

LANGUAGE LEARNING STRATEGY QUESTIONNAIRE (LLSQ)

**A Measurement to Identify Students' Learning
Strategies and Prepare the Success of Learning
English in the Indonesian Context
(Empirical Evidence)**

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Prof. Ag. Bambang Setiyadi, Ph.D.



GRAHA ILMU

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*This book is dedicated with love to my wife Ika Dewi and
my children Mada, Nares and Dipta.*

PREFACE

This book reports on studies intended to introduce a language strategy measurement developed in the EFL setting and the contribution of language learning strategies to the success in learning English a tertiary setting in the Indonesian context. The studies focus on the use of language learning strategies used by university students for whom English was learned as a foreign language. This book is a continuing process of an embryo introduced in a study on survey of the use of learning strategies of EFL learners (Setiyadi, 2000). This book is also motivated by the writer's experience of the need to provide English teachers with insights into how to assist Indonesian students learn English successfully.

Besides revealing that learning strategies affected the language achievement, this study has found that metacognitive strategies proved to be the best predictor of success in learning English. The findings of this study also revealed that motivation was an individual difference that was related with the use of language learning strategies. Since in this investigation it has been shown that low achievers employed strategies that are predictive of success less frequently than high achievers, teachers should provide opportunities for their students to employ self-evaluation and self-correction to enable students to use their metacognitive strategies optimally. Teachers should provide opportunities for their students to be involved in the highest level of mental processes: metacognitive strategies. Students should also have analytical skills in the linguistic forms in order to be able to compare their actual performance and the expected performance in order for the metacognitive strategies to work optimally. This can be done by, to some ex-

tent, providing students with formal study grammar for the conscious monitor. Teachers may also provide opportunities for students to develop more positive attitude and higher motivation since students with more positive attitude and higher motivation can be expected to utilize language learning strategies more frequently

Chapter one justifies the study of language learning strategies by discussing the conditions of English learning and teaching in Indonesia. In this chapter a potential problem in learning English is identified. Chapter two addresses previous studies on language learning strategies. Numerous studies on language learning have been conducted but the studies used measurements developed in Western settings and in ESL contexts. Chapter three proposes a taxonomy which is a relatively new in the context of EFL setting (Setiyadi, 2001). In this chapter a new classification of language learning strategies is introduced (Setiyadi, 2004). Chapter four identifies how the use of language learning strategies plays an important role in the success of acquiring English as a foreign language. In this chapter it is discussed how the use of learning strategies significantly contributes to learning outcomes. Chapter five proposes the distinction between the successful and unsuccessful learners in using language learning strategies (Setiyadi et al., 2016). In this chapter empirical evidence is provided how successful learners employed learning strategies. Chapter six identifies how students' motivation is related to the use of language learning strategies. This chapter addresses how language learning strategies is influenced by students' motivation in learning English (Setiyadi & Sukirlan, 2016). Chapter seven introduces a relatively revised design of learning strategy taxonomy. This chapter justifies a taxonomy which classifies language learning strategies under three categories, namely cognitive, metacognitive and social strategies (Setiyadi, 2014). Chapter eight justifies the newly developed taxonomy, which is named Language Learning Strategy Questionnaire or the LLSQ, is an alternative measurement for Indonesian learners. This measurement has been developed in an EFL setting in the Indonesian context.

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Chapter 1

A PROBLEM IN LEARNING ENGLISH IN INDONESIA

The English language has been taught as an obligatory subject from junior to senior high schools from the very beginning of Indonesian independence. At present the teaching of the English language takes place in every class of the junior school (age 12 to 16) at least four hours a week (Kementerian Pendidikan dan Kebudayaan, 2016), and in high schools (age 16 to 19), students study the language at least 2 hours weekly (Kementerian Pendidikan dan Kebudayaan, 2012). Ideally, a person who has finished high school must have a very substantial knowledge of English, but this is not the case with most of the Indonesian students. After three years at the junior high school and three years at senior high school, the English proficiency of the students is very limited. The students have difficulties in reading textbooks written in English and they cannot communicate in English both orally and in written form. The reading and writing in English of most the Indonesian students entering university, which is expected to increase their knowledge in their studies, is very poor (Alisjahbana, 1990, p.322). Alisjahbana (1990) also claims that the impact of this situation is disastrous on English teaching in the universities. This makes some universities in Indonesia, including the university where the research described in the thesis was conducted, require their students to follow courses of English besides the obligatory English subject of their faculties. This policy has been implemented in the hope of providing students with opportunities to gain communicative skills in the international language.

Since the teaching and learning the English language is emphasized in junior and senior high schools, a major step has been taken by the government of the Republic of Indonesia to improve the quality of teaching and learning English in Indonesian at those levels. A foreign-funded project, known as the PKG (Pemantapan Kerja Guru/ Strengthening of the Work of Teachers) Project was introduced. The project began in 1985 and the essence of the project has lasted until the new 1994 curriculum was first introduced in the academic year 1994/1995 (Sukmaantara, 1996, p.2). The basic principle developed by the participants of PKG English program was to increase the teaching skills of English teachers of senior high schools so that the teachers can create conditions conducive for their students to use English in communication (Tomlinson, 1990).

The new approach, which has been inspired by TPR (Total Physical Response), seems to focus on how teachers present teaching materials. Tomlinson (1990, pp. 34-36) claims that this approach has been a success and has led to dramatic gains in the confidence, comprehension, fluency, and comprehensibility of pronunciation of the PKG beginner teachers. Many PKG teachers when using English as the medium can communicate with their students easily and effectively as the medium.

Although the approach has succeeded in increasing the proficiency of the teachers, Tomlinson (1990, p.35) acknowledges that to some extent the implementation of the approach has not yet been very successful. This seems to be because the teachers are so conditioned to focus on syntax and forms and have such little awareness of the functions of the grammar on the curriculum that they still give very teacher-centered, informational lessons. Alternatively, they may leave the students in totally student-centered confusion without any teacher guidance towards functional discoveries. Even though it is claimed that students in PKG classes are in general more motivated to learn English than those in non-PKG classes, the students on average get the same or only slightly higher marks on standard discrete item tests than do students in non-PKG classes. No claim has been made about the effectiveness of this approach in increasing the English proficiency of the students. The approach was more designed to provide English teachers with insights to present teaching materials and to motivate their students to learn English. The approach was not meant for English teachers to teach students about

how that they would learn better by undertaking more effective learning strategies. However, motivating students to learn seems insufficient without knowing effective language learning strategies and encouraging students to use these strategies. Research on how students learn English and what learning strategies make them learn the language more effectively will contribute useful insights to efforts in increasing English proficiency of the students in Indonesia. What learning strategies language learners use and how we should measure the strategies in the context of English teaching in Indonesia should be identified. However the measurement for the purpose is not available.

Research seems important to response an issue whether the west-inspired theories on language learning strategies are relevant for EFL learners in Asia in general and in Indonesia in particular, and whether there is a need to develop a measurement to portray language leaning strategies specifically employed by EFL learners in Asia in general and in Indonesia in particular. This book will provide a better picture to solve the problem.

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Chapter 2

PREVIOUS STUDIES ON LANGUAGE LEARNING STRATEGIES

It seems obvious that there is no second language learning acquisition without learning strategies, either conscious or unconscious. This is the area to which the research conducted by Rubin (1975), Naiman et al. (1978), Fillmore (1979), Politzer and McGroarty (1985), O'Malley and Chamot (1990), Oxford and Nyikos (1989) and Wenden (1991b) has been devoted. They have elaborated on language learning strategies and suggested different ways of classifying learning strategies.

In a foreign language context, there are other strategies related to language, called *communicative strategies*. It would be helpful to distinguish learning strategies from communicative strategies. Farech and Kasper (1983, p. 212) define *communicative strategies* as potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal. Tarone (1988, p. 65) also says that a *communicative strategy* relates to a mutual attempt of two interlocutors to agree on a meaning in situations where requisite meaning structures do not seem to be shared. In other research contexts, the latter type is called negotiation of meaning (Pica et al, 1991; Gass & Selinler, 1994; and Holliday, 1995). From the definitions above it is clear that communication strategies relate to the process of communication between interlocutors. The interlocutors are involved in using a language which they are in the process of learning or may already have learnt. If communicative strategies are used in communication, learn-

ing strategies take place while people are in the process of learning to learn another language.

What is meant by *learning strategies*? Some terms related to learning strategies are cognitive styles or learning styles. Biggs (1981, p. 383) defines cognitive *styles* as consistent individual differences that reflect the style or manner in which a person perceives the world, conceptualizes meanings, learns a task, or solves a problem. In research writing about Second Language Learning (SLA), the term *cognitive style* is sometimes interchanged with learning styles (Willing, 1988, p. 152). Oxford (1990a) differentiates between the two terms. She states that *cognitive style* is a construct subordinated to learning style. She mentions that learning style includes a large number of largely unintegrated dimensions, studied in a one by one fashion by most researchers. It seems impossible to cover the largely unintegrated dimensions of learning style in a thorough investigation. Shipman and Shipman (cited in Oxford, 1990a) list 19 style dimensions; the most well-known one is field independence-dependence. Nunney (1977, p. 6) has mapped more than 25 elements of cognitive style in the educational field. Each style dimension seems to need separate extensive and in-depth research (Claxton and Murrell, 1987, p. 8). Learning styles seem to be closely related to learning strategies. Oxford (1990c, p. 439) puts learning styles at the root of an individual's natural strategy preference so that it is logical to relate learning styles with learning strategies. She (1990c) summarizes three style dimensions: analytic versus global processing, tolerance of ambiguity and sensory preferences. The different dimensions will result in different classifications of learning styles. She suggests that analytic versus global dimension is the most important style dimension for language learning, since it covers almost all other dimensions and has proven so significant in studies in other subject areas outside of language learning (p.441-445).

Many studies on learning styles have been conducted but they seem to classify students' learning styles from teachers' or researchers' perspectives (Pask, 1976; and Kyriacou et al., 1996). Willing (1988) conducted a study that has attempted to classify learning styles from students' perspectives by employing the statistical procedure of "factor analysis" and to relate it to language learning. The findings of his study suggest that students may be characterized by having a concrete, an analytical, a communicative or au-

thority-oriented learning style. It is interesting that he also included learning strategies in his study, but he did not analyze the data and relate these strategies to the learning styles that he introduced. The data on language learning strategies were included in his questionnaire as a means of stimulating some discussion during a testing session (p.163). He distinguishes styles from strategies. A style is seen rather as an entire syndrome, a complex set of attitude and approaches that are interpreted as being based upon an underlying cognitive/psychological orientation of a person (p.152). The ingredients of learning style are in fact so multiple that it could seem a vain hope to make sense of any individual in particular, beyond saying that a person is unique (p.6). A learning strategy, on the other hand, is a means of being specific about what is intended to be happening, cognitively, for learners, that is, how the experience provided is expected to result in actual learning (p.7).

Oxford also defines *learning style* as the learner's preferred mode of dealing with new information, the learner's actions to enhance their own learning. Oxford (1990a) states that the relationship between language learning style and strategies is complex and, until recently, almost completely unexplored, though she states that some learning styles may have a causal relationship with learning strategies. She gives an example in which extroverted students use affective strategies and visualization strategies more than introverted students but introverts use strategies involving searching for and communicating meaning more than extroverts do. Oxford concludes that a learner's preferred style is generally reflected in his or her learning strategies, although some learners are able to develop new strategies which are not reflective of their natural style inclinations. Prokop (1989, p.16) also suggests that learning strategies are easier to isolate and are less resistant to change since they do not necessarily involve a change in the learner's basic personality make-up. In other words, learning strategies may include learning styles but learning styles also include other strategies that are not related to learning strategies, and vice versa. Learning strategies and learning styles overlap; both of them share the same area, but both have an area that the other does not have.

Learning strategies, which are defined as steps or actions taken by language learners to enhance any aspect of their learning (Oxford 1990a, p.

70), seem to be more than a reflection of learning style. It seems difficult to categorize whether certain learning strategies of an individual are originally his/her own, or developed and adapted from certain external factors. Oxford's definition implies that learning strategies are conscious activities because students are learning a language while they are conscious of the process. However, not all writers agree with a concept that learning always takes place while subjects are conscious or aware of this. Some researchers have argued over the conscious-unconscious distinction (McLaughlin, 1978; 1990, Krashen, 1979). Kihlstrom (1996, p. 33) states that subjects may be simply unaware of some stimulus response, or of what they are learning; subjects can engage in learning when they are not conscious at all, for example when they are asleep or anaesthetized. Referring to Oxford's definition (1990a), in the study reported in this thesis, learning strategies refer to conscious activities since students seem to be aware what actions or steps they are taking to enhance their learning process to acquire another language. Or, at very least the students initiate the use of those strategies purposively and they may later be said to have become an automatic part of the students' repertoire of behavior for learning. This concept of learning strategies is also commonly used by many researchers, providing a framework for their pre-defined questionnaires of language learning strategies (Oxford and Nyikos, 1989; and Awang Hasyim and Syed Sahil, 1994; Green and Oxford, 1995; Park, 1997; and Kaylani, 1999).

Different researchers on learning strategies in SLA seem to have used different terms and different ways of investigation. There have been a number of attempts to group language learning strategies into meaningful categories. Six major studies on language learning strategies will be described and compared in a single framework. These are the studies by Rubin (1975), Fillmore (1979), Naiman (1978), Politzer and McGroarty (1985), O'Malley et al. (1985), Oxford and Nyikos (1989) and Wenden (1991).

