris benar-benar hebat.  
(STS CTS ATS NE AS CS SS)
35. Saya akan gugup seandainya saya harus berbicara Bahasa Inggris kepada orang lain di toko.  
(STS CTS ATS NE AS CS SS)
36. Dengan mengenalkan pengajaran Bahasa Inggris kepada semua pelajar di Indonesia, lambat-laun jati diri bangsa kita akan hilang.  
(STS CTS ATS NE AS CS SS)
37. Saya lebih suka menonton film asing yang didubbing ke dalam Bahasa Indonesia dari pada yang masih dalam bahasa aslinya dengan penjelasan Bahasa Indonesia di bawah.  
(STS CTS ATS NE AS CS SS)
38. Saya merasa kikuk kalau harus berbicara Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
39. Saya berharap saya bisa berbicara bahasa asing dengan sempurna.  
(STS CTS ATS NE AS CS SS)
40. Seandainya saya sendiri yang memutuskan, saya akan menghabiskan semua waktu saya untuk belajar Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
41. Saya merasa belajar Bahasa Inggris itu membosankan.  
(STS CTS ATS NE AS CS SS)
42. Saya ingin belajar Bahasa Inggris sebanyak mungkin.  
(STS CTS ATS NE AS CS SS)
43. Saya mengejar kemahiran Bahasa Inggris dengan mempelajarinya tiap hari.  
(STS CTS ATS NE AS CS SS)
44. Saya merasa gugup kalau ada orang (dosen atau teman) yang bertanya dalam Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
45. Saya ingin belajar Bahasa Inggris dengan baik sehingga bisa menjadi ciri khas kedua bagi saya.  
(STS CTS ATS NE AS CS SS)
46. Bila sedang belajar Bahasa Inggris, saya tidak memperdulikan gangguan-gangguan yang ada dan tetap melakukan pekerjaan saya.  
(STS CTS ATS NE AS CS SS)
47. Belajar Bahasa Inggris itu penting bagi saya karena kemungkinan suatu hari nanti akan berguna untuk mendapatkan pekerjaan yang baik.  
(STS CTS ATS NE AS CS SS)
48. Saya tidak terlalu memperhatikan masukan-masukan yang saya terima dalam kelas Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
49. Saya senang belajar Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
50. Belajar Bahasa Inggris penting karena suatu saat mungkin akan berguna untuk melibatkan diri dalam kegiatan-kegiatan penutur asli Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
51. Ketika diharuskan mempergunakan Bahasa Inggris, saya merasa santai saja.  
(STS CTS ATS NE AS CS SS)
52. Bila mempunyai masalah dalam memahami apa yang saya pelajari dalam kelas Bahasa Inggris, saya selalau menanyakan kepada dosen.  
(STS CTS ATS NE AS CS SS)
53. Sebagian besar bahasa asing itu kedengarannya tidak nyaman dan kasar.  
(STS CTS ATS NE AS CS SS)
54. Saya kadang-kadang membayangkan berhenti belajar Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)
55. Saya lebih suka menghabiskan waktu untuk belajar matakuliah yang bukan Bahasa Inggris.  
(STS CTS ATS NE AS CS SS)

56. Saya tidak mengerti mengapa mahasiswa lain merasa gugup kalau berbicara Bahasa Inggris di kelas.  
( STS CTS ATS NE AS CS SS )
57. Saya sebenarnya berharap saya bisa memulai belajar Bahasa Inggris sejak kecil.  
( STS CTS ATS NE AS CS SS )
58. Penutur asli Bahasa Inggris itu orang yang mudah bergaul, ramah dan kreatif.  
( STS CTS ATS NE AS CS SS )
59. Saya tidak tertarik untuk berusaha memahami aspek-aspek Bahasa Inggris yang rumit.  
( STS CTS ATS NE AS CS SS )
60. Saya cemas kalau mahasiswa lain di kelas bisa berbicara Bahasa Inggris lebih baik dari pada saya.  
( STS CTS ATS NE AS CS SS )
61. Saya akan bingung senandainya saya harus berbicara bahasa Inggris melalui telepon.  
( STS CTS ATS NE AS CS SS )
62. Saya bertekad untuk berusaha memahami semua kata Bahasa Inggris yang saya lihat atau dengar.  
( STS CTS ATS NE AS CS SS )
63. Saya sering berharap saya bisa membaca surat kabar atau majalah dalam bahasa asing.  
( STS CTS ATS NE AS CS SS )
64. Saya berencana untuk belajar Bahasa Inggris sebanyak mungkin.  
( STS CTS ATS NE AS CS SS )
65. Belajar Bahasa Inggris penting karena akan membuat saya bisa memahami kehidupan dan budaya penutur asli Bahasa Inggris.  
( STS CTS ATS NE AS CS SS )
66. Saya tidak merasa gugup saat ditanya dalam Bahasa Inggris di kelas.  
( STS CTS ATS NE AS CS SS )
67. Berbicara Bahasa Inggris membuat saya takut.  
( STS CTS ATS NE AS CS SS )
68. Bangsa Indonesia harus berusaha melindungi budayanya dari pengaruh elemen-elemen budaya penutur asli Bahasa Inggris.  
( STS CTS ATS NE AS CS SS )
69. Saya suka berkenalan dan mendengarkan orang yang berbicara bahasa asing.  
( STS CTS ATS NE AS CS SS )
70. Saya ingin mengetahui lebih banyak mengenai penutur asli Bahasa Inggris.  
( STS CTS ATS NE AS CS SS )
71. Bisa berbahasa Inggris sebenarnya bukan tujuan yang penting dalam hidup saya.  
( STS CTS ATS NE AS CS SS )
72. Saya akan merasa santai berbicara Bahasa Inggris dalam pertemuan informal yang dihadiri orang Inggris dan orang Indonesia.  
( STS CTS ATS NE AS CS SS )
73. Belajar bahasa Inggris itu penting karena akan meningkatkan kemampuan saya dalam mempengaruhi orang lain.  
( STS CTS ATS NE AS CS SS )
74. Karena dengan kemampuan berbahasa Indonesia saja sudah cukup untuk hidup, maka tidaklah penting bagi orang Indonesia untuk belajar bahasa asing.  
( STS CTS ATS NE AS CS SS )
75. Saya akan merasa tenang dan percaya diri seandainya harus memesan makanan di restoran dalam bahasa Inggris.  
( STS CTS ATS NE AS CS SS )
76. Saya kadang-kadang takut kalau mahasiswa lain akan mentertawakan saya bila berbicara Bahasa Inggris.  
( STS CTS ATS NE AS CS SS )

## Appendix F

**Kuesener Strategi Belajar Bahasa Asing**

**Petunjuk:** Kuesener mengenai strategi belajar bahasa asing ini dirancang untuk pembelajar Bahasa Inggris sebagai bahasa asing atau bahasa kedua. Dalam hal ini, Anda akan dihadapkan pada beberapa pernyataan mengenai belajar Bahasa Inggris. Bacalah masing-masing pernyataan dan nyatakanlah tanggapan Anda dengan melingkari angka 1, 2, 3, 4, atau 5 yang **MENYATAKAN SEBERAPA JAUH PERNYATAAN TERSEBUT BENAR** bagi Anda.

1. Sama sekali atau hampir sama sekali tidak benar bagi saya
2. Biasanya tidak benar bagi saya
3. Kadang-kadang benar bagi saya
4. Biasanya benar bagi saya
5. Selalu atau hampir selalu benar bagi saya.

**SAMA SEKALI ATAU HAMPIR SAMA SEKALI TIDAK BENAR BAGI SAYA** berarti bahwa tingkat kebenaran pernyataan tersebut sangat jarang bagi Anda.

**BIASANYA TIDAK BENAR BAGI SAYA** berarti bahwa tingkat kebenaran pernyataan tersebut kurang dari separoh bagi Anda.

**KADANG-KADANG BENAR BAGI SAYA** berarti tingkat kebenaran pernyataan tersebut sekitar separoh bagi Anda.

**BIASANYA BENAR BAGI SAYA** berarti bahwa tingkat kebenaran pernyataan tersebut lebih dari separoh bagi Anda.

**SELALU ATAU HAMPIR SELALU BENAR BAGI SAYA** berarti bahwa tingkat kebenaran pernyataan tersebut hampir selalu bagi Anda.

Tanggapan Anda tersebut *harus berdasarkan pada apa yang benar-benar Anda lakukan, bukan berdasarkan pada apa yang sebaiknya Anda lakukan atau apa yang dilakukan orang lain*. Tidak ada tanggapan yang salah atau benar atas pernyataan-pernyataan tersebut. Oleh karena itu, kerjakanlah dengan cepat, namun tidak ceroboh. Kalau ada pernyataan, segera beritahu pengawas.