Rubin

Rubin (1975), for example, suggested a list that would assign all language learning strategies to seven categories, namely: being a willing and accurate guesser, having a strong drive to communicate, being willing to make mistakes, looking constantly for patterns in the language, practicing, monitoring

his/her own and the speech of others, and attending to meaning.

1. The good language learner is a willing and accurate guesser.
2. The good language learner has a strong drive to communicate, or to learn from a communication.
3. The good language learner is often not inhibited; he/she is willing to appear foolish if reasonable communication results.
4. The good language learner is constantly looking for patterns in the language.
5. The good language learner practices
6. The good language learner monitors his own and the speech of others
7. The good language learner attends to meaning.

(Rubin, 1975, pp. 45-7)

The list she offered was based on all processes that were observed being used by good language learners in classrooms and by talking to other good language learners. It is not surprising that the taxonomy involves the observable activities language learners do while they are learning, but seems to have failed to explore mental processes, which tend to be unobservable. Even though it is not clear how she distinguished good language learners from less good ones, she succeeded in exploring strategies that good language learners used in learning English. Her taxonomy was finally revised to contain two main groups: direct learning strategies and indirect learning strategies (Rubin, 1981 pp.117-131). In her revised classification, cognitive processes were classified into direct learning strategies, which contribute directly to the learning process, while other actions that permit learning but do not actually contribute directly to learning are called indirect learning strategies. This distinction has disappeared from most authors and has been replaced by the more integrated theory of self-management proposed by Wenden (1991a).

Fillmore

A taxonomy that classifies language learning strategies under two categories was proposed by Fillmore (1979). Skehan (1989, p.73) considers Fillmore's study, which was conducted in the 1970's, as the beginning of research on language learning strategies. Fillmore (1979) studied the process of language

learning by observing five Mexican children who were attending English speaking school in California. The study followed a qualitative research paradigm, which relied on the interpretation of recorded data. It focused on the process of communication of the children, who did not have enough understanding of the second language for communication. Her study reveals that there were two categories of strategies that were helpful for children. The first category was called *social strategies* and the second category was called *cognitive strategies*.

Social strategies include (a) join a group and act as if you understand what is going on, even if you don't, (b) give the impression, with a few well chosen words, that you speak the language, (c) count on your friends for help. While cognitive strategies include (a) assume what people are saying is relevant to the situation at hand, (b) get some expressions you understand, and start talking, (c) look for recurring parts in the formulas you know, (d) make the most of what you've got, (e) work on big things first: save the details for later, and (f) count on your friends for help. (Fillmore, 1979, pp. 209-218).

Even though she classified language learning strategies into two groups, her classification was more specific than Rubin's in exploring unobservable mental processes, which were grouped under cognitive strategies. But, since the data were collected through audio-recording and audio-taping, data were interpreted from the researcher's perspectives. We have no certainty that her interpretation concerning unobservable mental strategies is accurate.

Naiman et al

Similar to Fillmore's taxonomy, which emphasized social and cognitive processes, is another taxonomy suggested by Naiman et al (1978). In their study, interviews were conducted to collect data. There were 34 students who were interviewed informally. Naiman et al.'s study (1978) is also one of the striking studies on language learning strategies. Similar to Rubin's study, Naiman et al.'s study focused on the strategies successful language learners used in learning a second language. Their study revealed that good language learners used at least five common strategies. The first is called *the active task approach*, in which good language learners actively involve themselves in the language learning task. The second strategy is *the realization of*

language as a system. In the second strategy, good language learners develop or exploit an awareness of language as a system. In the third strategy, which is called *the realization of language as a means of communication and interaction*, good language learners develop and exploit an awareness of language as a means of communication and interaction. The fourth strategy is *management of affective demands*. In this strategy, good language learners realize initially or with time that they must cope with affective demands made upon them by language learning and succeed in doing so. In the last strategy, *monitoring of L2 performance*, good language learners constantly revise their L2 system by testing their inferences.

The findings of Naiman et al.'s study are in accordance with the ideas developed in the communicative approach to language teaching, which emphasize the function of the language, not the forms. Even though no proficiency tests were administered, Naiman et al. succeeded in isolating strategies used by good language learners. Good language learners learned the language for communication instead of as a set of grammatical rules. The strategies mentioned were used by adult learners who were born in English-speaking parts of North America. The findings for the use of language learning strategies by Naiman et al. were limited to an environment where English is not a foreign language. Unlike their study, the environment of the current study was one where English is a foreign language and almost nobody speaks the language for communication. As stated earlier, this current study investigated language learning strategies used by adult English learners Indonesia, where L2 input available in the environment was not abundant. Consequently, learning strategies for learning English may not be similar to those suggested in the study by Naiman et al.(1978).

Politzer and McGroarty

Another classification was also suggested by Politzer and McGroarty (1985). Their taxonomy, which was based on a language learning behavior questionnaire, emphasized students' behaviors in learning a second language. The study involved Hispanics and Asians who were enrolled in an intensive eight-week ESL course. This course was designed to prepare students who had already attained some English proficiency for graduate study. The participants were about to enter graduate school in various fields. Most of

the participants were male (32 out of 37). Their ages ranged from 23 to 47. In this study, the students were given a proficiency test to measure gains in listening, grammatical skill, and communication. To collect data, they used a predefined questionnaire, which divided learning behavior and strategies into *classroom study*, *individual study*, and *social interaction outside the classroom behavior*. Their study revealed that students from different cultural backgrounds used different language learning strategies. They also reported that social strategies were the only strategies that correlated with gain scores.

Politzer and Groarty's study (1985) was more advanced than the previous studies in the sense that it offered experimental data which uncovered a relationship between learning behavior and gain scores. As mentioned earlier, the only positive significant relationship was between social strategies and gain on a test that was called the Communicative Test. The test was one of the three-proficiency tests administered in the study. Their study, which reports a correlation between language learning strategies and ethnic backgrounds, indicates that learning strategies are influenced culturally. This study suggests that students from different countries use different groups of learning strategies.

The different classification systems in the studies mentioned above emphasize different learning behaviors so that a category that was introduced in one classification scheme may not necessarily be included in another, or similar strategies are labeled differently in different studies. In the last three classification schemes social activities were included under language learning. It seems questionable whether all social processes explored in the previous studies typically be to learning strategies in learning a foreign language. Some of them seem to be about social interaction in general and do not need to be classified as language learning strategies. For example, join a group and act as if you understand what is going on and give the impression- with a few-well chosen words- that you can speak the language (Fillmore, 1979, p.209). These may be included in communicative strategies or negotiation of meanings as discussed earlier.

O'Malley et al

More productive schemes on language learning strategies have been proposed by O'Malley et al. (1985; see also O'Malley and Chamot, 1990), who

considered psychologically based issues in their taxonomies. They introduced categories that involved self-awareness. Processes in this category were introduced under the name “metacognitive”. In O’Malley et al.’s study (1985) the classification consists of three categories, namely: metacognitive strategies, cognitive strategies, and social strategies, whereas in Oxford’s study (1990b) six categories have been proposed, namely: cognitive strategies, memory, compensation, metacognitive strategies, affective strategies, and social strategies. Even though the two taxonomies have similar categories, which include metacognitive strategies, the ways of collecting data in their studies were different. O’Malley et al. collected data by interviewing students and teachers and by conducting observations, whereas Oxford used a language learning questionnaire, which she called the Strategy Inventory for Language Learning (SILL).

O’Malley and Chamot (1990) reported on a research project conducted in 1983. The participants in the study were 70 high school-age students enrolled in ESL classes and 22 teachers providing instruction in the classes. This research revealed that there were more learning strategies classified under the cognitive category than under other categories, even though the researchers were also concerned with two other strategies: metacognitive strategies and social mediation. Despite this, their study is more complete and covers areas that were not covered in previous studies. The new findings were included under metacognitive strategies. O’Malley and Chamot not only studied advanced students but also beginning and intermediate ESL students. They also differentiated between strategies used by ESL students and those that foreign language learners use. Like the study by Naiman et al. (1978), O’Malley et al. (1985) also conducted their study in an environment where L2 input was available for the students. The study, which was conducted in a metropolitan area in the United States, revealed a variation of strategy use related to students’ English proficiency. Although the participants of their study came from different ethnic backgrounds, they did not study the impact of culture or ethnicity on learning strategies. This current study investigated how students from different ethnic backgrounds used language learning strategies in the environment where L2 input was limited.

Metacognitive strategies in their study include four processes, namely: selective attention for special aspects of a learning task, as in planning to

listen for key words or phrases, planning the organization of either written or spoken discourse, monitoring or reviewing attention to a task, monitoring comprehension for information that should be remembered, or monitoring production, while it is occurring, and evaluating or checking comprehension after completion of a receptive language activity, or evaluating language production after it has taken place.

Cognitive strategies in O'Malley and Chamot's study (1990) include rehearsal, organization, inferencing, summarizing, deducing, imagery, transfer, and elaboration. And, the third strategy is *social mediation*, which overlapped with the term with *social strategies*. In the social mediation, the learners work with other language learners to obtain feedback and information (cooperation), questioning for clarification, and self talk. In their study the strategies in this category seem similar to communicative strategies, as previously noted by Tarone (1988), while Pica et al. (1989; 1991; see also Gass, 1985; and Holliday, 1995) refer to these as negotiation of meaning. O'Malley and Chamot (1990) succeeded in identifying language learning strategies used by ESL students but, unlike Naiman et al (1978), their study did not suggest which learning strategies successful language learners used compared with less successful ones.

Oxford

Another study that used psychologically based considerations similar to O'Malley et al.'s study is that of Oxford and Nyikos's (1989, and Oxford 1990a and 1990b). In this study they emphasized variables affecting the choice of language learning strategies by university students in a conventional setting. Their study, which involved 1200 Foreign Language American students, was said to be the largest completed study of language learning strategies. To collect data, they used a predefined questionnaire, which is called the *Strategy Inventory for Language Learning* (SILL). In their study language learning strategies are categorized into *direct strategies* and *indirect strategies* (Oxford and Nyikos, 1989; and Oxford, 1990b). The direct strategies are subdivided into *memory strategies*, *cognitive strategies*, and *compensation strategies*. The indirect strategies are subdivided into *metacognitive strategies*, *affective strategies*, and *social strategies*. Their study reveals that sex differences, years of study, major area of study, and status of candidature (elective versus required), influ-

ence language learning strategies. Their study also reveals that motivation interacts significantly with several factors in a complex way to influence the language learning strategies of American foreign language students. Oxford and Nyikos's study (1989) also uncovered a mutual interrelationship between strategies and motivation.

Not only does high motivation lead to significant use of language learning strategies, but high strategy use probably leads to high motivation as well. The use of appropriate strategies leads to enhanced actual and perceived proficiency, which in turns creates high self esteem, which leads to strong motivation, spiraling to still more use of strategies, great actual and perceived proficiency, high self-esteem, improved motivation. When viewed in light of this chain of variables, self-perception of language proficiency can be either *effects* or *causes* of strategy use. (1989, p 295)

Wenden

Another study that reviewed the previous classifications of language learning strategies has been Wenden (1991a). She classified language learning strategies into two broad categories. The first category, cognitive strategies, involves selecting information from incoming data, comprehending and storing the information, and retrieving the information. Her concept of language learning strategies within the cognitive category was mostly based on learning processes employed by language learners in previous studies (O'Malley et al., 1985 and 1990; and Rubin, 1975). The second category, which is called self-management strategies, involves planning, monitoring and evaluating. In her classification social strategies were classified under cognitive strategies (1991, p.23). Wenden (1991b) also conducted a study on the use of metacognitive strategies in L2 writing by students who were studying at undergraduate courses in a senior college. In this study she used the term *metacognitive strategies* instead of the term *self-management strategies* she introduced earlier. Her study involved eight students of ESL at high-intermediate level on Michigan's English Language Placement test. Her results suggested that the use of metacognitive strategies was a factor to take into account in trying to understand why some learners were ineffective despite the fact that they used strategies. Her study also revealed that though learn-

ers were very active writers in planning, evaluating, and monitoring, they were not successful writers in the sense that their writing lacked a mature and sophisticated development of ideas and showed evidence of a fair number of problems with syntax and word choice (Wenden, 1991b, pp.317-318). Her study succeeded in investigating the effect of the use of metacognitive strategies in writing but did not address the other skill areas: speaking, listening and reading. This current study investigated the contribution of the use of language learning strategies in all the four language skills to the success in learning English.

Sternberg

In visualizing learning by labeling learning processes, Sternberg (1983, p. 9) classifies learning skills in general education in a similar manner under executive skills and non-executive skills. Executive skills are used in identifying problems, selecting processes, strategies, representation or resources, monitoring, and translating feed back into an action plan; and non-executive skills are involved in carrying out task performance such as encoding, inferencing, mapping, application, and justification.

It is interesting that different researchers have labeled learning strategies using different terms but they still refer to similar processes. In general, learning strategies which have been explored in education are classified into two main groups: the first group is used when completing cognitive tasks and the other is used in planning, monitoring, correcting, and revising in the learning processes. In foreign language learning the first group seems to refer to cognitive strategies and the latter to metacognitive strategies. In the language learning context, researchers in this field have also uncovered some other strategies reported to be used by language learners that are not classified into either of the two groups mentioned above. These seem not to be related to the language learned but correlated to success in learning the language (Politzer and Groarty, 1985, p.114). The strategies deal with social activities involved in learning a second/foreign language (Fillmore, 1979; Politzer and Groarty, 1985; O'Malley et al., 1985; and Oxford, 1990a). These strategies are often called *social strategies*. In general there were three main groups of language learning strategies introduced in the previous studies.

The three groups of language learning strategies: cognitive, social and metacognitive strategies will be discussed in the following section of this chapter.

In general, it can be argued that the different studies of language learning strategies have revealed what language learners do to acquire a foreign language. Different studies have uncovered different findings. Some studies focus on certain aspects; some others focus on other aspects. Politzer and Groarty (1985) considered strategies to be culturally influenced since it seems that students from different cultural backgrounds have different learning strategies in SLA. Oxford and Nyikos (1989) and Fillmore (1979) reveal some of the individual factors influence language learning choice in a certain culture. Some other research indicates that good (successful) language learners use different language learning strategies from poor learners (Rubin, 1975; Naiman et al., 1978). The finding that people from different countries used different learning strategies in learning English motivated this investigation into the learning strategies of university students, in Indonesia in a foreign language environment and an exploration of which learning strategies successful language learners used in learning the four skills of English: speaking, listening, reading and writing.

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Chapter 3

LEARNING STRATEGY CLASSIFICATION: CONCEPTUAL AND EMPIRICAL CONSIDERATIONS

Using O'Malley et al.'s model (1985; and O'Malley and Chamot, 1990) and considering the works of Rubin (1975), Fillmore (1979), Naiman et al. (1978), Politzer and Groarty (1985), Prokop (1989) and Oxford (1990b), the Language Learning Strategy Questionnaire (LLSQ) was originally designed to measure three groups of language learning strategies: metacognitive, cognitive and social strategies. This initial questionnaire contained 80 items of the four skill-based learning strategies with 20 items for each skill.

After a series of reliability and exploratory factor analyses, the items were reduced to 45 items. Finally, the LLSQ was shown to contain metacognitive, deep level cognitive and surface level cognitive strategies. The metacognitive category had 15 items, and the deep and surface level cognitive strategies had 18 items and 12 items respectively. The classification of the strategies is probably not final and there may be overlap between them. It needs to be confirmed with other future studies on language learning strategies.

As a basic classification scheme, following O'Malley et al.'s classification, *metacognitive*, *cognitive* and *social categories* were used to identify language learning strategies implemented by students in Indonesia. The basic classification scheme proposed was used to develop a language-learning strategy questionnaire (LLSQ). The three categories were considered initially

for collecting data since they were also common terms utilized by language learning taxonomies developed by previous studies.

As a result of the factor and the reliability analyses (supported by peer rating analysis) the strategies used by the students were classified into two main groups of language learning strategies: metacognitive and cognitive categories where the cognitive category comprised deep level and surface level strategies. For the purpose of statistical calculation, it was decided to classify language learning strategies into three groups, namely: metacognitive, deep level cognitive and surface level cognitive strategies. To group the strategies into one of the three categories, especially, deep level cognitive and surface level cognitive categories, the cognitive domain of Bloom's taxonomy (1956, p.18) was utilized. It contains six major classes of learning outcomes, namely: knowledge, comprehension, application, analysis, synthesis and evaluation. As the purpose of classifying cognitive domain was related to educational objectives, the classification in this study, which relates to language learning strategies, was not the same. In general, metacognitive strategies might be related to the highest level in Bloom's taxonomy: *evaluation* but metacognitive category covers *self-evaluating* (not *evaluating* only), *self-directing* and *self-correcting*. Deep level cognitive strategies were related to the levels from *comprehension* to *synthesis* and surface level cognitive strategies to *recalling knowledge* in Bloom's taxonomy.

The classification consisting of metacognitive and cognitive strategies is also consistent with the classification proposed by Wenden (1991a), who categorises language learning strategies into cognitive strategies and self-management strategies. A classification of learning strategies consisting of metacognitive, deep level cognitive and surface level cognitive strategies is not new. A similar classification of cognitive strategies was developed by Entwistle (1981 & 1987) in general education. He classifies cognitive approaches to learning and studying into three categories: *surface*, *deep* and *strategic approaches*. Since his study focused on reading (1987, p.58), the surface approach indicates that the intention is limited to completing the task requirements, while with deep approach the intention generally leads to a lively interaction with the content of an article. He further suggests that the surface approach relies on rote learning through repetition and rehearsal in short term memory but the deep approach depends on meaningful learning

utilizing connections between concepts in semantic -term memory. He also provides examples of a strategic approach, for example: organize time and distribute effort to greatest effect and ensure conditions and materials for studying are appropriate (1987, p.195). The classification scheme used in his study is meant to group students based on their attitudes and preferences for particular learning activities. Grouping language learning strategies the way Entwistle (1981 &1987) classifies learning strategies is relevant but in this study the classification not only covers reading strategies but also the other three language skill areas: speaking, listening and writing.

The classification of language learning strategies into two categories is acknowledged by O' Malley et al. (1985, p.38), who explicitly noted that there are two broad categories of language learning strategies: metacognitive and cognitive, and the social strategy in their study was classified into cognitive strategies. In this study the strategy grouping was based on the factor analyses which showed that social strategies, which were developed following O'Malley et al. (1985; and O'Malley & Chamot, 1990), were separate from the cognitive category. This finding is different from the findings in their study, which grouped social strategies under the cognitive strategies.

The findings of this study show that cognitive strategies can be grouped under two subcategories. This category involves, to use Prokop's terms (1989, p18), deep level processes and surface level processes. The first category, deep-level processes, refers to deep level cognitive strategies and the latter, surface-level processes, refers to surface level cognitive strategies in this study. Prokop (1989, p18) categorizes repetition, note-taking, auditory representation and resourcing as the examples of strategies categorized in surface level strategies while some strategies in the deep level category are deduction, recombination, and key words.

A similar way of grouping what students do in learning is suggested by Newble and Clarke (1986). Like Entwistle (1981 & 1987), Newble and Clarke also suggest that students have three approaches to learning. He classifies students' approaches to learning into deep, surface and strategic approaches. He elaborates the first two approaches with examples but not the strategic approach (1986, p.65-66). The deep approach relates to drawing conclusion, using previous knowledge and personal experience. He claims that students adopting a deep approach had more complete understanding

and remembered more factual details immediately or several weeks later. In the surface approach students tended to use rote learning in an attempt to remember the facts they thought they might be required to reproduce at the end of the exercise and they failed to appreciate some of the structure and principles embodied in the article given. He also provides a finding that reported the success of the students who used deep approach and the failure of those who used the surface approach. Stated briefly, there are similarities between the strategy grouping in the study reported in this book and the groupings in general education. The first two approaches, the surface approach and a deep approach, refer to one category consisting of deep level cognitive and surface level cognitive strategies and the third one, strategic approach, refers to the other: metacognitive strategies.

Support for a language learning strategy classification consisting of two main categories: cognitive and metacognitive strategies is also provided by Dansereau (1978, p.18). He distinguishes between two classes of strategies: *primary* and *support strategies*. Primary strategies include identification, comprehension and retention, and retrieval and utilization while support strategies include strategies to allow primary strategies to flow efficiently and effectively. Support strategies also include monitoring (checking) and correcting the ongoing primary strategies. Primary strategies seem to be very similar to cognitive strategies and support strategies to metacognitive strategies in the current study even though support strategies in Dansereau's study seem to have a wider function in allowing primary strategies to work optimally.

In general, the classification consisting of two main categories in this study, which explored strategies employed in learning English in Indonesia, supports similar findings to those in general education. Since learning a foreign language is just one form of learning, it is not surprising that in learning foreign language students will employ the approach that they usually apply to other learning situations (Rubin & Thompson, 1982, p.8). Many classifications used in classifying language learning were based on collected data. It seems that they classified the data without tracing back the groupings to learning theories introduced in general education, in which language learning is also included. This study considers general learning theory as a response to Rubin's comment that researchers in the field of second language

learning have avoided considering the contribution which general learning theory might make to the understanding of the process of second language learning. Rubin also suggests that researchers of language learning strategies reconsider the theories and findings in general learning as the parallels between the two areas become clearer (1981, p.122).

In this study learning theories in general education are considered in order to relate them to the findings. In Politzer and McGroarty's study (1985, p.121-123), some items overlapped between *classroom behavior, individual study* and *outside classroom behavior*. For example, an item under classroom behavior: *do you interrupt yourself when you notice that you have made a mistake* is similar to an item under outside classroom behavior: *do you sometimes correct yourself when you notice that you made a mistake*. In this study, the two processes would be seen as the same processes and classified under metacognitive strategies.

It is interesting to note that at first sight some strategies seemed to be to the deep level cognitive category but the factor analyses grouped them under a different category. The discussion given above was meant to explain how the strategies were grouped by understanding what may have happened with the students when they used the strategies. The classification of language learning strategies in this study may need explanations that some strategies under one skill area were regarded as different strategies in other skill areas.

Metacognitive Strategies

As discussed earlier *metacognitive strategies*, which are higher order executive skills in language learning (O'Malley & Chamot, 1990, p.44), involve self-awareness to plan or direct, monitor, evaluate or correct what has been done in learning English. These strategies are seen to be higher level processes because of their controlling role in cognition, and it was this higher level, or meta-, characteristic that led many to extend the label metacognitive to these processes (Lawson, 1984, p.91-2). These strategies also referred to as *self-management strategies*, are utilized by learners to oversee and manage their learning (Wenden, 1991a, p.25). This category will be discussed first in this section.

The *metacognitive* category of language learning strategies has been introduced in two of the previous studies, O'Malley et al. (1985 & 1990) and Oxford (1990b). O'Malley et al. (1990) suggest that metacognitive strategies include selective attention for special aspects of a learning task, planning the organization of either written or spoken discourse, monitoring information to be remembered and production while it is occurring, and evaluating comprehension of receptive language activity and language production. The metacognitive strategies in Oxford's work include strategies for evaluating one's progress, planning for language tasks, consciously searching for practice opportunities, paying attention, and monitoring errors. By using metacognitive strategies, learners are aware of and control their efforts to use particular skills and strategies. The learners use their capacity to monitor and direct the success of the task at hand, such as recognizing that comprehension has failed, using fix-up strategies, and checking an obtained answer against an estimation (Jones et al., 1987, p.15). Even though the terms are not exactly the same, they still refer to similar processes under the category metacognitive strategies. Metacognitive strategies in this study involve mental processes related to planning and directing what to do in acquiring another language, monitoring, evaluating and correcting what has been done.

Based on the factor analyses and supported by peer rating analysis, fifteen strategies were grouped together as metacognitive strategies. The category consists of four speaking strategies, five listening strategies, three reading strategies and three writing strategies.

Strategies in speaking that were regarded as metacognitive strategies in this study are (a) *I try to correct my mistakes that I produce orally*, (b) *I try to speak with myself to improve speaking*, (c) *I try to evaluate my utterances after speaking*, (d) *I notice my English mistakes, and use that information to help do better*. These processes were classified as metacognitive strategies since they involve self-awareness to correct mistakes, self directing or evaluating utterances produced. Even though a certain metacognitive strategy seems to be a cognitive strategy when used on action, the result of factor analysis suggests that it was grouped into the metacognitive category. For example, strategy b may be classified under cognitive strategy.

The metacognitive category also has some strategies in listening. The metacognitive strategies of listening are (a) *I listen to what I say to practice my*

listening, (b) I try to remember a sentence(s) spoken face-to-face or on cassettes and analyze it by myself, (c) after a listening practice, I check and recheck my understanding, (d) I correct the mistakes that I produce orally and (e) I try to be aware of which sounds give the greatest trouble. In this way I can pay special attention to them while I listen and practice. The learning strategies mentioned above which were used in listening involve self-awareness to direct (Strategy *a* and Strategy *b*), monitor (Strategy *e*), evaluate or correct (Strategy *c* and Strategy *d*), which are the characteristics of the metacognitive category. Like metacognitive strategies in speaking, a metacognitive strategy in listening may be classified under the cognitive category. Strategy *b*, for example, may be classified under the cognitive category but the result of factor analysis grouped it into the metacognitive category.

In reading, the strategies under the metacognitive category are (a) I check and recheck my understanding after reading a passage (b) I cannot understand a reading passage, I try to analyze what difficulty I actually have, (c) I try to be aware of which words or grammar rules give me the greatest trouble. In this way I can pay special attention to the words or rules while I read and practice. The above strategies also involve self-awareness as mentioned before. Strategy *a* involves evaluating, Strategy *b* evaluating, and Strategy *c* monitoring.

The students also used metacognitive strategies in writing. The metacognitive strategies of writing are (a) I rewrite my composition by correcting the mistakes that I notice, (b) I read my writing and correct the mistakes, (c) I try to be aware of which words or grammar rules give the greatest trouble. In this way I can pay special attention to the words or rules while I write and practice. These strategies involve monitoring, evaluating or correcting.

From the explanation above, it is clear that different skill areas involved different types of metacognitive strategies even though it is acknowledged that the students were limited in their choice by what was provided in the LLSQ. In speaking, the students used correcting, directing, and evaluating while they used directing, monitoring and evaluating in listening. In reading they used evaluating and monitoring and in writing they used monitoring and evaluating.

Cognitive Strategies

The learning classification scheme introduced in general education also supports the finding that two patterns of cognitive language learning strategies seemed to emerge. The category can be sub-classified into surface and deep categories. The two subcategories are different from each other in the sense that the deep level subcategory involves higher-rank mental processes while the surface level subcategory involves lower-rank mental processes. In this study factor analyses were used as the basis of strategy grouping and were supported by inter-rater reliability, and the distinction was also discussed from the point of view of the cognitive domain developed by Bloom (1956).