**Bagian I, nomer 1 - 9**

1. Saya memikirkan hubungan-hubungan antara apa yang telah saya ketahui dengan hal-hal baru yang saya pelajari dalam Bahasa Inggris. ( 1 2 3 4 5 )
2. Saya menggunakan kata-kata baru Bahasa Inggris dalam kalimat sehingga saya bisa mengingatnya. ( 1 2 3 4 5 )
3. Saya menghubungkan bunyi kata baru Bahasa Inggris dengan image atau gambar yang terkait untuk membantu saya mengingat kata tersebut. ( 1 2 3 4 5 )
4. Saya mengingat kata baru Bahasa Inggris dengan membuat bayangan situasi di mana kata itu mungkin dipakai. ( 1 2 3 4 5 )
5. Saya menggunakan rema untuk mengingat kata-kata baru Bahasa Inggris. ( 1 2 3 4 5 )
6. Saya mempergunakan kartu flash untuk mengingat kata-kata baru Bahasa Inggris. ( 1 2 3 4 5 )
7. Saya secara fisik memperagakan kata-kata baru Bahasa Inggris. ( 1 2 3 4 5 )
8. Saya sering mengulas ulang pelajaran-pelajaran Bahasa Inggris. ( 1 2 3 4 5 )
9. Saya mengingat kata-kata atau frase-frase baru Bahasa Inggris dengan mengingat tempatnya di halaman buku, papan, atau tanda-tanda di jalanan. ( 1 2 3 4 5 )

**Bagian II, nomer 10 - 23**

10. Saya mengucapkan dan menuliskan kata-kata baru Bahasa Inggris berulang-ulang. ( 1 2 3 4 5 )
11. Saya berusaha untuk berbicara seperti penutur asli Bahasa Inggris. ( 1 2 3 4 5 )
12. Saya mempraktekkan bunyi Bahasa Inggris. ( 1 2 3 4 5 )

13. Saya menggunakan kata-kata Bahasa Inggris yang saya kuasi dalam berbagai cara. (1 2 3 4 5)
14. Saya memulai percakapan dalam Bahasa Inggris. (1 2 3 4 5)
15. Saya menonton tayangan-tayangan TV atau film-film yang menggunakan Bahasa Inggris. (1 2 3 4 5)
16. Saya membaca bacaan berbahasa Inggris untuk mengisi waktu luang. (1 2 3 4 5)
17. Saya menuliskan catatan, pesan, surat atau laporan dalam Bahasa Inggris. (1 2 3 4 5)
18. Dalam membaca bacaan berbahasa Inggris, saya membaca sekilas dengan cepat lebih dulu, kemudian mengulangnya dengan seksama. (1 2 3 4 5)
19. Saya mencari kata-kata Bahasa Indonesia (bahasa daerah) yang sama dengan kata-kata Bahasa Inggris. (1 2 3 4 5)
20. Saya berusaha mencari pola-pola dalam Bahasa Inggris. (1 2 3 4 5)
21. Saya mencari arti suatu kata Bahasa Inggris dengan memilahnya ke dalam bagian-bagian yang bisa saya pahami. (1 2 3 4 5)
22. Saya berusaha untuk tidak menerjemahkan kata demi kata. (1 2 3 4 5)
23. Saya membuat ringkasan atas informasi yang saya dengar atau baca dalam bahasa Inggris. (1 2 3 4 5)

*Bagian III, nomer 24 - 29*

24. Untuk mengetahui kata-kata yang tidak saya kenal, saya menggunakan terkaan-terkaaan. (1 2 3 4 5)
25. Dalam percakapan, bila saya tidak tahu suatu kata Bahasa Inggris, saya menggunakan gerakan. (1 2 3 4 5)
26. Saya menciptakan kata-kata baru kalau saya tidak tahu kata yang tepat dalam bahasa Inggris. (1 2 3 4 5)
27. Saya membaca bacaan Bahasa Inggris tanpa melihat kamus atas semua kata baru. (1 2 3 4 5)
28. Saya berusaha menerka apa yang akan dikatakan berikutnya oleh orang lain dalam Bahasa Inggris. (1 2 3 4 5)
29. Jika saya tidak tahu suatu kata dalam Bahasa Inggris, saya menggunakan kata atau frase yang artinya sama. (1 2 3 4 5)

*Bagian IV, nomer 30 - 38*

30. Saya berusaha mencari cara sebanyak-banyaknya untuk dapat menggunakan Bahasa Inggris. (1 2 3 4 5)
31. Saya memperhatikan kesalahan Bahasa Inggris saya, dan menggunakan informasi itu untuk memperbaikinya. (1 2 3 4 5)
32. Saya memperhatikan bila ada orang yang berbicara dalam Bahasa Inggris. (1 2 3 4 5)
33. Saya berusaha mencari cara untuk bisa menjadi pembelajar Bahasa Inggris yang lebih baik. (1 2 3 4 5)
34. Saya merencanakan jadwal-jadwal kegiatan saya, sehingga saya mempunyai waktu yang cukup untuk belajar Bahasa Inggris. (1 2 3 4 5)
35. Saya mencari orang lain yang bisa saya ajak berbicara dalam Bahasa Inggris. (1 2 3 4 5)
36. Saya mencari kesempatan sebanyak-banyaknya untuk membaca dalam bahasa Inggris. (1 2 3 4 5)
37. Saya mempunyai tujuan yang jelas untuk meningkatkan kemampuan Bahasa Inggris saya. (1 2 3 4 5)
38. Saya memikirkan tentang kemajuan saya dalam belajar Bahasa Inggris. (1 2 3 4 5)

*Bagian V, nomer 39 - 44*

39. Saya berusaha untuk santai saat saya takut menggunakan Bahasa Inggris. (1 2 3 4 5)
40. Saya memberanikan diri untuk berbicara dalam bahasa Inggris walaupun di saat saya takut membuat kesalahan. (1 2 3 4 5)
41. Saya memuji diri sendiri saat pekerjaan dalam bahasa Inggris saya bagus. (1 2 3 4 5)

42. Saya memperhatikan apakah saya cemas atau gugup saat saya sedang menggunakan Bahasa Inggris. ( 1 2 3 4 5 )
43. Saya menuliskan perasaan-perasaan saya dalam buku harian belajar bahasa. ( 1 2 3 4 5 )
44. Saya membicarakan kepada orang lain tentang bagaimana perasaan saya saat belajar Bahasa Inggris. ( 1 2 3 4 5 )

*Bagian VI, nomer 45 - 50*

45. Jika saya tidak mengerti pembicaraan seseorang dalam Bahasa Inggris, saya meminta orang tersebut untuk mengurangi kecepatan bicaranya atau mengulanginya lagi. ( 1 2 3 4 5 )
46. Saya meminta orang lain untuk mengoreksi Bahasa Inggris saya saat berbicara. ( 1 2 3 4 5 )
47. Saya mempraktekkan Bahasa Inggris dengan teman-teman. ( 1 2 3 4 5 )
48. Saya meminta bantuan kepada orang-orang yang bisa berbahasa Inggris. ( 1 2 3 4 5 )
49. Saya mengajukan pertanyaan-pertanyaan dalam Bahasa Inggris. ( 1 2 3 4 5 )
50. Saya berusaha mempelajari budaya penutur Bahasa Inggris. ( 1 2 3 4 5 )

## Appendix G

**Skala Penilaian Kemahiran  
Berbahasa Inggris Sebagai Bahasa Asing**

**Petunjuk:** Berikut adalah skala penilaian untuk mengukur seberapa jauh Anda merasa memiliki kemahiran dalam berbahasa Inggris sebagai bahasa asing. Skala ini terdiri dari empat bagian, yang masing-masing mengukur salah satu dari keempat macam keterampilan bahasa – menyimak, berbicara, membaca, dan menulis, dan disusun dalam rentangan tujuh tingkat. Tingkat 1, 4, dan 7 dilengkapi dengan deskripsi mengenai tingkatan kemahiran Anda itu. Anda diminta untuk menilai kemampuan Anda sendiri pada keempat keterampilan bahasa itu berdasarkan skala yang telah diberikan.

**I. Menyimak**

<i>Skala</i>	<i>Deskripsi</i>
7	Saya memahami percakapan yang disampaikan dengan kecepatan normal baik oleh orang Indonesia yang berbicara Bahasa Inggris atau oleh penutur asli Bahasa Inggris (misalnya: komentaria, dialog dalam film, acara radio/televisi, dsb.)
6	
5	
4	Saya memahami orang Indonesia yang berbicara Bahasa Inggris Mengenai topik-topik yang saya kenal (misalnya: keluarga, rumah, sekolah, kegiatan sehari-hari), tetapi saya masih mempunyai kesulitan memahami pembicaraan penutur asli Bahasa Inggris, orang Inggris, Amerika atau Australia Australia (misalnya: percakapan Bahasa Inggris dalam acara-acara televisi).
3	
2	
1	Saya memahami kalimat-kalimat/petunjuk-petunjuk dalam Bahasa Inggris yang sederhana di dalam kelas asal dosennya berbicara dengan lambat dan jelas.
0	

## II. Berbicara

### Skala

### Deskripsi

7	Saya bisa melibatkan diri dalam percakapan atau diskusi dalam Bahasa Inggris mengenai topik apa saja baik yang sederhana maupun yang serius (misalnya: kejadian sehari-hari, berita kini, film, hobi, dsb.). Kesalahan dalam tata bahasa dan pelafalan yang saya buat sangat sedikit atau tidak ada.
6	
5	
4	Saya bisa berbicara mengenai masalah-masalah keseharian yang tak asing (misalnya: keluarga, kegiatan sehari-hari, memberi petunjuk mengenai arah, dsb.). Saya masih sering membuat kesalahan dalam tata bahasa dan pelafalan tetapi masih bisa dipahami oleh orang lain.
3	
2	
2	Saya menguasai kosa kata yang cukup kalau hanya untuk menjawab pertanyaan-pertanyaan sederhana mengenai diri sendiri dan kejadian sekitar (misalnya: "Where are you going?", "What did you have for breakfast this morning?"). Saya berbicara dengan terbata-bata seraya mencari kata-kata yang tepat.
0	

### III. Membaca

#### Skala

#### Deskripsi

7	Saya bisa membaca dan memahami tanpa kesulitan semua bentuk tulisan Bahasa Inggris (misalnya: surat kabar, novel, cerita, buku petunjuk permainan, buku referensi yang terkait dengan pelajaran di sekolah, dsb.). Saya jarang merujuk ke kamus).
6	
5	
4	Saya bisa membaca dan memahami bacaan-bacaan yang telah disederhakan, novel atau cerita versi yang disederhanakan, majalah Indonesia yang berbahasa Inggris, seperti <i>Hello</i> , dsb.). Saya kadang-kadang merujuk ke kamus.
3	
2	
1	Saya bisa membaca dengan lambat dan memahami kalimat-kalimat sederhana, seperti yang ada di bacaan-bacaan yang telah disederhakan, dengan terus-menerus merujuk ke kamus dua bahasa.
0	

#### IV. Menulis

##### Skala

##### Deskripsi

7	Saya bisa menulis surat baik pribadi maupun resmi dalam Bahasa Inggris, membuat catatan perkuliahan atau buku referensi, menulis laporan tentang pengalaman pribadi (misalnya: kecelakaan, perjalanan, dsb.). Kesalahan dalam tata bahasa dan pemakaian kata yang saya buat sedikit atau tidak ada.
6	
5	
4	Saya bisa menulis surat-surat persahabatan yang menjelaskan kegiatan sehari-hari, menuliskan pesan-pesan pendek. Saya masih sering membuat kesalahan tata bahasa dan pemakaian kata, tetapi masih bisa dipahami.
3	
2	
1	Saya bisa menulis kalimat-kalimat pendek dengan mengikuti pola yang telah diberikan (misalnya: latihan mengubah kalimat atau latihan-latihan sejenis yang biasa ditemukan dalam buku-buku pelajaran Bahasa Inggris).
0	

## Appendix H

## Informasi Latar Belakang Partisipan

**Petunjuk:** Berikanlah informasi seperti yang diminta pada butir-butir berikut ini. Beberapa butir meminta Anda menuliskan informasi tersebut, dan beberapa butir lainnya meminta Anda untuk memilih salah satu dari beberapa pilihan yang telah disediakan. Untuk menjaga kerahasiaan pekerjaan Anda, jangan menuliskan nama pada kuesener ini.

1. Usia : \_\_\_\_\_ tahun
2. Jenis kelamin : Laki-laki / perempuan (*Garisbawahi jawaban Anda*)
3. Bahasa yang pertama kali Anda kuasai sejak kecil: \_\_\_\_\_
4. Berapakah jumlah saudara kandung Anda? \_\_\_\_\_  
(*Anda sendiri jangan dihitung*)
5. Bahasa-bahasa apakah yang Anda pakai di rumah? (*Sebut berdasarkan urutan frekuensi pemakaian*)
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
6. Berapa lama Anda telah belajar Bahasa Inggris di universitas? \_\_\_\_\_ semester. (*Semester sekarang jangan dihitung*)
7. Bagaimana menurut Anda tingkat kesulitan Bahasa Inggris yang Anda pelajari ini?  
(*Beri tanda cawang (V) pada jawaban Anda*)

Sangat sulit	_____
Cukup sulit	_____
Cukup mudah	_____
Sangat mudah	_____
8. Seberapa penting kemahiran berbahasa Inggris itu bagi Anda?  
(*Beri tanda cawang (V) pada jawaban Anda*)

Sangat penting	_____
Penting	_____
Tidak begitu penting	_____
Sama sekali tidak penting	_____
9. Bahasa asing lain (selain Bahasa Inggris) apa yang telah atau sedang Anda pelajari?
  1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_

## Appendix I

### Protokol Wawancara

Wawancara ini dirancang untuk mengukur pemahaman mahasiswa mengenai strategi-strategi yang mereka terapkan dalam belajar Bahasa Inggris sebagai bahasa asing.

1. Mengapa Anda belajar Bahasa Inggris?
2. Apakah Anda menyukai mata kuliah Bahasa Inggris?
3. Bagaimana perasaan Anda mengenai mata kuliah Bahasa Inggris? Sulit, mudah atau biasa saja?
4. Apakah Anda merasa mempunyai kemampuan tertentu yang membantu Anda dalam belajar bahasa Inggris? Apakah Anda merasa tidak memiliki kemampuan tertentu yang bisa membantu Anda belajar bahasa Inggris? Dengan kata lain, kemampuan-kemampuan tertentu apa yang Anda harapkan untuk bisa dimiliki?
5. Bagian tata bahasa manakah yang paling sulit bagi Anda? Mengapa demikian?
6. Bagian manakah yang paling mudah? Mengapa demikian?
7. Saat Anda mempelajari butir tata bahasa baru, apakah Anda lebih suka diberi penjelasan dalam Bahasa Inggris, dalam Bahasa Indonesia, atau tanpa penjelasan sama sekali (misalnya, dengan contoh-contoh saja)?
8. Saat dosen Anda memperkenalkan sebuah kata baru, apakah bisa mempelajarinya dengan lebih cepat bila Anda melihat kata tersebut dituliskan di papan atau bila Anda mendengarnya saja?
9. Saat dosen Anda memperkenalkan sebuah kata baru, apakah Anda lebih suka diterjemahkan ke dalam bahasa Indonesia atau penjelasan maknanya dalam bahasa Inggris?
10. Dalam berbicara, bila Anda tidak mengetahui sebuah kata atau ungkapan dalam Bahasa Inggris, apakah Anda menggunakan kata atau ungkapan lain untuk menjelaskan ide-ide Anda, mengucapkannya dalam Bahasa Indonesia, mencari kata tersebut dalam kamus dwibahasa (Inggris-Indonesia), atau melupakan saja dan tidak berusaha mengungkapkan ide Anda itu?
11. Dalam mengarang, bila Anda tidak mengetahui suatu kata atau ungkapan dalam Bahasa Inggris, apakah Anda mencari kata-kata lain dalam Bahasa Inggris untuk mengungkapkan ide Anda tersebut, menyebutkan kata atau ide tersebut dalam bahasa Indonesia, mencari kata Bahasa Inggrisnya dengan membuka kamus dwibahasa (Inggris-Indonesia), atau melupakan saja dan tidak berusaha mengungkapkan ide tersebut?
12. Apakah Anda sering berlatih bahasa Inggris di kelas? Mengapa ya/tidak? Apakah Anda enggan kalau diminta oleh dosen Anda untuk menjawab suatu pertanyaan pada hal Anda tidak angkat tangan? Apakah Anda merasa terganggu kalau ada teman lain yang menjawab tanpa mengangkat tangan lebih dulu? Apakah Anda merasa dosen Anda telah cukup sering meminta Anda menjawab pertanyaan atau Anda masih ingin sering lagi?
13. Bila Anda tidak memahami sesuatu di kelas, apa yang paling mungkin Anda lakukan? a. Meminta bantuan atau klarifikasi kepada dosen, b. Meminta abntuan kepada mahasiswa lain, c. Berusaha mencari jawab dari buku atau kamus, d. Tak memperdulikan masalah itu sasma sekali.
14. Apakah Anda merasa keberatan kalau dikoreksi? Apakah ada saat-saat tertentu di mana Anda lebih menghendaki agar Bahasa Inggris Anda tidak dikoreksi?
15. Bila Anda melakukan kesalahan, apakah Anda lebih suka dikoreksi saat itu juga atau Anda lebih suka menyelesaikan tanggapan Anda lebih dahulu?
16. Apa yang Anda lakukan bila Anda dikoreksi?
17. Apakah Anda juga melakukan koreksi terhadap Bahasa Inggris mahasiswa lain bila mereka membuat kesalahan? Apakah Anda melakukannya dengan keras atau tidak bersuara?
18. Beberapa pembelajar bahasa berperasaan sangat negatif mengenai pengalaman belajarnya. Mereka merasa (a) tidak tertantang, (b) frustrasi, (c) tidak sabar, (d) bingung karena kesulitan tugas-tugas belajarnya. Apakah Anda pernah mengalami hal semacam ini?

19. Sementara itu, pembelajar yang lain merasa bahwa bahasa asing itu terasa (e) lucu dan aneh bagi mereka dan mereka merasa (f) konyol kalau harus mengungkapkan idenya dalam bahasa asing itu. Apakah Anda pernah merasa seperti ini?
20. Beberapa pembelajar yang lain merasa (g) sangat malu dan (h) seolah-olah tak ada orang lain yang akan membantu saat mereka benar-benar mempergunakan bahasa asing itu. Apakah pengalaman seperti ini biasa terjadi pada Anda saat mempergunakan bahasa Inggris?
21. Jika Anda dulu pernah merasakan hal-hal semacam di atas dan sekarang sudah tidak lagi, apa saja yang telah Anda lakukan untuk mengatasi hal tersebut?
22. Apakah Anda sudah mengembangkan teknik-teknik atau kebiasaan-kebiasaan belajar tertentu yang membantu Anda:
  - a. dalam mempelajari sistem bunyi Bahasa Inggris?  
Misalnya: dengan membaca keras, mengulang melafalkan kata, dsb.
  - b. dalam mempelajari tata bahasa?  
Misalnya: dengan menghafal hukum-hukumnya melalui rema-remas yang lucu, membentuk rumus-rumus mengenai hukum-hukum tersebut lalu menerapkannya, dsb.
  - c. dalam mempelajari kosa kata?  
Misalnya: dengan mengulang terus-menerus, mencari hubungan antar kata, menuliskan kata-kata tersebut, dsb.
  - d. dalam mengembangkan kemampuan menyimak?  
Misalnya: dengan mendengarkan radio, lagulagu, dsb.
  - e. dalam belajar berbicara?  
Misalnya: dengan berhubungan dengan penutur asli Bahasa Inggris, dengan senantiasa meminta dikoreksi, atau membayangkan suatu dialog atau berbicara pada diri sendiri, dsb.
  - f. dalam belajar membaca?  
Misalnya: dengan membaca majalah-majalah atau buku-buku berbahasa Inggris, dsb.
  - g. dalam belajar bagaimana mengungkapkan diri Anda dalam bentuk tulisan?  
Misalnya: menulis surat dalam Bahasa Inggris kepada teman, dsb.