Different from metacognitive strategies, *cognitive strategies* relate directly to the task at hand and the manner in which linguistic information is processed (Prokop 1989, p.17). The term of cognitive strategies in language learning has been used in some studies. In Oxford (1990b), cognitive strategies includes *reasoning, analyzing, summarizing, and practicing* while O'Malley and Chamot (1985) include *resourcing, repetition, grouping, deduction, imagery, auditory representation, keyword method, elaboration, transfer, inferencing, note-taking, summarizing, recombination, and translation*. Like metacognitive strategies, cognitive strategies are also commonly used in general learning and these have been related to specific strategies and skills to cognitive tasks. In reading comprehension cognitive strategies involve comprehending a passage, composing an essay, making a decision, solving a problem, creating a play, and so on (Jones et al., 1987, p.44). In language learning, cognitive strategies may include many activities that take place in the brain while the language tasks are at hand. By using cognitive strategies, language learners use their mental processes while they are learning a language. These strategies include the four skill areas: speaking, listening, reading and writing.

Deep Level Cognitive Strategies

The cognitive category can be classified into sub-categories: deep level cognitive and surface level cognitive strategies. With *deep level cognitive strategies*, students learned something by relating it to previous knowledge, other topics and personal experience (Entwistle, 1987, p.58; and Newble & Clarke, 1986, p.65). In terms of Bloom taxonomy (1956), the students in this study comprehended texts, analyzed parts of sentences, and synthesized sentenc-

es. Based on the factor analyses and supported by peer rating analysis, eighteen strategies in this investigation were regarded as deep level strategies. These comprise four speaking strategies, two listening strategies, six reading strategies and six writing strategies.

The activities included as deep level cognitive strategies in speaking are (a) *I use rhymes to remember new English words*, (b) *I try to remember new English words by pronouncing them*, (c) *I speak a word or a sentence several times to remember it*, (d) *I try to translate Indonesian sentences into English sentences and produce them orally*. For the Indonesian students, it seems that use of the four strategies in speaking not only involves *recalling knowledge* (the lowest level in Bloom's taxonomy), but working with elements, parts, etc., and combining them in such a way as to constitute a pattern or structure not clearly there before. Such a process is categorized as *synthesis* in Bloom's taxonomy (1956, p.162). *Synthesis* in the cognitive domain is regarded as a high level of mental processing (Bloom, 1956, p.18). Similar to the other three strategies, it seems that the students also used Strategy *d* by involving a process of synthesizing.

The students also used some strategies under the deep level category in listening. These include (a) *I learn English by watching English TV programs*, and (b) *I learn English by listening to English songs or other listening script*. These strategies do not seem like deep level descriptors. The use of these strategies probably leads to deep level processing. The students seem to use their *comprehension* when they learn English by watching TV programs and listening to English songs. It seems that they are confronted with a communication and expected to know what is being communicated and to be able to make use of the material or ideas contained in it (Bloom, 1956, p.89) when they watched TV and listened to English songs.

While in listening the students used the deep level cognitive strategies only for *comprehension*. In reading they seemed to use the deep level cognitive strategies by involving more mental processes. The deep level strategies in reading are (a) *To understand unfamiliar English words while I am reading, I guess from available clues*, (b) *I learn English by reading English books or magazines*, (c) *I try to understand sentences by analyzing their patterns*, (d) *I try to understand the passage by using my general knowledge and experience*, (e) *while I read a text, I try to anticipate the story line*, and (f) *I read a text more for ideas than words*. Strategies *a*, *b* and *f* were grouped in the deep level cognitive

category since the three strategies seem to involve *comprehension*, which is higher than remembering knowledge (Bloom, 1956, p.18). In comprehension students are confronted with a communication and expected to know what is being communicated and to be able to make use of the material or ideas contained in the communication (Bloom, 1956, p.89). The remainder of the reading strategies grouped under the deep level cognitive category also involve comprehension except Strategies *c* and *d*. Strategy *c* and Strategy *d* were regarded as *analysis* (Bloom, 1956, p.144), which emphasizes the breakdown of the material into its constituent parts and detection of the relationships of the parts and of the way they are organized.

In writing, the deep level cognitive category includes (a) *I write what I am thinking about*, (b) *I keep a diary*, (c) *I write sentences to apply certain rules*, (d) *I write out new material over and over*, (e) *I try to memorize the meanings of words*, and (f) *I write a message to my friends in English for practice*. Strategy a and b relate to working with elements, parts, etc., and combining them (*synthesis*). Strategy c relates to *application*, which means that students apply the appropriate abstraction without having to be prompted as to which abstraction is correct or having to be shown how to use it in that situation (Bloom, 1956, p.120). At first sight Strategy d and Strategy e seemed to be rote learning, which should have been regarded as a surface level cognitive strategy in this study, but based on factor analyses they were grouped together with deep level cognitive strategies. It is hypothesized in this study that when the students wrote something (Strategies d, e and f), they considered elements or parts (word choice, structure, etc) and then combined them into sentences, which is classified into *synthesis* in Bloom taxonomy.

Deep level cognitive strategies vary from the second lowest process in the cognitive domain of Bloom, *comprehension*, to *synthesis* (the second highest process). It seems to be possible that a strategy that was classified under the deep level cognitive category in one occasion would be classified under another category in other occasions, depending on what and how language learners use in their mental processes. This means that the verbalization of the categories is inadequate and often fails to capture exactly the learning processes involved in a particular strategy. For example, the translating strategy in speaking (strategy d in speaking) was regarded as deep level cog-

nitive strategy while in listening and in writing the strategy was regarded a surface level cognitive strategy as will be discussed in the following section.

Surface Level Cognitive Strategies

By using deep level cognitive strategies, the students involved comprehending texts, synthesizing parts of sentences, analyzing sentences and applying rules. In using surface level strategies, by contrast, they relied on the lowest ranks of mental processes such as *rote learning* (Bowden, 1986, p.65-66; and Entwistle, 1987, p.58). As done with deep level cognitive strategies, surface level cognitive strategies were also related to the cognitive domain developed by Bloom (1956). The lowest ranks of mental processes include *recalling knowledge* in Bloom's taxonomy. However, the surface level cognitive category in this study not only includes *recalling knowledge* (Bloom, 1956, p.62) but also other strategies that are regarded as *rote learning*.

Based on the factor analyses and supported by peer rating analysis, the surface level cognitive category consists of two listening strategies, four reading strategies and three writing strategies. In listening, the students also used strategies that were regarded as surface level cognitive strategies. The surface level cognitive strategies in listening include (a) *I try to understand what somebody is saying by translating into Indonesian* and (b) *I try to understand every individual word to understand the passage*. Since the factor analyses were the only evidence to group the learning strategies, the explanation to the way of grouping the strategies is really hypothetical. It is hypothetical that the students in this study recalled meanings of words in the Indonesian language when they used the two strategies. They used these strategies to *recall knowledge*. They might be more occupied with word to word translation, which involves recalling the translation of an individual word. It is hypothetical that they did not *comprehend* the passage and *analyze* the sentences, which some people may expect. It seems that what is needed is a way of getting students to introspect on what they are doing and then rephrase the LLSQ items to reflect this.

In contrast to the surface level cognitive strategies in listening, it may be easier to understand surface level cognitive strategies in reading. The surface level cognitive strategies in reading include (a) *I read the passage aloud*, (b) *I take notes to remember the ideas*, (c) *In reading, I pick out key words and repeat*

them to myself, (d) I discuss reading passages with my friends, and (e) If I do not understand the content of a reading passage, I ask my friends or my teachers for help. In reading, perhaps the students were involved with rote learning (a) and recalling knowledge (b and c). Perhaps, in discussing and asking (d and e) the students in this study only practice for learning (rote learning) so that they did not use their higher mental processes, such as *comprehension*.

The other cognitive strategies that were regarded as surface level are strategies in writing. In writing the surface level cognitive category includes (a) *I try to translate word for word*, (b) *I mix Indonesian words and English words in writing*, and (c) *I use Indonesian patterns to keep writing in English*. The strategies under surface level category in writing refer to different things but they mainly involve very low processes, namely *recalling* (Strategy a) and *rote learning* (Strategies b and c). Since students do not use “heavy” mental processes in writing with these processes, these strategies are classified into a surface level strategy.

At the risk of prediction made too soon, the evidence in this study of two category learning taxonomy: cognitive (surface level and deep level) and metacognitive strategies, supports the theories and findings reported in the field of general education as mentioned above. The classification has been explored in an Indonesian environment and the validity and reliability of the language learning strategy questionnaire (LLSQ) has been measured.

The process of developing the language learning strategies used in this study took into account what students themselves felt about their learning and developed descriptions of strategies they needed, as reported by Grenfell and Harris (1993, p.25). Language learning strategies that previous researchers have proposed were then identified, cross-checking these with the proposed strategies and adding newly developed items. New items were developed based on the interviews with the students and the observations conducted in the classrooms before the questionnaire was administered. The taxonomy of the language learning strategies has been developed by undertaking factor analyses, meaning that the language learning strategies have been grouped based on the language learners’ responses that were collected through administering the LLSQ.

The classification of language learning strategies into metacognitive and cognitive strategies is not a dramatic departure from previous taxono-

mies. The classification may develop further with further studies. This study provides evidence that the cognitive category has two subsets of strategies: surface and deep level processes. It may be that the category of metacognitive strategies can also be divided into other subsets of strategies.

To explore how the strategies under the three categories relate to one another, correlation analyses were undertaken. The result of the analysis shows that the three groups of strategies are significantly correlated. Metacognitive and deep-level cognitive strategies turned out to be the highest correlated among the three strategies ($r = .76, p < .001$), followed by the correlations between deep-level and surface-level cognitive strategies ($r = .53, p < .001$) and between metacognitive and surface-level cognitive strategies ($r = .52, p < .001$). The positive correlation between metacognitive strategies and the other two cognitive language strategies supports to some extent the previous finding on the relationship of metacognitive and cognitive strategy use by Purpura (1997). His finding provides empirical evidence that metacognitive strategies show a significant, direct, positive impact on cognitive strategies. He suggests that metacognitive strategies exert an executive function over cognitive strategies, with metacognitive strategies constituting self-management behaviours that oversee and manage the cognitive behaviors in SL acquisition, use, and testing (p.308). The correlation between language learning strategies in this study also supports the finding in a study carried out by Wenden, whose definitions of strategies are very similar to those employed in this study (1991b, pp.302-303). Her finding suggests a hierarchical relationship between the two strategies (p.315). In her study metacognitive strategies were directly responsible for the execution of writing task while cognitive strategies were used to deal with obstacles encountered a the way.

The inter-correlations among the categories and the subcategories in this study means that increased frequency of strategy use under one category/subcategory is associated with an increase in the use of those of the other categories/subcategories. This is interesting because originally the strategies were developed in different areas of the language skills: speaking, listening, reading, and writing. The language learning strategies were finally grouped based on factor analyses.

To the degree that they correlate, strategies share variance, and the magnitude of r^2 indicates the amount of variance that is interrelated (Hatch

& Lazaraton, 1991, p.440-441). Since the correlation between metacognitive and deep level strategies is .76, it could be said that the two categories of language learning strategies overlap to the extent of r^2 (or. 577). This suggests that the overlap of the two groups of language learning strategies is 57.7%, or, more than one half of the variance in metacognitive strategies can be accounted for by the variance of deep level strategies and vice versa. The variance of metacognitive and surface level strategies that overlap is 28% (r. 53) while deep level and surface level strategies overlap to the extent of 27% (r.52). The findings in this study, supported by Purpura (1997) and Wenden (1991b), may be interpreted as a sign of mutual conceptual dependence among strategies. This is probably understood as evidence that in learning a foreign learners do not rely on a single category or certain groups of strategies only, but employ many strategies. This calls for further studies to determine whether the use of strategy combination in a certain way plays an important role in the successful learning of a foreign language and, if so, how the strategies are effectively combined.

The rank correlation among the three strategies in this study also implies that the students used a combination of the language learning strategies. The use of metacognitive strategies is closer to that of deep level strategies ($r = .76$) than the use of surface level strategies ($r = .52$). However, in this study deep level cognitive strategies were grouped together with surface level cognitive strategies by using theoretical considerations as a key criterion, as discussed earlier in this chapter. Future studies need to explore if language learners begin to employ lower level strategies less frequently when they already use higher strategies more frequently, as findings in this current study suggests.

The classification of language learning strategies is complex. Many studies have proposed different learning strategies and different ways in which similar strategies have been grouped. Nonetheless, the present findings on the language learning classification have some implications for the teaching and learning English in a tertiary EFL setting.

Different researchers have used different categories for classifying learning strategies. Some use the same terms for a category but they refer to different concepts, and some others refer to the same concepts with different terms. In this study, the categories that the previous researchers have

used are considered, but the terms are conceptualized by tracing them back to *psychology*, the mother discipline of SLA. The categories that the previous researchers have used are considered in the current study under the headings: *cognitive*, *social*, and *metacognitive*. These three categories are the ones that have most commonly been used by the previous researchers. A classification of learning strategies consisting of metacognitive and cognitive is not new. A similar classification of cognitive strategies was developed by Entwistle (1981 & 1987) in general education. He classifies cognitive approaches to learning and studying into three categories: *surface*, *deep* and *strategic approaches*. He also suggests that the surface approach relies on rote learning through repetition and rehearsal in short term memory but the deep approach depends on meaningful learning utilizing connections between concepts in semantic -term memory. He also provides examples of a strategic approach, for example: organize time and distribute effort to greatest effect and ensure conditions and materials for studying are appropriate (1987, p.195). Grouping language learning strategies the way Entwistle (1981 &1987) classifies learning strategies is relevant but in this study the classification not only covers reading strategies but also the other three language skill areas: speaking, listening and writing. In grouping learning strategies under certain categories based on factor analyses, Bloom taxonomy (1956) has been considered to understand how language learners in the current study used the strategies.