Appendix J  
Factor Analysis of the SILL 50 Strategy Items

Correlation Matrix

	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25		
S1	1.000																										
S2	0.373	1.000																									
S3	0.313	0.347	1.000																								
S4	0.337	0.361	0.420	1.000																							
S5	0.286	0.211	0.260	0.336	1.000																						
S6	0.090	0.182	0.173	0.183	0.323	1.000																					
S7	0.255	0.323	0.296	0.260	0.198	0.272	1.000																				
S8	0.268	0.216	0.060	0.238	0.208	0.163	0.195	1.000																			
S9	0.252	0.207	0.172	0.220	0.172	0.049	0.247	0.323	1.000																		
S10	0.194	0.245	0.046	0.219	0.111	0.164	0.112	0.370	0.309	1.000																	
S11	0.357	0.328	0.144	0.240	0.149	0.076	0.244	0.275	0.311	0.271	1.000																
S12	0.310	0.308	0.154	0.278	0.264	0.118	0.242	0.372	0.285	0.312	0.554	1.000															
S13	0.306	0.349	0.153	0.250	0.206	0.093	0.232	0.307	0.162	0.095	0.285	0.419	1.000														
S14	0.216	0.279	0.106	0.237	0.269	0.201	0.243	0.290	0.154	0.189	0.157	0.218	0.375	1.000													
S15	0.144	0.201	0.037	0.151	0.111	-0.060	0.055	0.145	0.162	0.059	0.314	0.290	0.332	0.210	1.000												
S16	0.289	0.333	0.133	0.273	0.174	0.156	0.288	0.351	0.219	0.165	0.271	0.331	0.333	0.365	0.315	1.000											
S17	0.231	0.199	0.091	0.136	0.212	0.101	0.183	0.256	0.127	0.212	0.210	0.271	0.204	0.404	0.164	0.470	1.000										
S18	0.282	0.214	0.138	0.147	0.133	0.118	0.158	0.225	0.205	0.201	0.311	0.302	0.237	0.152	0.206	0.259	0.230	1.000									
S19	0.177	0.070	0.170	0.161	0.152	0.061	0.177	0.091	0.206	0.104	0.152	0.209	0.069	0.112	0.018	0.125	0.144	0.195	1.000								
S20	0.286	0.205	0.136	0.312	0.247	0.175	0.21	0.332	0.279	0.206	0.228	0.331	0.313	0.292	0.118	0.309	0.225	0.244	0.377	1.000							
S21	0.253	0.113	0.155	0.226	0.162	0.064	0.203	0.159	0.178	0.121	0.205	0.214	0.263	0.196	0.075	0.166	0.146	0.247	0.170	0.341	1.000						
S22	0.152	0.234	0.133	0.092	0.026	0.022	0.091	0.047	0.133	0.012	0.183	0.175	0.175	0.101	0.179	0.173	0.138	0.234	0.178	0.144	0.163	1.000					
S23	0.288	0.210	0.127	0.217	0.191	0.216	0.268	0.256	0.197	0.140	0.177	0.265	0.256	0.356	0.143	0.311	0.263	0.257	0.144	0.318	0.239	0.118	1.000				
S24	0.136	0.126	0.045	0.180	0.047	-0.060	0.044	0.067	0.154	0.035	0.158	0.087	0.178	0.014	0.285	0.106	0.058	0.186	0.136	0.016	0.135	0.233	0.188	1.000			
S25	0.126	0.156	0.230	0.160	0.157	0.070	0.106	0.048	0.199	0.093	0.153	0.097	0.129	0.050	0.167	0.094	0.036	0.145	0.152	0.103	0.143	0.100	0.087	0.300	1.000		
S26	0.144	0.125	0.132	0.180	0.206	0.175	0.155	0.053	0.207	0.063	0.194	0.114	0.157	0.204	0.149	0.138	0.120	0.154	0.217	0.148	0.144	0.121	0.226	0.262	0.364	1.000	
S27	0.083	0.107	0.044	0.047	0.070	0.041	0.092	0.122	0.086	0.054	0.078	0.024	0.149	0.144	0.176	0.168	0.193	0.128	0.070	0.066	0.069	0.223	0.077	0.244	0.018	0.018	1.000
S28	0.188	0.170	0.208	0.159	0.068	0.064	0.233	0.114	0.255	0.125	0.264	0.186	0.191	0.133	0.210	0.116	0.135	0.297	0.121	0.147	0.238	0.171	0.190	0.205	0.206	0.206	1.000
S29	0.325	0.289	0.156	0.213	0.105	0.028	0.112	0.167	0.258	0.133	0.242	0.271	0.197	0.114	0.252	0.231	0.157	0.307	0.159	0.120	0.187	0.256	0.164	0.271	0.299	0.299	1.000
S30	0.303	0.278	0.135	0.300	0.181	0.149	0.254	0.257	0.291	0.264	0.340	0.288	0.348	0.164	0.114	0.324	0.202	0.279	0.110	0.294	0.214	0.118	0.237	0.061	0.139	0.139	1.000

	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25
S31	0.355	0.246	0.167	0.304	0.201	0.087	0.205	0.335	0.242	0.273	0.335	0.459	0.304	0.142	0.219	0.306	0.211	0.307	0.194	0.371	0.330	0.210	0.278	0.171	0.105
S32	0.302	0.200	0.093	0.235	0.068	0.027	0.170	0.276	0.233	0.221	0.369	0.353	0.295	0.158	0.289	0.293	0.222	0.298	0.052	0.222	0.279	0.113	0.225	0.180	0.184
S33	0.268	0.236	0.071	0.177	0.056	0.046	0.144	0.242	0.185	0.160	0.322	0.360	0.326	0.128	0.253	0.257	0.134	0.355	0.007	0.217	0.261	0.126	0.233	0.118	0.055
S34	0.226	0.120	0.166	0.152	0.240	0.180	0.205	0.397	0.114	0.208	0.173	0.283	0.315	0.291	0.095	0.336	0.288	0.104	0.074	0.248	0.188	0.020	0.354	-0.060	0.038
S35	0.313	0.265	0.146	0.228	0.103	0.102	0.232	0.308	0.158	0.141	0.288	0.214	0.322	0.283	0.252	0.405	0.318	0.219	-0.020	0.252	0.268	0.075	0.289	0.109	0.161
S36	0.332	0.322	0.143	0.207	0.204	0.074	0.242	0.442	0.249	0.268	0.312	0.376	0.335	0.293	0.225	0.517	0.363	0.281	0.089	0.331	0.218	0.174	0.309	0.035	0.019
S37	0.299	0.222	0.098	0.243	0.136	0.066	0.116	0.313	0.090	0.231	0.310	0.337	0.298	0.209	0.189	0.279	0.169	0.301	0.027	0.239	0.167	0.161	0.264	0.147	0.143
S38	0.295	0.216	0.089	0.195	0.178	0.088	0.072	0.286	0.189	0.213	0.344	0.346	0.300	0.195	0.220	0.223	0.124	0.315	0.010	0.247	0.193	0.095	0.197	0.133	0.137
S39	0.131	0.157	0.149	0.149	0.052	-0.100	0.108	0.098	0.190	-0.030	0.301	0.219	0.204	0.021	0.206	0.106	0.087	0.178	0.017	0.022	0.088	0.154	0.076	0.242	0.242
S40	0.238	0.238	0.125	0.263	0.125	0.046	0.073	0.165	0.186	0.103	0.345	0.215	0.284	0.164	0.247	0.214	0.190	0.299	0.087	0.145	0.156	0.137	0.114	0.251	0.241
S41	0.019	0.063	0.085	0.037	0.096	0.066	0.086	0.094	0.125	0.025	0.180	0.127	0.140	0.067	0.093	0.031	0.113	0.147	0.079	0.107	0.116	0.127	0.052	0.071	0.176
S42	0.157	0.049	0.184	0.220	0.117	0.106	0.002	0.131	0.116	0.057	0.180	0.127	0.202	0.016	0.052	0.006	0.012	0.158	0.025	0.107	0.212	0.140	0.101	0.129	0.168
S43	0.143	0.073	0.113	0.128	0.176	0.251	0.129	0.207	0.002	0.121	0.056	0.044	0.125	0.237	-0.020	0.167	0.256	0.162	0.060	0.176	0.159	0.081	0.180	0.045	0.084
S44	-0.030	-0.030	-0.030	0.031	0.078	0.069	0.054	0.094	0.086	0.096	0.136	0.958	0.076	0.049	-0.010	-0.010	0.047	0.025	0.117	0.100	0.176	0.088	0.066	0.136	0.149
S45	0.205	0.111	0.104	0.169	0.039	0.065	0.095	0.105	0.121	0.186	0.297	0.195	0.227	0.011	0.209	0.106	0.072	0.211	0.028	0.044	0.118	0.041	0.093	0.153	0.170
S46	0.162	0.094	0.099	0.134	0.089	0.135	0.052	0.135	0.130	0.111	0.196	0.212	0.166	0.025	0.053	0.148	0.086	0.117	-0.010	0.149	0.187	0.001	0.163	0.026	0.099
S47	0.203	0.233	0.062	0.123	0.145	0.146	0.188	0.303	0.134	0.198	0.222	0.259	0.327	0.330	0.145	0.366	0.299	0.211	-0.020	0.219	0.224	0.114	0.203	0.087	0.116
S48	0.169	0.166	0.114	0.198	0.128	0.112	0.104	0.254	0.180	0.244	0.233	0.241	0.280	0.090	0.098	0.163	0.108	0.218	0.076	0.204	0.205	0.070	0.082	0.074	0.098
S49	0.190	0.220	0.050	0.206	0.173	0.184	0.212	0.306	0.177	0.177	0.302	0.286	0.327	0.353	0.234	0.447	0.350	0.294	0.104	0.300	0.217	0.203	0.262	0.122	0.121
S50	0.253	0.242	0.165	0.221	0.200	0.142	0.280	0.221	0.175	0.181	0.310	0.299	0.330	0.318	0.237	0.406	0.328	0.223	0.074	0.266	0.239	0.144	0.340	0.081	0.106



	S26	S27	S28	S29	S30	S31	S32	S33	S34	S35	S36	S37	S38	S39	S40	S41	S42	S43	S44	S45	S46	S47	S48	S49	S50	
S36	0.048	0.222	0.149	0.163	0.416	0.440	0.396	0.373	0.484	0.536	1.000															
S37	0.048	0.070	0.117	0.189	0.391	0.347	0.383	0.396	0.357	0.408	0.447	1.000														
S38	0.106	0.055	0.129	0.279	0.344	0.352	0.389	0.393	0.246	0.333	0.333	0.473	1.000													
S39	0.158	0.130	0.240	0.319	0.166	0.227	0.315	0.147	0.057	0.281	0.149	0.253	0.304	1.000												
S40	0.139	0.143	0.160	0.288	0.285	0.240	0.328	0.257	0.120	0.384	0.225	0.306	0.322	0.445	1.000											
S41	0.141	0.057	0.251	0.104	0.143	0.083	0.052	0.123	0.134	0.145	0.030	0.104	0.187	0.190	0.182	1.000										
S42	0.161	0.022	0.175	0.119	0.249	0.166	0.243	0.191	0.145	0.231	0.096	0.255	0.178	0.298	0.289	0.292	1.000									
S43	0.114	0.070	0.151	0.005	0.173	0.073	0.148	0.091	0.280	0.174	0.173	0.144	0.082	0.006	0.132	0.149	0.176	1.000								
S44	0.145	-0.040	0.220	-0.020	0.139	0.068	0.105	0.042	0.137	0.143	0.088	0.069	0.076	0.161	0.139	0.222	0.244	0.277	1.000							
S45	0.048	0.000	0.142	0.224	0.265	0.259	0.356	0.206	0.118	0.327	0.174	0.217	0.275	0.299	0.327	0.088	0.231	0.138	0.207	1.000						
S46	0.002	-0.130	-0.010	0.043	0.273	0.251	0.288	0.194	0.242	0.266	0.219	0.242	0.341	0.219	0.268	0.115	0.277	0.152	0.318	0.444	1.000					
S47	0.062	0.096	0.066	0.112	0.324	0.312	0.261	0.272	0.283	0.469	0.371	0.364	0.310	0.208	0.303	0.143	0.135	0.175	0.027	0.181	0.281	1.000				
S48	0.015	-0.000	0.048	0.121	0.391	0.286	0.381	0.363	0.283	0.344	0.305	0.296	0.354	0.220	0.342	0.159	0.233	0.153	0.177	0.415	0.495	0.357	1.000			
S49	0.148	0.191	0.142	0.244	0.362	0.330	0.287	0.278	0.237	0.371	0.355	0.266	0.264	0.143	0.323	0.167	0.182	0.228	0.090	0.181	0.150	0.436	0.295	1.000		
S50	0.132	0.139	0.212	0.179	0.272	0.241	0.154	0.234	0.340	0.312	0.390	0.226	0.246	0.126	0.200	0.094	0.098	0.185	0.156	0.199	0.163	0.328	0.169	0.408	1.000	

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.978	21.957	21.957	10.978	21.957	21.957	4.561	9.123	9.123
2	2.698	5.397	27.353	2.698	5.397	27.353	4.319	8.639	17.762
3	2.526	5.052	32.405	2.526	5.052	32.405	2.650	5.300	23.061
4	2.047	4.094	36.499	2.047	4.094	36.499	2.587	5.173	28.235
5	1.773	3.547	40.045	1.773	3.547	40.045	2.448	4.896	33.131
6	1.490	2.980	43.025	1.490	2.980	43.025	1.912	3.826	36.957
7	1.263	2.525	45.551	1.263	2.525	45.551	1.879	3.759	40.715
8	1.164	2.329	47.880	1.164	2.329	47.879	1.814	3.627	44.342
9	1.160	2.321	50.200	1.160	2.321	50.200	1.662	3.323	47.666
10	1.131	2.261	52.461	1.131	2.261	52.461	1.633	3.267	50.933
11	1.122	2.245	54.706	1.122	2.245	54.706	1.548	3.096	54.028
12	1.047	2.095	56.801	1.047	2.095	56.801	1.386	2.772	56.801

Rotated Component Matrix

	Component											
	1	2	3	4	5	6	7	8	9	10	11	12
S1		0.357		0.493								
S2				0.533								
S3				0.786								
S4				0.624								
S5				0.419								
S6										0.737		
S7				0.433								0.471
S8	0.388	0.305				0.539						
S9						0.563						
S10						0.726						
S11						0.308				0.523		
S12		0.315				0.315				0.565		
S13	0.407	0.327								0.357		
S14	0.632											
S15	0.303				0.378					0.487		
S16	0.683											
S17	0.661											
S18		0.420							0.407			
S19						0.711						
S20						0.623						
S21		0.344				0.488						
S22									0.583			
S23	0.376	0.318										
S24					0.670							
S25					0.619							
S26					0.654							
S27	0.308								0.391	-0.304		
S28												0.635
S29					0.437				0.410			
S30		0.462										
S31		0.548										
S32		0.640										
S33		0.741										
S34	0.504	0.317							-0.383			
S35	0.501	0.453										
S36	0.572	0.440										
S37		0.621										
S38		0.546										
S39			0.304		0.327			0.343			-0.402	
S40			0.404		0.308							
S41								0.743				
S42								0.584				
S43	0.317									-0.308	0.409	
S44			0.421					0.397				
S45			0.699									
S46			0.733									
S47	0.538											
S48		0.334	0.616									
S49	0.558								0.350			
S50	0.565											

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

## BIBLIOGRAPHY

- Anderson, J. R. (1990). *Cognitive psychology and its implications* (3rd ed.). New York: W.H. Freeman and Company.
- Ary, D., Jacobs, L. C., & Razavieh, A. (2002). *Introduction to research in education* (6th ed.). Belmont, CA: Wadsworth/Thomson Learning.
- Baradja, M. F. (1994). Memperkenalkan pemerolehan bahasa kedua (Introducing second language acquisition). *Jurnal Pendidikan Humaniora dan Sains*, 1 (1), 2-12.
- Bacon, S. M. (1992). The relationship between gender, comprehension, processing strategies, and cognitive and affective response in foreign language listening. *The Modern Language Journal*, 76, 160-178.
- Bacon, S. M., & Finnemann, M. D. (1990). A study of the attitudes, motives, and strategies of university foreign language students and their disposition to authentic oral and written input. *The Modern Language Journal*, 74, 459-473.
- Bedell, D. A., & Oxford, R. L. (1996). Cross-cultural comparisons of language learning strategies in the People's Republic of China and other countries. In R. L. Oxford (Ed.), *Language learning strategies around the world: Cross-cultural perspectives* (pp. 75-88). Honolulu: University of Hawai'i at Manoa, Second Language Teaching & Curriculum Centre.
- Beebe, L. M. (1983). Risk-taking and the language learner. In H. W. Seliger & M. H. Long (Eds.), *Classroom oriented research in second language acquisition* (pp. 39-65). Rowley, Massachusetts: Newbury House.
- Bell-Gredler, M. E. (1986). *Learning and instruction: Theory into practice*. New York: Macmillan Publishing Company.
- Bialystok, E. (1981). The role of conscious strategies in second language proficiency. *The Modern Language Journal*, 65, 24-35.
- Bialystok, E., & Fröhlich, M. (1978). Variables of classroom achievement in second language learning. *The Modern Language Journal* 62, 327-336.
- Brown, D. H. (1987). *Principles of language learning and teaching* (2nd ed.). Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

- Busch, D. (1982). Introversion-extraversion and EFL proficiency of Japanese students. *Language Learning*, 32, 109-132.
- Canale, M. (1983). From communicative competence to language pedagogy. In J. C. Richards & R. W. Schmidt (Eds.), *Language and communication* (pp. 2-27). London: Longman Group Limited.
- Carrell, P. L., & Eisterhold, J. C. (1988). Schema theory and ESL reading pedagogy. In P. L. Carrell, J. Devine, & D. E. Eskey (Eds.), *Interactive approaches to second language reading* (pp. 73-92). Cambridge: Cambridge University Press.
- Carroll, D. W. (1986). *Psychology of language*. Belmont, California: Wadsworth, Inc.
- Carroll, J. B. (1981). Twenty-five years of research on foreign language aptitude. In K. C. Diller (Ed.), *Individual differences and universals in language learning aptitude* (pp. 83-118). Rowley, Massachusetts: Newbury House.
- Carroll, J. B. (1990). Cognitive abilities in foreign language aptitude: Then and now. In T. S. Parry & C. W. Stansfield (Eds.), *Language aptitude reconsidered* (pp. 11-66). Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Carroll, J. B., & Sapon, S. M. (1958). *Modern language aptitude test: Form A*. New York: The Psychological Corporation.
- Carroll, J. B., & Sapon, S. M. (1959). *Modern language aptitude test: Manual*. New York: The Psychological Corporation.
- Chamot, A. U., & Küpper, L. (1989). Learning strategies in foreign language instruction. *Foreign Language Annals*, 22, 13-24.
- Chamot, A. U., & O'Malley, J. M. (1994). Language learner and learning strategies. In N.C. Ellis (Ed.), *Implicit and explicit learning of languages* (pp. 371-392). London: Academic Press Limited.
- Chandrasegaran, A. (1981). *Problems of learning English as a second language: an investigation of factors affecting the learning of ESL in Malaysia*. Singapore: Singapore University Press for SEAMEO Regional Language Centre.