Cognitive category

The cognitive category is used to classify all cognitive processes in SLA. In order to identify what are cognitive processes, it is useful to explain two basic issues: *mental representation* and *mental processing*. Mental representation refers to how an event or an experience is represented in the mind (Deaux and Wrightsman, 1988, p.21). In language learning, mental representation may refer to how some students memorize what they have learned, or experiences in their life by remembering things in their native languages. Mental processing, on the other hand, deals with cognitive processing. Even though mental representation may be differentiated from mental processing, it seems to be covered within it. Sherrod (1982, p. 9) says that *cognitive psychologists* are concerned with how people attend to information in the environment and how they process that information in their brains.

From the definitions above, it is clear that *cognitive processes* include all activities related to mental processing. In relation to language learning strategies, the cognitive category may include all activities that take place in the brain in order to acquire a foreign language. This category may include intelligent guessing, looking for patterns from sentences, inferencing, association, summarizing, grouping in the mind, deduction, imagery, and other mental processes. Strategies classified under cognitive category have proved to be more significantly correlated with language achievement in a study by Park (1997).

Fillmore (1979), O'Malley & Chamot (1990), and Oxford (1990a) explicitly mention a *cognitive category* to classify some learning activities. However, they have different concepts of what cognitive strategies are. Fillmore states that examples of cognitive strategy are (a) get some expressions you understand, and start talking, (b) make the most what you have got. It seems that these are not mental processes that relate to language learning. Such processes are not categorized under the same category in O'Malley & Chamot's study and Oxford's study. These processes are more related to social strategies, which will be discussed later. Even though O'Malley & Chamot and Oxford have different ways of classifying learning strategies, they seem to be similar in classifying learning processes when it comes to cognitive strategies. In Oxford's model, *guessing intelligently by using linguistic clues* is similar to *inferencing by using available information* in O'Malley & Chamot's model. *Receiving and sending messages* in Oxford's model seems very general. The process of receiving and sending message may not involve mental processes as discussed before (p.24). *Memory strategy* in Oxford's model, which includes creating mental linkages, applying images and reviewing, will be included under the *cognitive strategies* in this current study since the processes mentioned in the category of memory in Oxford's model involve mental processing. In other words, different writers have classified similar processes into different categories. Wenden (1991a) also introduced cognitive strategies in her classification scheme. Cognitive strategies in her classification involve selecting information from incoming data, comprehending and storing the information, and retrieving the information. Learning activities under comprehending and storing in Wenden's taxonomy refers to cognitive strategies introduced by O'Malley et al (1985, see also O'Malley and

Chamot, 1990), while retrieving information refers to the list introduced in Rubin (1975 and 1981). Cognitive strategies developed in the current study refer to all mental processes, except processes that involve self-monitoring and self-evaluating, in order to learn another language. Even though the two groups of learning strategies are different, they are closely related (Forrest-Pressley and Waller, 1984, p.2).

Social category

The second category is the *social category*. To explain the concept of this category, it is useful to refer to social psychology. Stratton and Hays (1988, p.180) defines *social psychology* as the branch of psychology which is particularly concerned with the nature and form of social interaction and how people come to influence one another's behaviour. Another definition by Statt (1990, p.122) is that *social psychology* is the branch of psychology that deals with social life, the behavior of people in groups, and the behaviour of individuals in social settings. As mentioned earlier, social strategies were found in a language learning context and not explored in studies in general education. These strategies were investigated and explicitly stated in studies conducted by Fillmore (1979), Politzer and Groarty (1985), O'Malley et al.(1985) and Oxford (1990a and 1990b). In the study by Fillmore (1979) there were three social strategies, namely, a) joining a group, b) give the impressions- with a few well-chosen words- that you can speak the language, and c) count on your friends. In Politzer and Groarty's study these strategies were grouped under *interacting with others outside the classroom*, a category which contained 22 items (1985, p.122). The items in Politzer and Groarty's study seem to overlap with those under the metacognitive and cognitive categories developed in the current study. For example, the strategy *do you sometimes correct yourself when you notice that you made a mistake?*, which was a metacognitive strategy in the current study, was grouped under social strategies by Politzer and Groarty (1985, p. 123). An example of a cognitive strategy developed in the current study that was classified as a social strategy in their study was *can you often guess the meaning of what somebody said either from his/her expression or gestures?* (p.123). O'Malley et al. (1985) also introduced the category of social strategy and classified it under a heading *social mediation*. In their study this group only contained one strategy, namely, cooperation (work-

ing with one or more peers to obtain feedback, pool information, or model a language (p. 34). Social strategies were also developed by Oxford (1990a and 1990b). The strategies she introduced under this category were a) asking questions, b) cooperating with others and c) empathizing with others (p. 75), while Wenden (1991a) classified social strategies under “retrieving information” of cognitive strategies. The social category developed in this study includes not only all processes that take place in groups, but also includes individual activities in social settings aimed to acquire another language. An example of this would be reading letters from friends in order to have the opportunity to practice English.

Metacognitive category

The last category, *metacognitive strategy*, is relatively new. This category was introduced in O’Malley et al. (1985) and Oxford (1990a & 1990b). The concept of metacognition in both studies refers to similar processes in acquiring another language. Oxford (1990a) states that metacognitive strategies include: centering, learning, arranging and planning learning, and evaluating learning. In O’Malley & Chamot’s study, metacognitive strategies have more processes that are classified under planning, monitoring, and evaluation. Some of the previous studies already introduced metacognitive processes, but they did not name them as such. For example, Rubin identified monitoring strategy under the name direct learning (1981, p. 124). Naiman et al. mentioned a similar strategy, but they regarded it as a single category (1978, p. 15), while Politzer and Groarty classified metacognitive processes under their three categories: classroom behavior, learning behavior during individual study and interacting with others outside the classroom (1985, pp. 121-3). Unlike O’Malley and Chamot (1990) and Oxford (1990a & 1990b), Wenden (1991a) classified metacognitive strategies under the name self-management strategies. Some studies have shown that metacognitive strategies correlated with language learning (Brown et al., 1986 and Gu and Johnson, 1996).

It is clear that while *cognition* involves mental processing, *metacognition* involves processes related to monitoring and evaluating what has been done and planning what to do in acquiring another language. Stratton and Hays (1989, p.111) say that *the study of metacognition* includes the study of the ways in which people monitor and control their own cognitive activity. Sheinker

and Sheinker (1989, p.vi) emphasize that students studying *metacognitively* may use strategies for self-direction, self-monitoring, self-evaluation, and self-correction. In the current study metacognitive strategies refer to similar strategies introduced by O'Malley et al. (1985), Oxford (1990a & 1990b) and Wenden (1991). The metacognitive strategies include self-direction, self-monitoring, self-evaluating and self-correcting.

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Chapter 4

LANGUAGE LEARNING STRATEGIES AND LEARNING OUTCOMES

The main focus in this section is whether the students benefit from the use of language learning strategies grouped under the categories discussed in Chapter Three. Then, the discussion continues by referring to findings from similar studies and compares them with the findings of this study.

The findings suggest that language learning strategies affect students' learning and predicts 3.2% of the achievement variance. Clearly, the amount of variance is small but it is nevertheless important since the affect constitutes 44% of the total gain scores. A study suggesting that learning strategies affect language achievement was also conducted by Bialystok and Frohlich (1978). Their study, which explored variables of classroom achievement in second language learning, showed that many factors were correlated with language achievement, but only two of them: aptitude and strategy use were statistically significant in predicting performance.

A similar study on the effect of language learning strategies on achievement was conducted by Park (1997). However, Park's study indicates that the use of language learning strategies accounted for 13 to 14% of the total variation of the achievement scores. Even though the evidence in this study supports the findings of Park's study, this study reveals that the contribution of metacognitive strategies is much greater than the two other groups of language learning strategies: deep level cognitive and surface level cognitive strategies. This finding contradicts Park's study, which

involved Korean University students. Park's study indicated that cognitive strategies were more predictive of language achievement scores than were metacognitive strategies (p.216). He admits that it is unclear why cognitive strategies were more predictive than metacognitive strategies. He also offers several explanations for the small variance of the contribution of strategy use to the achievement scores. One of the proposed reasons was that the Strategy Inventory for Language Learning (SILL), which was reported to have high validity in several studies (Oxford & Burry-Stock, 1995), might measure only some of the language learning strategies used by the Korean students. Park (1997) also provides an argument that not all strategies the students used in learning English were inventoried in Oxford's SILL (p.217). That the SILL might be inadequate in accurately reporting strategy use was also suspected by Grainger (1997, p.383), who explored the relationship between strategy use and ethnicity of learners of Japanese. He suspects the inadequacy of the SILL since he found that in learning Japanese the students of Asian backgrounds do not follow traditional patterns of strategy use as identified in other major studies of language learning strategies.

Another reason that Park (1997) proposed for the small variance of the contribution of strategy use to the achievement scores was that the TOEFL (Test of English as a Foreign Language), like other instruments, might not measure student's language proficiency completely. He argued that the TOEFL, which was used in his study, did not measure students' speaking and writing skills. This reason seems to be less probable since in this study the instrument to measure language proficiency, ALIGU (American Language Institute of Georgetown University), also did not measure students' speaking and writing abilities.

In this study, the empirical data suggests that the contribution of the metacognitive strategies subsumes the contribution of the deep level cognitive strategies. Individually, the use of metacognitive strategies best predicted the gain in language achievement students experienced during the three-month English course. The contribution of metacognitive strategies constituted almost 100% of the variance of gain in achievement contributed by language learning strategies, followed in rank by the two other groups of strategies: deep-level cognitive (50%), and surface-level cognitive strategies (3%). From the data of the regression analyses, it may be concluded that

the function of the metacognitive strategies is a powerful “tool” in learning English and directs the execution of learning processes. These findings seem to support the notion that metacognitive processes refer to the control or executive processes that direct cognitive processes and lead to efficient use of cognitive strategies (Forrest-Pressley and Waller, 1984, p.2).

That metacognitive strategies best predict the language achievement also supports the notion provided by Brown and Baker (1986, pp.73-75). Their study, in which the term “metacognitive” was defined in a similar manner to that of the current study, provided data on the contribution of metacognitive aspects of reading to reading comprehension. The investigation began by providing metacognitive strategy training to the experimental group. The experimental and control classrooms were equivalent on standardized tests of reading before the project, but the experimental groups scored significantly higher afterwards.

This study, which involved university students, shows that metacognitive strategies were superior to the other two groups of strategies in explaining increase in language performance. The significantly positive effect of metacognitive strategies on the students’ language outcomes was probably affected by their maturity. That the extent to which metacognitive strategies play role in learning a foreign language is related to the learner’s maturity may be explained by the “monitor” hypothesis of Krashen. This explains that two conditions need to be met in order to use monitoring and self-correcting strategies (Krashen 1985, pp.1-2, 1988, p. 3), which are classified under the metacognitive category in this study. The performer must be consciously concerned about correctness. This condition seems to be met in this study since it involved relatively mature students of university level, who learned (not acquired) English consciously in educational settings. Learning English in a formal setting (as the students did during this experiment) makes language learners tend to learn the language from its rules, and correctness, in terms of rules, becomes important to them. The data of this study seem to be compatible with Critical Period Hypothesis in second language learning (CPH). One prediction of CPH is that second language acquisition will be relatively fast, successful, and qualitatively similar to first language only if it occurs before the age of puberty (Snow & Hoefnagel-Honle, 1982, p.93). The findings related to support for the superiority of metacognitive strategies

in this study may be linked to Bialystok's study (1981), which showed that monitoring, one of the metacognitive strategies, had a strong positive trend, in terms of its relationship to success but the relationship only reached significance only in older students (grade 12). These findings support the conclusion that the use of a monitoring strategy has more effect when language learners are mature.

Another explanation related to the effective use of metacognitive strategies in adult learning is provided by Dulay et al (1982, p.60-61), who note that the capacity for linguistic monitoring may be related to the onset of other developmental changes that occur at about puberty. Oxford (1990b, p.13) also agrees that learners who are more aware and more advanced seem to use better strategies. The capacity for grasping the conscious representation of abstract linguistic rules appears to emerge at about puberty and may well be a result of the adolescent's new ability to think abstractly in general. The data in this study clearly show that the contribution of metacognitive strategies is more predictive of language achievement than are the strategies grouped under deep and surface level cognitive strategies. In short, metacognitive strategies appear to be effective in facilitating language development of adult learners, as shown by the participants in this study. This conclusion is supported by a similar study by Gu and Johnson (1996, p.658). Their study on vocabulary learning strategies used by Chinese university students and language outcomes suggests that metacognitive strategies: self-initiation and selective attention also turned out to best predict overall proficiency in EFL learning.

The Contribution of Individual Language Learning Strategies to The Learning Success

It has been shown that language learning strategies contributed to the success in learning English. An important issue is to what extent individual language learning strategies contribute to the success of EFL learning. To answer the question, stepwise multiple regression analyses were performed to get a clearer understanding of the relationship between individual language learning strategies and language achievement. In performing the multiple regressions, the three groups of strategies were separated and respective analyses involved only the strategies under each single subordinate cate-

gory (metacognitive, deep level or surface level). The pretest was included as an independent variable. The data provided in the stepwise multiple regression with strategies under the metacognitive category reveal that four metacognitive strategies contributed uniquely to the success of EFL learning ($P < .05$). The four strategies were 1) *I correct the mistakes that I produce orally*, 2) *I read my writing and correct the mistakes*, 3) *I notice my English mistakes, and use that information to help me do better*, and 4) *If I cannot understand a reading passage, I try to analyze what difficulty I actually have*. The other eleven strategies in the metacognitive category included in the regression analysis did not make a statistically significant unique contribution to the explained language achievement.