- Chapelle, C., & Roberts, C. (1986). Ambiguity tolerance and field independence as predictors of proficiency in English as a second language. *Language Learning, 36*, 27-45.
- Chastain, K. (1988). *Developing second-language skills: Theory and practice* (3rd ed.). New York: Harcourt Brace Jovanovich, Inc.
- Chesterfield, R., & Chesterfield, K. B. (1985). Natural order in children's use of second language learning strategies. *Applied Linguistics, 6*, 49-59.
- Clark, H. H., & Clark, E. V. (1977). *Psychology and language: An introduction to psycholinguistics*. New York: Harcourt Brace Jovanovich, Inc.
- Clément, R., Smythe, P. C., & Gardner, R. C. (1978). Persistence in second-language study: motivational considerations. *Canadian Modern Language Review, 34*, 688-694.
- Cohen, A. D. (1987). Studying learner strategies: How we get the information. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 31-40). Hemel Hempstead, Hertfordshire: Prentice Hall International (UK) Ltd.
- Cohen, A. D. (1991). Strategies in second language learning: Insights from research. In R. Phillipson, E. Kellerman, L. Selinker, M. S. Smith, & M. Swain (Eds.), *Foreign/second language pedagogy research* (pp. 107-119). Clevedon: Multilingual Matters, Ltd.
- Collier, V. (1987). Age and rate of acquisition of second language for academic purposes. *TESOL Quarterly, 21*, 617-641.
- Cook, V. (1991). *Second language learning and language teaching*. London: Edward Arnold.
- Cziko, G. A. (1980). Language competence and reading strategies: a comparison of first- and second-language reading errors. *Language Learning, 30*, 101-116.
- Danifil. (1985). *Kemampuan membaca Bahasa Inggris tenaga edukatif non Bahasa Inggris di Universitas Riau (English reading ability of lecturers of non English Department at Riau University)*. Unpublished doctoral dissertation, IKIP Malang, Indonesia.

- Danks, J. H., Bohn, L., & Fears, R. (1983). Comprehension processes in oral reading. In G. B. Flores d'Arcais & R. J. Jarvella (Eds.), *The process of language understanding* (pp. 193-223): John Wiley & Sons Ltd.
- Dick, W., & Carey, L. (1996). *The systematic design of instruction* (4th ed.). New York: HarperCollins College Publishers.
- Dickinson, L. (1987). *Self-instruction in language learning*. Cambridge: Cambridge University Press.
- Djiwandono, M. S. (1982). *A study on the effectiveness of the teaching of English reading courses (ERC)*. Unpublished doctoral dissertation, IKIP Malang, Indonesia.
- Djiwandono, P. I. (1998). *The relationship between EFL learning strategies, degree of extroversion, and oral communication proficiency: A study of second year secretarial students at Widya Karya University*. Unpublished doctoral dissertation, IKIP Malang, Indonesia.
- Dornic, S. (1979). Information processing in bilingualism: Some selected issues. *Psychological Research*, 40, 329-348.
- Dörnyei, Z. (1990). Conceptualising motivation in foreign language learning. *Language Learning*, 40, 45-78.
- Dörnyei, Z. (1996). Moving language learning motivation to a larger platform for theory and practice. In R. Oxford (Ed.), *Language learning motivation: Pathways to the new century* (pp. 71-80). Honolulu: University of Hawai'i at Manoa, Second Language Teaching & Curriculum Centre.
- Dreyer, C., & Oxford, R. L. (1996). Learning strategies and other predictors of ESL proficiency among Afrikaans speakers in South Africa. In R. L. Oxford (Ed.), *Language learning strategies around the world: Cross-cultural perspectives* (pp. 61-74). Honolulu: University of Hawai'i at Manoa, Second Language Teaching & Curriculum Centre.
- Ehrman, M., & Oxford, R. (1989). Effects of sex differences, career choice, and psychological type on adult language learning strategies. *The Modern Language Journal*, 73, 1-13.

- Ehrman, M., & Oxford, R. (1990). Adult language learning styles and strategies in an intensive training setting. *The Modern Language Journal*, 74, 311-327.
- Ekstrand, L. H. (1976). Age and length of residence as variables related to the adjustment of migrant children, with special reference to second language learning. In G. Nickel (Ed.), *Proceedings of the fourth international congress of applied linguistics* (pp. 179-197). Stuttgart: Hochschulverlag.
- Ellis, R. (1985). *Understanding second language acquisition*. Oxford: Oxford University Press.
- Ellis, R. (1990). Individual learning styles in classroom second language development. In J. H. A. L. de Jong & D. K. Stevenson (Eds.), *Individualising the assessment of language abilities*. Clevedon: Multilingual Matters.
- Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press.
- Ellis, R. (1997). *Second language acquisition*. Oxford: Oxford University Press.
- Ely, C. M. (1986). An analysis of discomfort, risktaking, sociability, and motivation in the L2 classroom. *Language Learning*, 36, 1-25.
- Eysenck, H. J., & Eysenck, S. B. G. (1975). *Manual of the Eysenck personality questionnaire (junior & adult)*. London: Hodder & Stoughton.
- Eysenck, H. J., & Eysenck, S. B. G. (1991). *Manual of the Eysenck personality scales (EPS Adult)*. London: Hodder & Stoughton.
- Gajayana University. (1996). *Course guide for 1996/1997 - 2001/2002*.
- Gagne, R. M., Briggs, L. J., & Wager, W. W. (1992) *Principles of instructional design* (4th ed.). Orlando: Holt, Rinehart and Winston, Inc.
- Gardner, R. C. (1985). *Social psychology and second language learning*. London: Edward Arnold.
- Gardner R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second-language learning*. Rowley, Massachusetts: Newbury House.
- Gardner, R. C., & MacIntyre, P. D. (1992). A student's contributions to second language learning. Part I: Cognitive abilities. *Language Teaching*, 25, 211-220.

- Gardner, R. C., & MacIntyre, P. D. (1993). On the measurement of affective variables in second language learning. *Language Learning, 43*, 157-194.
- Gardner, R. C., Tremblay, P. F., & Masgoret, A. (1997). Towards a full model of second language learning: An empirical investigation. *The Modern Language Journal, 81*, 344-362.
- Gass, S. M., & Selinker, L. (1994). *Second language acquisition: An introductory course*. Hillsdale, New Jersey: Laurence Erlbaum Associates, Inc.
- Geltrich-Ludgate, B. (1984). Suggested strategies for listening comprehension in the foreign language classroom. *Foreign Language Annals, 17*, 339-348.
- Gillette, B. (1987). Two successful language learners: An introspective approach. In C. Færch & G. Kasper (Eds.), *Introspection in second language research* (pp. 268-279). Clevedon: Multilingual Matters Ltd.
- Goh, C. (1997). Metacognitive awareness and second language listeners. *ELT Journal, 51*, 361-369.
- Goodman, K. S. (1976). Reading: a psycholinguistic guessing game. In H. Singer & R. B. Ruddell (Eds.), *Theoretical models and processes of reading* (2nd ed.). Newark, Delaware: International Reading Association.
- Grainger, P. R. (1997). Language-learning strategies for learners of Japanese: Investigating ethnicity. *Foreign Language Annals, 30*, 378-385.
- Green, J. M., & Oxford, R. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly, 29*, 261-297.
- Griffiths, R. (1991). Personality and second language learning: Theory, research and practice. In E. Sadtono (Ed.), *Language acquisition and the second/foreign language classroom* (pp. 103-135). Singapore: SEAMEO Regional Language Centre.
- Gronlund, N. E., & Linn, R. L. (1990). *Measurement and evaluation in teaching* (6th ed.). New York: Macmillan Publishing Company.
- Gu, Y., & Johnson, R. K. (1996). Vocabulary learning strategies and language learning outcomes. *Language Learning, 46*, 643-679.
- Guiora, A. Z., Brannon, R. C. L., & Dull, C. Y. (1972). Empathy and second language learning. *Language Learning, 22*, 111-130.

- Hamied, A. F. (1997). EFL program surveys in Indonesian schools: Towards EFL curriculum implementation for tomorrow. In G. M. Jacobs (Ed.), *Language classrooms of tomorrow: issues and responses* (pp. 67-77).
- Hamied, A. F. (2000). *TEFL-related policy issues in Indonesia*. Paper presented at the 48th TEFLIN (Teaching English as a Foreign Language in Indonesia) International Conference, Jakarta, 22-24 October 2000.
- Hansen, J., & Stansfield, C. (1981). The relationship of field dependent-independent cognitive styles to foreign language achievement. *Language Learning, 31*, 349-367.
- Harris, V. (1997). *Teaching learners how to learn: Strategy training in the ML classroom*. London: Centre for Information on Language Teaching and Research.
- Harris, A. J., & Sipay, E. R. (1980). *How to increase reading ability: A guide to developmental and remedial methods*. New York: Longman, Inc.
- Henning, G. H. (1973). Remembering foreign language vocabulary: acoustic and semantic parameters. *Language Learning, 34*, 186-196.
- Heyde, A. (1979). *The relationship between self-esteem and oral production of a second language*. Unpublished Ph.D dissertation, University of Michigan, Ann Arbor.
- Hinkle, D. E., Wiersma, W., & Jurs, S. G. (1988). *Applied statistics for the behavioral sciences*. Boston: Houghton Mifflin Company.
- Holec, H. (1981). *Autonomy and foreign language learning*. Strasbourg: Council of Europe.
- Holley, C. D., & Dansereau, D. F. (1984). The development of spatial learning strategies. In C. D. Holley & D. F. Dansereau (Eds.), *Spatial learning strategies: Techniques, applications, and related issues* (pp. 3-19). Orlando: Academic Press, Inc.
- Hornby, A. S. (1974). *Oxford advanced learner's dictionary of current English*. Oxford: Oxford University Press.