The problem in conceptualizing strategies is also acknowledged by O'Malley et al. (1985, p.32) that some strategies in their study failed to produce mutually exclusive categories, for example some strategies appeared in more than a single grouping. They gave an example that repetition could be classified as either memorization or practice. They also stated that Rubin (1983, personal communication cited in O'Malley and Chamot, 1985) suggested that it was desirable to inspect original student description to clarify the classification of mutually exclusive categories. Overlapping among strategies seems unavoidable since a language learner may employ a single process in different tasks. This results in different categories for a single learning strategy, depending on what perspectives the learner's process is seen from. However, language learning strategies introduced in this study have been specified in single items (not only categories), so that the possibility of overlapping can be decreased.

The problem in conceptualizing or classifying strategies not only happens to strategies under the metacognitive category as discussed earlier but also to the other strategies under the cognitive category: deep level and surface level cognitive strategies. It is very probable that a strategy to be classified under one category in one study would be classified under another category in another study. As evidenced in the recent study, the three categories had significant positive correlations among them. The correlations not only imply that the frequency of strategy use under one category is in accordance with that under another category, but it also implies that a construct measured by the strategies under one category share variance with another con-

struct measured by the strategies under another category. In other words, a strategy grouped under one category may have a very close relationship with another category; they may overlap.

In order to link the findings of this study with similar studies that have been conducted, Wenden's work (1991a) is discussed in the following section. Following Wenden's inventory, self-management strategies, which are defined as metacognitive strategies in this study, include three main groups of strategies: planning, monitoring and evaluating (1991a, p.29). The first two significant metacognitive strategies discussed above, involve *evaluating* (correcting) in Wenden's inventory; the third involves *planning*, and the fourth strategy, *monitoring*. The planning strategy in the study reported in this thesis, to use Wenden's term (1991a, p.27), go on while the task is being performed, which is called *planning-in-action*. This planning strategy is contrasted with *pre-planning*, in which learners determine what their objectives are and decide on the means by which they will achieve them. Wenden (1991a, p.28) also says that the scope of monitoring can involve a narrow focusing on a specific item in a reading text to a broad overview of a series of learning activities, such as a semester course in a reading. In monitoring, after becoming aware of a difficulty, learners analyze the difficulty and seek the cause, as identified in the fourth strategy mentioned above: *If I cannot understand a reading passage, I try to analyze what difficulty I actually have*. She also contrasts evaluating with monitoring, which focuses on the difficulty. In her study evaluating means that learners consider the outcome of a particular attempt. Evaluating may focus on the proficiency of learners or strategies used in learning. Evaluating in the current study is only related to correcting mistakes and focuses on proficiency.

The three main strategies in Wenden's work: planning, monitoring and evaluating sometimes overlaps, as to a certain extent a strategy may become another. Wenden explains that planning may depend on information provided from the implementation of the two other self-management strategies- monitoring and evaluating. She further describes that self-assessment, which is a part of a monitoring strategy, may be used as a planning strategy when it is done in the pre-planning stage but it is a part of monitoring strategy when it is used during the act of learning. The distinction among the strategies under metacognitive category seems a complex process. Weinstein and

Mayer (1986, p. 323) describe that the use of metacognitive strategies is most often operationalized as comprehension monitoring. They further state that this process requires the student to establish learning goals for an instructional unit or activity, to assess the degree to which these goals are being met, and, if necessary, to modify the strategies being used to meet the goals. These processes, which involve establishing goals and evaluating the degree of success, seem to be more to adults than children.

Besides revealing the contribution of individual metacognitive strategies to learning success, this study also provides evidence that three strategies under deep level cognitive category uniquely contributed significantly ($p < .05$) to success. They were 1) *I write sentences to apply certain rules*, 2) *I write a message to my friends in English for practice*, and 3) *while I read a text, I try to anticipate the story line*. The other fifteen strategies of deep level cognitive category in the regression analysis did not provide a statistically significant unique contribution to the language achievement.

Even though surface level strategies only contributed a very small amount to the increase of the students' language performance, three of the strategies under this category turned out to predict the success significantly ($p < .05$). They were *In reading, I pick out key words and repeat them to myself*, and *I ask questions in English, if I do not understand the content of a reading passage, I ask my friends or my teachers for help* and *I mix Indonesian words and English words in writing*. The other seven strategies of surface level cognitive category in the regression analysis did not provide a statistically significant unique contribution to the language achievement.

As done with metacognitive strategies, the cognitive strategies predictive of the language achievement are compared with the strategy classification proposed by Wenden (1991). The "powerful" strategies of the cognitive category, both deep-level and surface-level strategies, are covered in the *comprehending and storing the information and retrieving the information* category developed by Wenden (1991). In reviewing the significant strategies, both deep-level and surface-level strategies were combined since they be to the same processes: cognitive strategies. The strategies that are similarly classified under retrieving, more specifically retrieving and using process (p.22) are 1) *I write sentences to apply certain rules*, 2) *I write a message to my friends in English for practice*, 3) *I pick out key words and repeat them to myself* and 4) *I mix*

Indonesian words and English words in writing. Even though the four strategies involve different learning skills: writing and speaking, they be more to *practice strategies*, a sub-category of *retrieving the information than comprehending and storing the information* in Wenden's taxonomy (1991a, p.22). One strategy under the cognitive category that significantly contributed to learning success in this study was *inferencing* category of Wenden's classification: using knowledge about world, culture, communication process to infer meaning or predict outcomes (p.22). The strategy that refers to *inferencing* in the current study is *while I read a text, I try to anticipate the story line*.

The results suggesting that *practice strategies* are effective and more frequently used than the other cognitive strategies is consistent with Oxford study's (1990b). She argues that strategies for practicing are among the most important cognitive strategies and she further states that the importance of these strategies has not been highlighted in research at all levels of language learning, in particular in naturalistic practice (p.43).

The evidence that language learners in this study benefited from practice strategies of cognitive categories further supports Bialystok's (1981 pp.25-35) and Huang and Van Naerssen's (1987) findings. In Bialystok's study, which involved children, the strategy most responsible for achievement on all tasks was functional practice or practice for communication (naturalistic practice), and formal practice or practice for learning appeared to show less relationship to achievement.

Huang and Van Naerssen (1987) also conducted a study with adults using a similar classification of language learning strategies introduced in Bialystok (1981). The strategy measurement used to investigate learning strategies in oral communication by Chinese students in Huang and Naerssen's study was derived from the Rubin (1975) inventories (p. 289). The finding of their study also supported the finding of the previous study of Bialystok (1981), which suggested the superiority of *functional practice* to the other two strategies: *formal practice* and *monitoring*.

Even though the two studies provided similar findings, they suggested different answers to the manner in which functional practice and achievement are correlated. While Huang and Van Naerssen suggest that the correlation does not automatically imply a direct cause-and-effect rela-

tionship, Bialystok seems very confident that functional practice facilitates performance, meaning that more functional practice produces better performance. However, she does not interpret the negative correlation between formal practice and achievement to mean that more formal practice produces lower achievement; rather additional practice after a particular point never facilitates performance. This might have been due to “over practice” of the strategies and produced inefficient result.

The two studies seemed to have failed to investigate metacognitive strategies, which appeared to have a stronger relationship to achievement than that of cognitive strategies as suggested in this study. Probably, the answer is that metacognitive strategies seem to have been less emphasized in their studies as Rubin (1981, p.118), from whose questionnaire Huang and Van Naerssen derived their instrument, acknowledges that her efforts were to establish major cognitive processes used in second language learning and the problems encountered in observing those processes. Rubin (1981) groups language learning strategies into eight categories. In her classification similar strategies to metacognitive strategies developed in my study are grouped under *monitoring*. The monitoring strategies in her classification include *correcting error in own/others' pronunciation, vocabulary, spelling, grammar and style, and observe and analyze language use of others* (1981, p.124). It is not surprising that metacognitive strategies might be given less attention in Huang and Van Naerssen's study (1987) since learning strategies which are similar to metacognitive strategies in this study are only grouped under one category among eight categories developed in Rubin's work (1981).

As has been discussed language learning strategies in this study predict language proficiency. The finding supports a previous study by Dreyer and Oxford (1999, p.73), which provides evidence on a significant relationship between strategy use and ESL proficiency. However, it is debatable whether learning strategies determine proficiency or proficiency determines learning strategies. Skehan (1989) responds to this issue by suggesting a longitudinal research design that monitors changes in strategies and proficiency over time in the same group of learners. This current study provides empirical evidence that seems to support a cause-and-effect relationship between learning strategies and learning outcomes. Besides the data on the regression analyses between learning strategies and language outcomes dis-

cussed above, the data on correlation analyses between the language learning strategies and the pretest and posttest also revealed that strategy use affected language achievement before and after the experiment. The small correlation between the use of metacognitive strategies and the pretest ($r = .24, p < .01$) and the bigger correlation with the posttest suggest ($r = .40, p < .01$) imply that the students in this study benefited from the use of the strategies in learning English during the experimental period. Similar data were also provided with the correlation between deep level strategies and the pretest and posttest (with pretest $r = .18, p > .05$ and with posttest $r = .29, p < .01$), and the correlation between surface level strategies and the pretest and posttest ($r = -.01, p > .05$) and $r = .08, p > .05$ respectively). The correlations imply that a different manner of use of the learning strategies appeared to occur after the pretest time and continued at the time the LLSQ was administered (the end of the course). The language achievement seems to be affected by the manner in which students used language learning strategies. The way they were taught might have changed the way they learned English by using metacognitive strategies more effectively. The way they learned English at the Language Centre might have been affected by the way their teachers taught them, which is different from the way they used to be taught in their senior schools. Probably, these data can address the issue on how the strategy use is correlated with language achievement mentioned earlier. The data in this study seem to suggest that there is a cause-and-effect relationship. The correlational data suggesting that the students improved the effectiveness of their learning strategies during the experiment support the cause-and-effect relationship between strategy use and language outcomes.

In summary, the language learners employed three groups of learning strategies (metacognitive, deep level and surface level) and the strategies share contribution to the success in language learning. Metacognitive strategies proved to best predict in their performance in English. Students did not use one single strategy or single group of strategies in learning English. Instead, they combined their learning strategies. However, not all strategies provided a significant contribution to their learning success; only four strategies of the metacognitive category, three strategies of deep level category, and three strategies under surface-level gave a significant unique contribution to the students' success. Seemingly, student's choice of learning strate-

gies and the frequency of use resulted in learning differences and finally affected their language achievement. Having considered the result, the students' relative frequency of use of learning strategies influenced learning outcomes, attention will now be given to the absolute extent of use of strategies of more and less successful learners.

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Chapter 5

HOW SUCCESSFUL LEARNERS EMPLOY LEARNING STRATEGIES IN AN EFL SETTING IN THE INDONESIAN CONTEXT

Different instruments have been developed to identify what learning strategies language learners employ in learning a foreign language. Instruments that have been validated and extensively used for language learning strategies may not measure all strategies that learners employ in learning English as a foreign language, especially in the context of EFL settings. To identify language learning strategies of learners of EFL in the Indonesian setting, a measurement developed in the basis of their cultural setting needs to be explored.

Numerous studies have revealed that learners from different cultures may learn a foreign language in different ways. The students learning a foreign language in Asian contexts have been proved to use different learning strategies compared to students that learn the same language in Western countries. Therefore, a measurement of language learning strategies that considers the context of EFL students in Asia, especially in Indonesia, is needed in order to portray the learning strategies more thoroughly in the their context.

By identifying how the use of English learning strategies is correlated to their language skills, language teachers in the country may expect their students to learn a foreign language more successfully. Language teachers can condition their teaching processes in order for their students to use their effective strategies or training their students to use the strategies when language learners learn individual skill.

As with other self report survey questionnaires, the measurement for language learning strategies used in this study may have limitations. The limitations include the fact that learners may not fully understand how to respond to the questions of the questionnaire or they may not answer the questions in a frank manner. Further research with different ways of collecting data needs to be undertaken to verify how the use of language learning strategies grouped under the language skills contribute to language performance as the findings of this study indicate. This study has proposed taxonomy of language learning strategies consisting of skill-based categories. This classification is not final; further studies need to be done to replicate the findings related to this newly developed measurement so that more consistent findings become available within and across populations. Particularly important is more information on how students from different age levels and different cultural backgrounds use language learning strategies in EFL contexts. The number of the students participated in this study is small and they were not randomly chosen, hence making difficult to generalize the findings of this study to any Asian context. However, the participants involved in this study share important common attributes with language learners in other Asian settings, mainly in that they learn English as a foreign language by separated language skills. It would be worthwhile conducting other studies in EFL tertiary settings to explore whether the language learning categories provided in this study also contribute to similar success as the findings of this study indicate.

Previous Studies on Language Learning Strategies

Numerous studies have determined that the use of language learning strategies significantly predicts success in learning English, and that some individual strategies are more predictive of success than others. Studies by Bidabadi and Yamat (2011), Dreyer and Oxford (1999), Ghafournia (2014)) and Md Yunus, Sulaiman and Embi (2013) provide evidence on a significant relationship between strategy use and ESL proficiency. Another study (Bialystok and Frohlich, 1978) suggests that learning strategies affect language achievement. Their study, which explored variables of classroom achievement in second language learning, showed that many factors were correlated with language achievement, but only two of them: aptitude and strategy use

were statistically significant in predicting achievement. A similar study on the effect of language learning strategies on achievement conducted by Park (1997) also indicates that the use of language learning strategies accounted for 13 to 14% of the total variation of the achievement scores.