- Horwitz, E. K. (1987). Linguistic and communicative competence: Reassessing foreign language aptitude. In B. VanPatten, T. R. Dvorak & J. F. Lee (Eds.), *Foreign language learning: A research perspective* (pp. 146-157). New York: Newbury House Publishers.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70, 125 -132.
- Huda, N. (1988). *Survei Pengajaran Bahasa Inggris di SMP dan SMA: Tahap I (8 Propinsi) (A Survey of English Teaching at Junior and Senior Secondary Schools: Phase I (8 Provinces))*. Malang, Indonesia: Pusat Penelitian IKIP MALANG
- Huda, N. (1992). The 1994 English syllabus for secondary schools: Issues and problems. *Bahasa dan Seni*, 51, 1-11.
- Huda, N. (1998). Relationship between speaking proficiency, reflectivity-impulsivity, and L2 learning strategies. In W. A. Renandya & G. M. Jacobs (Eds.) *Learners and language learning* (pp. 40-55). Singapore: SEAMEO Regional Language Centre.
- Huda, N. (1999). *Language learning and teaching: Issues and trends*. Malang, Indonesia: IKIP Malang Publisher.
- Islamic University of Malang. (1999). *Course guide for 1999/2000*.
- James, M. O. (1987). ESL reading pedagogy: implications of schema-theoretical research. In J. Devine, P. L. Carrell, & D. E. Eskey (Eds.), *Research in reading in English as a second language* (pp. 175-188). Washington D.C.: Teachers of English to Speakers of Other Languages.
- Jamieson, J. (1995). The cognitive styles of reflection/impulsivity and field independence/dependence and ESL success. In H. D. Brown & S. Gonzo (Eds.), *Readings on second language acquisition* (pp. 119-137). Englewood Cliffs, New Jersey: Prentice Hall, Inc.

- Kaylani, C. (1996). The influence of gender and motivation on EFL learning strategy use in Jordan. In R. L. Oxford (Ed.), *Language learning strategies around the world: Cross-cultural perspectives* (pp. 75-88). Honolulu: University of Hawai'i at Manoa, Second Language Teaching & Curriculum Centre.
- Kemp, J. E., Morisson, G., & Ross, S. M. (1994). *Designing effective instruction*. New York: Macmillan College Publishing Company, Inc.
- Kiany, G. R. (1998). English proficiency and academic achievement in relation to extraversion: A preliminary study. *International Journal of Applied Linguistics*, 8, 113-130.
- Krashen, S. D. (1981). *Second language acquisition and second language learning*. Oxford: Pergamon Press.
- Lado, R. (1961). *Language testing*. London: Longman Group, Ltd.
- Lawson, M. J., & Hogben, D. (1996). The vocabulary-learning strategies of foreign-language students. *Language Learning*, 46, 101-135.
- Leki, I. (1992). *Understanding ESL writers: A guide for teachers*. Portsmouth, New Hampshire: Boynton/Cook Publishers.
- Lengkanawati, N. S. (1997). *Kontribusi strategy belajar bahasa terhadap kemahiran berbahasa (Contribution of learning strategies on language proficiency)*. Unpublished doctoral dissertation, IKIP Bandung, Indonesia.
- Levine, A., Reeves, T., & Leaver, B. L. (1996). Relationship between language learning strategies and Israeli versus Russian cultural-educational factors. In R. L. Oxford (Ed.), *Language learning strategies around the world: Cross-cultural perspectives* (pp. 75-88). Honolulu: University of Hawai'i at Manoa, Second Language Teaching & Curriculum Centre.
- Lindsay, P. H., & Norman, D. A. (1975). Human information processing. In N. Entwistle & D. Hounsel (Eds.), *How students learn* (pp. 67-81). Lancaster: University of Lancaster, Institute for Research and Development in Post-Compulsory Education.

- Littlewood, W. (1984). *Foreign and second language learning: Language acquisition research and its implications for the classroom*. Cambridge: Cambridge University Press.
- LoCastro, V. (1994). Learning strategies and learning environments. *TESOL Quarterly*, 28, 409-414.
- Lukmani, Y. M. (1972). Motivation to learn and language proficiency. *Language Learning*, 22, 261-273.
- Lunt, E. H. (2000). *The learning strategies of adult immigrant learners of English: Quantitative and qualitative perspectives*. Unpublished Ph.D thesis, The University of Melbourne.
- MacIntyre, P. D., & Gardner, R. C. (1989). Anxiety and second-language learning: Toward a theoretical clarification. *Language Learning*, 39, 251-275.
- MacIntyre, P. D., & Noels, K. A. (1996). Using social-psychological variables to predict the use of language learning strategies. *Foreign Language Annals*, 29, 373-386.
- Mayer, R. E. (1988). Learning strategies: an overview. In C. E. Weinstein, E. T. Goetz, & P. A. Alexander (Eds.), *Learning and study strategies: Issues in assessment, instruction, and evaluation* (pp. 11-22). San Diego: Academic Press, Inc.
- McDonough, S. H. (1981). *Psychology in foreign language teaching*. London: George Allen & Unwin (Publishers) Ltd.
- McLaughlin, B. (1987). *Theories of second-language learning*. London: Edward Arnold.
- McLaughlin, B. (1990). The relationship between first and second languages: language proficiency and language aptitude. In B. Harley, P. Allen, J. Cummins, & M. Swain (Eds.), *The development of second language proficiency* (pp.158-178). Cambridge: Cambridge University Press.
- McLaughlin, B., Rossman, T., & McLeod, B. (1983). Second language learning: An information-processing perspective. *Language Learning*, 33, 135-158.
- McMillan, J. H., & Schumacher, S. (1989). *Research in education: A conceptual introduction* (2nd ed.). Glenview, Illinois: Harper Collin Publishers.

- Merrifield, J. (1996). *Examining the language learning strategies used by French adult learners*. Unpublished master thesis. Aston University.
- Ministry of Education and Culture. (1993). *Kurikulum sekolah menengah umum: Garis-garis besar program pengajaran (Curriculum for senior secondary schools: Basic course outline)*. Jakarta: Departemen Pendidikan dan Kebudayaan.
- Mukminatien, N. (1997). *The differences of students' writing achievements across different course levels*. Unpublished doctoral dissertation, IKIP Malang, Indonesia.
- Muyoto, N. (1986). *Penelitian tentang pengaruh faktor sekolah, guru, dan murid terhadap prestasi Bahasa Inggris di Kota Madya Malang (A study on the effect of school, teacher and student on English achievement in Malang Municipality)*. Malang, Indonesia: Pusat Penelitian IKIP Malang.
- Nababan, P. W. J. (1982). Indonesia: The language situation. In R. B. Noss (Ed.), *Language teaching issues in multicultural environments in Southeast Asia* (pp. 1-47). Singapore: SEAMEO Regional Language Centre.
- Naiman, N., Fröhlich, M., & Todesco, A. (1975). The good second language learner. *TESL Talks*, 6, 58-76.
- Naiman, N., Fröhlich, M., Stern, H. H., & Todesco, A. (1978). *The good language learner*. Toronto: Ontario Institute for Studies in Education.
- Nunan, D. (1992). *Research methods in language learning*. Cambridge: Cambridge University Press.
- Nyikos, M., & Oxford, R. (1993). A Factor analytic study of language-learning strategy use: Interpretations from information-processing theory and social psychology. *The Modern Language Journal*, 77, 11-22.
- Oller, J., Baca, L., & Vigil, F. (1977). Attitudes and attained proficiency in ESL: A sociolinguistic study of Mexican Americans in the Southwest. *TESOL Quarterly*, 11, 173-183.
- O'Malley, J. M., & Chamot, A. U. (1989). Listening comprehension strategies in second language acquisition. *Applied Linguistics*, 10, 418-437.

- O'Malley J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- O'Malley, J. M., Chamot, A. U., & Walker, C. (1987). Some applications of cognitive theory to second language acquisition. *Studies in Second Language Learning, 9*, 287-306.
- O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Russo, R. P., & Kupper, L. (1985a). Learning strategy applications with students of English as a second language. *TESOL Quarterly, 19*, 557-584.
- O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Kupper, L., & Russo, R. P. (1985b). Learning strategies used by beginning and intermediate ESL students. *Language Learning, 35*, 21-46.
- Oxford, R. L. (1990a). *Language learning strategies: what every teacher should know*. New York: Newbury House Publishers.
- Oxford, R. L. (1990b). Styles, strategies, and aptitude: Connections for language learning. In T. S. Parry & C. W. Stansfield (Eds.), *Language aptitude reconsidered* (pp. 67-125). Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Oxford, R. L. (1993). Research on second language learning strategies. *Annual Review of Applied Linguistics, 13*, 175-187.
- Oxford, R. L. (Ed.) (1996a). *Language learning strategies around the world: Cross-cultural perspectives*. Honolulu: University of Hawai'i at Manoa, Second Language Teaching & Curriculum Centre.
- Oxford, R. (Ed.) (1996b). *Language learning motivation: Pathways to the new century*. Honolulu: University of Hawai'i at Manoa, Second Language Teaching & Curriculum Centre.
- Oxford, R. L., & Burry-Stock, J. A. (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the Strategy Inventory for Language Learning (SILL). *System, 23*, 1-23.
- Oxford, R., & Crookall, D. (1989). Research on language learning strategies: methods, findings, and instructional issues. *The Modern Language Journal, 73*, 404-419.

- Oxford, R. L., & Ehrman, M. E. (1995). Adult's language learning strategies in an intensive foreign language program in the United States. *System* 23, 359-386.
- Oxford, R., & Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. *The Modern Language Journal*, 73, 291-300.
- Oxford, R., Nyikos, M., & Ehrman, M. (1988). Vive la difference? Reflections on sex differences in use of language learning strategies. *Foreign Language Annals*, 21, 321-329.
- Oxford, R., Park-Oh, Y., Ito, S., & Sumrall, M. (1993). Japanese by satellite: Effects of motivation, language learning styles and strategies, gender, course level, and previous language learning experience on Japanese language achievement. *Foreign Language Annals*, 26, 359-371.
- Pallant, J. F. (2001). *SPSS survival manual: A step-by-step guide to data analysis using SPSS (Version 10)*. Crows Nest, NSW: Allen & Unwin.
- Park, G. (1997). Language learning strategies and English proficiency in Korean university students. *Foreign Language Annals*, 30, 211-221.
- Pimsleur, P. (1966). *Pimsleur language aptitude battery*. New York: Harcourt, Brace & World, Inc.
- Politzer, R. L. (1983). An exploratory study of self reported language learning behaviours and their relation to achievement. *Studies in Second Language Acquisition*, 6, 54-68.
- Politzer, R. L., & McGroarty, M. (1985). An exploratory study of learning behaviours and their relationship to gains in linguistic and communicative competence. *TESOL Quarterly*, 19, 103-123.
- Polytechnic of Brawijaya University. (1997). *Course Guide for 1997/1998 - 1999/2000*.
- Reichardt, C. S., & Cook, T. D. (1979). Beyond qualitative versus quantitative methods. In T. D. Cook & C. S. Reichardt (Eds.), *Qualitative and quantitative methods in evaluation research* (pp. 7-32). Beverly Hills: Sage Publications, Inc.

- Reynolds, A. G., & Flagg, P. W. (1983). *Cognitive psychology* (2nd ed.). Boston: Little, Brown and Company.
- Richards, J. C., Platt, J., & Platt, H. (1992). *Longman dictionary of language teaching and applied linguistics*. Harlow, Essex: Longman Group Limited.
- Robinson, H. A. (1975). *Teaching reading and study strategies: The content areas*. Boston: Allyn and Bacon, Inc.
- Root, E. (1999). *Motivation and learning strategies in a foreign language setting: A look at a learner of Korean*. Minneapolis: University of Minnesota, Centre for Advanced Research on Language Acquisition.
- Rossier, R. E. (1975). *Extraversion-introversion as a significant variable in the learning of English as a second language*. Unpublished doctoral dissertation, University of Southern California.
- Rossmann, T. (1981). *The nature of linguistic processing in reading a second language*. Unpublished master thesis, Concordia University.
- Rubin, J. (1975). What the "good language learner" can teach us. *TESOL Quarterly*, 9, 41-51.
- Rubin, J. (1987). Learner strategies: theoretical assumptions, research history and typology. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 15-30). Hemel Hempstead, Hertfordshire: Prentice Hall International (UK) Ltd.
- Rubin, J., & Thomson, I. (1982). *How to be a more successful language learner*. Boston: Heinle & Heinle Publishers, Inc.
- Sadtono, E. (1974). *An interim report on the teaching of English at the five centres of excellence in Indonesia: the University of Indonesia, the Agricultural Institute, the Institute of Technology, Gajah Mada University, Airlangga University*. Malang, Indonesia: Bureau of Research and Development, IKIP Malang.
- Sadtono, E. (1995). *Perspektif pengajaran Bahasa Inggris di Indonesia (Perspectives of English teaching in Indonesia)*. Malang, Indonesia: Seksi Kajian Bahasa dan Seni FPBS IKIP Malang.

- Samuels, S. J., & Kamil, M. L. (1984). Models of reading process. In P. D. Pearson (Ed.) & M. L. Kamil (Section Ed.), *Handbook of reading research* (pp. 185-224). New York: Longman, inc.
- Scarcella, R. C., & Oxford, R. L. (1992). *The tapestry of language learning: The individual in the communicative classroom*. Boston: Heinle & Heinle Publishers.
- Schmidt, R., Boraine, D., & Kassabgy, O. (1996). Foreign language motivation: Internal structure and external connections. In R. Oxford (Ed.), *Language learning motivation: Pathways to the new century* (pp. 9-70). Honolulu: University of Hawai'i at Manoa, Second Language Teaching & Curriculum Centre.
- Schnell, J. (1995). *Effective listening: More than just hearing* (ERIC Document Reproduction Service No. ED 379 691).
- Schulz, R. A. (1991). Second language acquisition theories and teaching practice: How do they fit?. *The Modern Language Journal*, 75, 17-26.
- Schumann, J. H. (1976). Social distance as a factor in second language acquisition. *Language Learning*, 26, 135-143.
- Scovel, T. (1978). The effect of affect on foreign language learning: a review of the anxiety research. *Language Learning*, 28, 129-142.
- Setiyadi, A. B. (1999). *A survey of the language learning strategies of tertiary EFL students in Indonesia*. Unpublished Ph.D thesis, La Trobe University.
- Sheorey, R. (1999). An examination of language learning strategy use in the setting of an indigenised variety of English. *System*, 27, 173-190.
- Skehan, P. (1986). Where does language aptitude come from?. In P. Meara (Ed.), *Spoken language* (pp. 95-113). London: Centre for Information on Language Teaching and Research.
- Skehan, P. (1989). *Individual differences in second language learning*. London: Edward Arnold.
- Skehan, P. (1991). Individual differences in second language learning. *Studies in Second Language Acquisition*, 13, 275-298.

- Smith, F. (1971). *Understanding reading: A psycholinguistic analysis of reading and learning to read*. New York: Holt, Rinehart and Winston, Inc.
- Song, M. (1998). Teaching reading strategies in an ongoing EFL university reading classroom. *Asian Journal of English Language Teaching*, 8, 41-54.
- Stern, H. H. (1975). What can we learn from the good language learner? *Canadian Modern Language Review*, 31, 304-318.
- Stern, H. H. (1983). *Fundamental concepts of language teaching*. Oxford: Oxford University Press.
- Strong, M. (1983). Social styles and second language acquisition of Spanish-speaking kindergarteners. *TESOL Quarterly*, 17, 241-258.
- Sugeng, B. (1997). A learning strategy profile of Indonesian elementary school students. *RELC Journal*, 28 (2), 82-106.
- Tarigan, J., & Tarigan, H.G. (1987). *Teknik pengajaran keterampilan berbahasa (Techniques of teaching language skills)*. Bandung, Indonesia: Angkasa.
- Tarone, E. (1983). Some thoughts on the notion of 'communication strategy'. In C. Færch & G. Kasper (Eds.), *Strategies in interlanguage communication* (pp. 61-74). London: Longman Group Limited.
- Tarone, E. (1987). Methodologies for studying variability in second language acquisition. In R. Ellis (Ed.), *Second language acquisition in context* (pp. 35-46). London: Prectice-Hall International Ltd.
- Thomson, I., & Rubin, J. (1996). Can strategy instruction improve listening comprehension?. *Foreign Language Annals*, 29, 331-342.
- Tobias, S. (1986). Anxiety and cognitive processing of instruction. In R. Schwarzer (Ed.), *Self-related cognition in anxiety and motivation* (pp.35-54). Hillsdale, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Tremblay, P. F., & Gardner, R. C. (1995). Expanding the motivation construct in language learning. *The Modern Language Journal* 79, 503-518.
- Turner, K. (1995). *Listening in a foreign language: A skill we take for granted*. London: Centre for Information on Language Teaching and Research.

- Undang-undang Republik Indonesia No. 2 Th. 1989 tentang sistem pendidikan nasional (Act of the Republic of Indonesia No. 2 1989 on national education system)*. Jakarta: Dharma Bhakti.
- Vann, R. J., & Abraham, R. G. (1990). Strategies of unsuccessful language learners. *TESOL Quarterly*, 24, 177-198.
- Weaver, G. G., & Cenci, L. (1960). *Applied teaching techniques*. New York: Pitman Publishing Corporation.
- Wenden, A. (1987). Conceptual background and utility. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 3-13). Hemel Hempstead, Hertfordshire: Prentice Hall International (UK) Ltd.
- Wenden, A. (1991). *Learner strategies for learner autonomy*. London: Prentice-Hall International Ltd.
- Weinstein, C. E., & Mayer, R. E. (1988). The teaching of learning strategies. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed.) (pp. 315-327). New York: Macmillan Publishing Company.
- Wesche, M. B., Edwards, H., & Wells, W. (1982). Foreign language aptitude and intelligence. *Applied Psycholinguistics*, 3, 127-140.
- Wharton, G. (2000). Language learning strategy use of bilingual foreign language learners in Singapore. *Language Learning*, 50, 203-243.
- Williams, K. (1991). Anxiety and formal/foreign language learning. *RELC Journal*, 22, 19-28.
- Willing, K. (1988). *Learning styles in adult migrant education*. Adelaide: National Curriculum Resource Centre.
- Willing, K. (1989). *Teaching how to learn: Learning strategies in ESL*. Sydney: Macquarie University, National centre for English Language Teaching and Research.
- Wolfe, S. (1981). *Bilingualism: One or two conceptual system*. Unpublished master thesis, San Francisco State University.
- Young, D. (1986). The relationship between anxiety and foreign language oral proficiency ratings. *Foreign Language Annals*, 19, 439-445.