An important issue is to what extent language learning strategies contribute to the success of EFL learning. It is assumed that the students who have employed certain strategies would report better language achievement. In Bialystok's study (1981), the strategy most responsible for achievement on all tasks was naturalistic practice or practice for communication, and formal practice or practice for learning appeared to show less relationship to achievement. Huang and Van Naerssen (1987) also conducted a study using a similar classification of language learning strategies introduced in Bialystok (1981). The strategy measurement used to investigate learning strategies in oral communication by Chinese students in Huang and Naerssen's study (1981) was derived from Rubin's inventories (1975). The findings of their study also supported the findings of the previous study by Bialystok (1981), which suggested the superiority of functional practice to the other two strategies: formal practice and monitoring. Another study by Md Yunus, Sulaiman and Embi (2013), which used the Strategy Inventory for Language Learning (SILL) developed by Oxford (1990), found that gifted students used more indirect strategies: metacognitive, affective, social, compared to direct strategies: memory, cognitive, compensation. Another similar study that used the SILL was conducted by Park (1997). His study, which involved Korean university students, indicated that cognitive strategies were more predictive of language achievement scores than were metacognitive strategies (p. 216). A study conducted by Kamran (2013) also revealed that a statistically significant and positive relationship exists between Iranian EFL learners' overall reading strategy use and the scores of their reading comprehension test; to assess the use of language learning strategies this study used Survey of Reading Strategy or SORS developed by Mokhtari and Sheorey's (2002) measurement. Another study that identified the relationship between the use of listening strategies and listening proficiency levels in the Iranian learning context by Bidabadi and Yasmat (2011) also indicated that the Iranian EFL freshman university students of three different listening proficiency groups employed meta-cognitive strategies more frequently than cognitive and so-

cio-affective strategies. In their study the strategy questionnaire developed by Vandergrift was used to measure the use of students' listening strategies (p. 28).

Different classification schemes and instruments have been developed for assessing the use of language learning strategies. The most widely used measurement for language learning strategies is the SILL, which was reported to have high validity in several studies (Oxford & Burry-Stock, 1995). The version 7.0 of SILL, which has 50 items to measure the use of learning strategies in learning English as a foreign language, consists of *memory strategies*, *cognitive strategies*, and *compensation strategies*, *metacognitive strategies*, *affective strategies*, and *social strategies* (Hsio & Oxford, 2002). The SILL has been used in different countries with different contexts. Ahamad Shah, Ismail, Esa and Muhamad (2013) used the SILL to measure the use of language learning strategies of English for specific purposes in Malaysia. In another study conducted in Asian context, the SILL was used to measure the use of language learning strategies by college students in Philippines (Querol, 2010). Radwan (2011) also used the SILL to identify the relationship between the use of language learning strategies (LLS) and gender and English proficiency of university students in Oman. In Iran Saeb and Zamani (2013) also used the SILL to investigate learning strategies and beliefs about language learning in high-school students and students attending English institutes (see also Takallou, 2011). Chang (2011) also used the SILL to find out the profile of learning strategy use of students in Taiwan. Yu and Wang (2009) used the measurement to identify the use of learning strategies in China. The SILL was also used in Botswana to identify the types of language learning strategies the students use in learning and the relationship between the language learning strategies chosen and their age/level of schooling, their proficiency, and their self-efficacy beliefs (Magogwe & Oliver, 2007).

However, Grainger (1997) suspects the inadequacy of the SILL since he found that the students of Asian backgrounds do not follow traditional patterns of strategy use as identified in other major studies of language learning strategies. Park (1997) also provides an argument that not all strategies the students employed in learning English in his study were inventoried in Oxford's SILL (p. 217). In another study Park (2011) also found out that the classification of the SILL proposed by Oxford (1990) did not fit the data of

his research which was analyzed through confirmatory factor analysis (CFA) to test *apriori* factor structures in the relationships between observed and latent variables. He suggests that classification system of the SILL should be reinvestigated to understand better the structures of the measurement and the psychometric properties of the instrument including the construct validity. His suggestion is in line with the findings of a study by Hsio and Oxford (2002), which involved 534 undergraduate EFL students in Taiwan. The studies with the participants from the Asian students provide empirical evidence that suggests reevaluating the SILL even though the findings of their studies seem to be contradictory with the findings in a study by Ardashева and Tretter (2013), whose data was collected from ESL students in the United States.

Language learners from different cultures may learn the same language in different ways (Woodrow, 2005). Students learning a foreign language in Asian contexts may use different learning strategies from those learning the same language in Western countries as suspected by Park (1997, 2011). A number of studies in the respect to the use of learning strategies in different cultures have been conducted with the students from different Asian countries (Park, 1997, 2011; Grainger, 1997; Gan, 2004; Nisbet, Tindall & Arroyo, 2005). Therefore, a study on how EFL students in Asia learn English by language skills is needed in order to portray their use of learning strategies in their cultural settings. Setiyadi (2014) proposed an alternative measurement for language learning strategies for Indonesian students in learning English in the EFL tertiary setting. The measurement, which is named the *Language Learning Strategy Questionnaire* or the LLSQ, was used in this study. Different from the SILL of Oxford (1990), in the LLSQ language learning strategies are classified under skill-based categories and each skill category consists of three groups of strategies: cognitive, metacognitive and social strategies. The three groups of strategies are common strategies among researchers on language learning strategies (Fillmore, 1979; O'Malley, Stewner-Manzanares, Kupper & Russo, 1985; Oxford, 1990; Politzer & Groarty, 1985). The grouping consisting cognitive, metacognitive and social strategies is also supported with the CFA indicated in a study by Woodrow (2005), which used Schmidt and Watanabe's (2001) classification. In her study most of the participants were Asian students, including students from Indonesia, where the present study was conducted.

Skill-Based Category of Learning Strategy as an Alternative

In assessing internal consistency, the Cronbach alpha reliability is the most appropriate reliability index to be used on continuous data, such as that produced by a Likert-type scale (Oxford & Burry-Stock, 1995). The criteria on reliability of internal consistency of each category in this study were met so that the strategies under the categories were justified to be grouped into *skill-based categories*, namely: language learning strategies grouped under listening, speaking, reading and writing categories. The criteria on reliability of internal consistency for the 80 items of the measurement were very high with the Cronbach's Alpha .92; therefore, the strategies were justified to be grouped into a scale. The classification system that a learning strategy measurement consists of skill-based categories and each category covers cognitive, metacognitive and social strategies may contribute classification schemes of learner strategies.

The validity of individual predictor instrument and combinations of predictor instruments is determined by correlational analysis and extensions of correlational analysis to multivariate analysis (Nunnally, 1978). The validity of the instrument in the present study, especially its predictive validity, was determined by measuring predictive relationship between the use of the instrument and language performance. As indicated in this study, all of the skills of language were significantly correlated with the use of certain groups of language learning strategies. It implies that the skills of language can be predicted by the use of certain language strategies; if language learners use more frequently certain strategies in learning one language skill, their skill will increase better. The correlations between the use of language learning strategies and the language skills may be interpreted that the questionnaire has predictive validity to the success in learning the language skills of English as a foreign language.

In line with the findings by Purpura (1997) and Wenden (1991), the intercorrelation among the strategies as found in this study may be interpreted as a sign of mutual conceptual dependence among strategies. This provides evidence that learners employ all strategies under the four language skills and they do not rely on a single category or certain strategies in learning foreign language. The finding of this study seems to answer a concern that various classification systems of language learning strategies have been de-

veloped for research purpose but little attention has been paid to students' learning goals or teaching a new language (Chamot, 2004). The skill-based categories of language learning strategies introduced in this study can be considered to portray learners' use of language learning strategies when learners learn a foreign language and to identify effective learning strategies for each language skill. The equal numbers of language learning strategies between the spoken and written language and between the receptive and productive skills developed in this questionnaire may be a response to the limitations of some studies, as suggested in a study by Tragant, Thompson, and Victori (2013). They have developed a new measurement for language learning strategies in foreign language contexts and provided a thorough analysis of their measurement but the analysis of their study does not include oral production strategies (p.105). Many institutions, especially in Asian countries, provide language learners with classes based on skill instruction, namely listening, speaking, reading, and writing classes. By identifying what strategies of the skills contribute to the success in learning a foreign language, language teachers can teach these strategies to less successful learners when they learn the language by skills as suggested by Rivera-Mills and Plonsky (2007) that a learning strategy category can be used to identify what successful learners; therefore, these strategies can be taught to less successful learners.

The rank correlation as shown in this study may imply that learning strategies for the oral communication of English proficiency (speaking skill) have closer processes to the other oral communication of the proficiency (listening skill). On the other hand, the written English proficiency (reading skill) has closer processes to the other written proficiency (writing skill). To some extent, it may support the natural order hypothesis of Krashen (1985) that there may be a natural order which relatively exist learners in acquiring a foreign language, even though Krashen and Terrel (1983) refer it to the acquisition of grammatical rules.

In the present study there is indication that the learners acquire listening and speaking skills through a closely correlated process, and they acquire reading and writing skills through another closely correlated way. It is argued that the process of speaking takes place after language learners acquire listening skill and the process of writing takes place after the acquisi-

tion of reading skill. This is also argued that the process of learning a foreign language begins with the spoken language and, then, the process will be followed by the written language. In the acquisition of the spoken language listening seems to play a role as the first process and is followed by speaking while in the acquisition of the written language reading comes first and is followed by writing.

Language Learning Strategies in Relation to Language Performance

Numerous studies have been conducted to correlate the use of language learning strategies and language performance and the studies have contributed to different perspectives of teaching and learning a foreign language. To mention some, Magogwe and Oliver's (2007) study, which involved students primary, secondary and tertiary levels, indicated that in general there was no significant interaction between proficiency and learning strategies though there was an indication of interaction between them at the primary level. Nisbet, Tindall and Arroyo (2005) found out that only minimal correlation between learning strategies and proficiency existed. To correlate between strategy use and proficiency Hong-Nam and Leavell's (2006) study only indicated that language learning strategies develop a continuum from novice learners to expert.

A study by Wong and Nunan (2011), however, indicated that different frequency of strategy use was significantly different between the more effective and the less effective students and the finding in a study by Jurkovic (2010) metacognitive strategies proved to be significantly correlated with language performance. However, there is little literature which specifically focuses on the roles of language learning strategies in relation to the language skills separately. This present study partly confirms previous studies on how learners' learning strategies were correlated to each language skill.

The Role of Learning Strategies in Listening

The data here indicates that the frequency of the strategy use under two categories: the cognitive category and the social category were significantly correlated with the skill of listening. Studies on the role of learning strategies in relation to the skill of listening, separated from the other skills of language,

are not easily found in the literature. A study that demonstrated the learner's perceptions towards the use of meta-cognitive processes while listening to a spoken text in English was conducted by Bidabadi and Yamat (2013). It was found in their study that the learners believe that metacognitive strategies play an important role to help them become good foreign language listeners but there was no evidence whether the metacognitive strategies were significantly correlated with their listening skill; in their study only the perceptions of the students towards the use of metacognitive strategies were measured.

In the present study it can be argued that in learning English as a foreign language the learners benefitted from the cognitive and social strategies in listening. It may be easily understood that by using the social strategies, which trigger them to communicate with other people, and cognitive strategies, which make them practice using the language, the students will develop their skill of listening. Practicing in using the language both with other people (social strategies) and practicing in using the language by themselves (cognitive strategies) seems to be the key to their success in listening. It is not irrational that in developing the skill of listening learners rely on social interaction in the context of English learning.

The Role of Learning Strategies in Speaking

Similar to the correlation analysis in listening as indicated in this study, in speaking two groups of categories: cognitive and social strategies were significantly correlated with the score of speaking. The finding is similar to that by Murray (2010), which showed cognitive strategy use had the strongest correlation to the skill of speaking in acquiring Korean as a foreign language; different from the findings in Murray's study, in this study social strategy use was also significantly correlated with speaking. This may be argued that speaking is a language skill which involves an interlocutor(s) and the process of involving other people improves the acquisition of the skill. An investigation on the preference of using learning strategies learning by Liyanage, Bartlett, Birch and Tao (2012) found that Chinese EFL learners reported more use of metacognitive strategies for speaking and listening but their study did not explore whether the frequency of the strategy use was correlated to their proficiency.

In present study it is understood that the power of the social and cognitive strategies in improving the skill of listening also works in promoting the skill of speaking. In developing the skill of speaking it is also the case that the learners in the present study benefitted from practicing the language both through their social interaction and practicing in using the language by individually. It may be argued that the two skills of the spoken language: listening and speaking have relatively similar language learning strategies that play an important role to develop learners' skills.

The Role of Learning Strategies in Reading

The correlation analysis in this study indicates that the learning strategies under the cognitive and metacognitive categories played an important role in reading comprehension; they were significantly correlated with the skill of reading. The finding of this study is in line with the finding of a study in China by Yu and Wang (2009) that cognitive and metacognitive strategies significantly correlated with language achievement. However, in their study it is not clear whether reading comprehension was tested or not. A similar study with respect to the reading skill in China (Zhang & Seepho, 2013) explored only metacognitive strategy use in reading comprehension. The results of their study showed that there was significant positive correlation between the overall metacognitive strategies and the reading achievement and the high proficiency students demonstrated higher frequency in using most of metacognitive strategies than the low proficiency students.

That the cognitive strategies, as well metacognitive strategies, were significantly correlated with the reading score in this study generates the interest for further discussion. It may be understood that the function of the metacognitive strategies is a powerful "tool" in learning English and directs the execution of learning processes. These findings seem to support the notion that metacognitive processes refer to the control or executive processes that direct cognitive processes and lead to efficient use of cognitive strategies (Forrest-Pressley & Waller, 1984).

The data here indicate that not only were social strategies insignificantly correlated but they were negatively correlated with the reading scores. Social strategies are commonly found in a language learning context and these strategies are not well explored in general education. These strategies were

investigated and explicitly stated in studies on language learning conducted by Fillmore (1979), O'Malley, Stewner-Manzanares, Kupper and Russo (1985), Oxford (1990) and Politzer and Groarty (1985). The social category includes not only all processes that take place in groups, but also individual activities in social settings aimed to acquire another language. Related to reading in the present study, strategies that involve other people seem not to play an important role in acquiring the skill. The empirical data as found in this study suggests the more learners use social strategies, the less successfully they will acquire the reading skill. It may be argued that reading, which refers to a problem-solving task and background experience is required in the task (Richardson & Morgan, 1997), involving other people in this process of acquiring a foreign language is not essential.

The Role of Learning Strategies in Writing

It is interesting to note that, consistent with the other skill of the written language: reading, in writing the frequency of metacognitive strategy use was significantly correlated with the writing skill. Different from reading, in writing the significant correlation of the frequency of metacognitive strategy use is not followed by the significant correlation of cognitive strategy use. This needs a further discussion why the learners have succeeded in acquiring the skills of the written language by the strengths of the metacognitive and cognitive strategies only in reading but it was not found that the use of the cognitive strategies contributes to the success in developing their writing skill. Even though the relationship between the use of metacognitive strategies and performance has been investigated in numerous studies (Magogwe & Oliver, 2007; Nisbet et al, 2005; Sun, 2013), studies on the specific relationship between the use of metacognitive strategies and writing performance can be hardly found in the literature. A study which identified the use of writing strategies and writing performance was conducted by Chien (2012), in which the data on the writing strategies were collected through think-aloud protocol, uncovered strategies employed by students from the time they began to read the writing prompt until they had completed their writing. The finding in the study revealed that the two groups reported their thoughts about the use of writing strategies and the strategies between the two groups proved to be significantly different. Actually, various studies investigated the correlation between the use of language learning strategies

with language achievement or performance but the skill of writing was not tested in their studies (Murray, 2010; Nisbet et al, 2005; Wong & Nunan, 2011).

As the empirical data shown in this study indicate that only metacognitive strategies were significantly correlated with the skill of writing, it can be hypothesized that the function of the metacognitive strategies in directing and controlling cognitive processes will work effectively when language learners make use of their background knowledge while they are reading. When they are concerned with expressing their ideas in a written form, namely writing, it seems that the learners use avoidance strategy and they do not rely very much on their schemata or background knowledge which functions to direct their cognitive processes and lead to efficient use of the cognitive strategies. Different from the skill of reading, the effectiveness of the metacognitive strategies seems not to be followed by the power of the cognitive strategies in the skill of writing. It may be argued that the power of metacognitive strategies to control or execute processes that direct cognitive processes in learning another language will be effective when the process of learning needs learners' schemata as it happens to reading process. Similar to the relationship between the strategy use and learners' proficiency of the spoken language, in the written language it may also be argued that the two skills of the written language: reading and writing have relatively similar language learning strategies that play an important role to develop the skills, namely the metacognitive strategies.

In sum, the empirical data in this study showed that different language skills were significantly correlated with the use of different learning strategies. It may be concluded that some language learning strategies will be more effective for improving certain skills while some others will be better for other skills. Language teachers need to condition the process of teaching and learning in order for their students to use language learning strategies accordingly when teaching English as a foreign language according to skills.

Chapter 6

THE ROLE OF MOTIVATION IN DETERMINING LEARNING STRATEGIES

The role of motivation in language learning in general has been well documented (Nayan, S., Krishnasamy, H.N. & Shafie, L.A., 2014; Tsuda & Nakata, 2013; Papi & Teimouri, 2014) but studies on motivational orientations of EFL learners in EFL settings are very rare. Classifying motivation under intrinsic and extrinsic orientations is not new in language learning (Ngo, Spooner-Lane & Mergler, 2015; Abrar-UI-Hassan, 2014). Nevertheless, a classification consisting of integrative and instrumental motivation has also been popular in the context of foreign language learning (Bernaus & Gardner, 2008; Chang & Liu, 2013).

The role of motivation in foreign/second language learning has been dominantly inspired by Gardner and Lambert (Dornyei, 1994, p.273). Gardner and Lambert (1959, 1972) made a distinction between two kinds of motivation in SLA: integrative motivation and instrumental motivation. Both are believed to exist before learners decide to learn another language. Integrative motivation, which refers to the individual's willingness and interest in having social interaction with members of the L2 group, seems to be the centre of their basic model of motivation in second language acquisition (Gardner, Tremblay, & Masgoret, 1997; Gardner, 2000). Some studies have been conducted based on the approach (Kissau, Kolano & Wang, 2010; Liu, 2012; Domakani, Roohani & Akbari, 2012), whose validity and reliability has been provided (Gardner, Lalonde, & Moorcroft, 1985; Gardner & Glikzman, 1982).

However, a study by Warden and Lin (2000), which was conducted with students in Taiwan, provided evidence that the integrative motivational group was notably absent in their study. It was argued in their study that the distinction between integrative and instrumental motivation was relevant with students who learn English as a second language (ESL) while in Taiwan students learn English as a foreign language (EFL). Oller (1982) and Au (1988) also argue that integrative orientation in relation to language learning was questionable and incapable of generating concrete empirical evidence concerning causal relationship. The distinction in Gardner's model is understandable since integrativeness seems to be a big issue in Quebec City, in which French and English are working languages between different communities. Although the distinction between instrumental and integrative motivation in Gardner's model are not always relevant in other contexts, a study by Abrar-UI-Hassan (2014), which involved ESL learners in the USA, has supported the distinction and provided empirical proof of their existence in language learning. It may be argued whether integrative motivation is also relevant for EFL students as it is for ESL learners.

A traditional dichotomy of motivation as intrinsic motivation and extrinsic motivation (Hidi, 2000; Lepper, Vallerand, Pelletier & Koestner, 2008), is also widely accepted in language learning. Dornyei (1994) makes a distinction between extrinsically motivated behaviors and intrinsically motivated behaviors in language learning. He states that extrinsically motivated behaviors are the ones that the individual performs to receive some extrinsic reward, e.g., good scores while intrinsically motivated behaviors are behaviors whose rewards are internal, e.g., the joy of doing a particular activity. Dornyei (2003, p. 5) claims that Gardner and Lambert's concept of motivation has no obvious parallels in any areas of mainstream motivational psychology, and its exact nature is difficult to define. Dornyei's concept about motivation in language learning is in line with studies by Noels, Pelletier, Clement, and Vallerand (2003, which have also classified motivational orientations in language learning under intrinsic and extrinsic motivation.

Referring to the original concept of motivation in general education, there are four approaches to motivation, namely behavioral, humanistic, cognitive and socio-cultural approaches (Woolfolk, 2004, pp.352 - 358). Woolfolk further describes that, based on the approaches, the sources of

motivation will result in different motivational orientations and the result of the motivational orientation will only be grouped under extrinsic and intrinsic categories. The other three approaches will also be useful to interpret the motives which can be classified under intrinsic and extrinsic motivation (Woolfolk, 2004, p.358).

Integrative motivation, which refers to openness to identify, at least in part, with another language community in Gardner's model (Masgoret & Gardner, 2003, p. 126), is similar to a motive to learn the values and practices of the community to keep one's identity as a community member (Woolfolk, 2004, p. 357). This motive is known as intrinsic motivation in general education. The integrative motivation introduced by Gardner and Lambert (1959; 1972) can be understood as a parallel with intrinsic orientation of socio-cultural conception of motivation while instrumental motivation is similar to extrinsic orientation. Extrinsic motivation includes a group of factors concerned with motivation arising from external goals (Williams, Burden & Lanvers, 2002, p.505). In a language class, because motivation is an internal or attitudinal characteristic of an individual, it is subject to variation and the variation of their motivation is often classified under degree or intensity of motivation (Abrar-Ul-Hassan, 2014, p. 37). Therefore, besides classifying students based on their motivation under two types: those with intrinsic and those with extrinsic motivation, it is also reasonable to group students under degree of their motivation: low, medium and high motivation.

Different approaches of psychological theories have inspired researchers on language motivation. Self - Determination Theory (SDT) is one of the most current theories of motivation that has the concept of intention at its core and classifies human behaviors in the continuum between controlled and self-determined types of intentional responding (Noels, Pelletier, Clement & Vallerand, 2000; Vallerand, Pelletie & Koestner, 2008; Levesque, Copeland & Sutcliffe, 2008). Under the SDT different reasons or goals that give rise to an action are grouped under extrinsic and intrinsic motivation. Ryan and Deci (2000a; 2000b) elaborate the concept of self determined behavior in a continuum of relative autonomy. At the far left hand of the continuum is amotivation and at the far right is intrinsic motivation (Ryan & Deci, 2000a). In the SDT amotivation represents the absence of self-determination (Levesque, Copeland & Sutcliffe, 2008). Ryan and Deci (2000a) assume that

the far left represents the least self-determined behavior while the right left represents the most self-determined behavior. They also state that between the two extremes lies extrinsic motivation, which is defined as doing an activity to attain some separable outcome. They argue that amotivated people do not act at all or act without intent; they may act but their behavior lacks intentionality. Levesque, Copeland, & Sutcliffe (2008) explain that between amotivation and extrinsic motivation lie four types of extrinsic motivation: externally regulated, introjected, identified and integrated motivation. The four types vary in the extent to which the behaviors are self-determined. They also believe that people with intrinsic motivation do an activity for its inherent satisfactions from the activity. They also assume that the more self-motivated behavior of extrinsic motivation may be similar to intrinsic motivation in the sense that both of them represent autonomous learning. The SDT has been developed many studies in a variety of life contexts. The findings of research conducted under the principles of the theory suggests that the theory operate in a similar fashion across areas of research (Vallerand, Pelletie & Koestner, 2008). In language learning contexts, the SDT has been developed in a study conducted by Noels, Pelletier, Clement and Vallerand (2000). The finding of their study indicates that motivational constructs in second language learning may parallel motivational principles of the SDT.

Rigby, Deci, Patrick and Ryan (1992, p. 168) argue that some studies support the idea that people with intrinsically motivated behaviors decrease their activities of extrinsic motivation and this is often interpreted that extrinsic motivation will undermine self determination. The interpretation seems to support the concept that types of motivational orientations lie in a continuum. However, they also argue that some studies have provided empirical evidence that extrinsic motivation is not necessarily detrimental to intrinsic motivation and indeed the extrinsic motivation can increase intrinsic motivation. That the types of motivation lie on a continuum seems to be debatable. The conflicting findings may be understood that in some context extrinsic and intrinsic motivation are antagonistic while in some other contexts they may complement each other. Whether in the contexts of language learning, especially in EFL setting, extrinsic and intrinsic motivation lie in a continuum or they are antagonistic role needs further research.

Referring to the studies discussed earlier, language learners in this study would be mainly grouped under either extrinsic versus intrinsic motivation. Those who are learning English voluntarily are intrinsically motivated while those who are extrinsically motivated are learning English in order to arrive at some instrumental end, and not because of inherent interest in the activity. Related to the issue of integrativeness, language learners who were learning in order to integrate with another community would be grouped later, depending on the findings of the current study. In the current study a motive to integrate and communicate with people from other communities by using English does not necessarily refer to native speakers of English. These potential classifications would be validated based on the empirical data collected from language learners in an EFL setting in the current study.

By identifying the motivational orientation of EFL learners in this study, curriculum and text book writers, English teachers, and test developers will have a better picture of what the EFL learners in Indonesia need in learning English and provide them with appropriate materials to learn, learning processes to experience, and tests to evaluate. The EFL learners are not necessarily demanded to use the target language as accurately as native speakers of English, which may not be in accordance with their orientations in learning English as a lingua franca in the era of globalization.

Factor Analysis of Motivational Orientations

Initially, the items developed in the questionnaire were hypothesized to relate to two motivational orientations: intrinsic and extrinsic motivation. However, the factor analysis of motivational data provides empirical evidence that motivational orientations in learning English in EFL setting has three meaningful sub-components. Consequently, the questionnaire which had been expected to have two constructs are reinterpreted and renamed accordingly. Empirically, the reasons of learning English as a foreign language in the context of Indonesia has three sub-components of motivation.

Factor 1 was defined by positive loadings on 4 items. This motivational orientation seems to reflect the reasons of learning English in order to arrive at some instrumental end, extrinsic motivation. One item which had been expected to group under this sub-component but rotated to another

sub-component is *I want to improve my English for travelling*. Factor 2 seems to correspond to *International Orientation* because it loaded appreciably on five items dealing with reasons for learning English to integrate with people from other countries. Consequently, Factor 2 was labeled *Integrative Orientation*. The last factor (Factor 3) was called *Intrinsic Motivation*. All items loading on this factor were concerned with the ideas that the students learned English voluntarily and they learn the language for fun. Their reasons of learning English are internal to themselves.

Correlation Analyses among the Sub-Scales of Motivation

Once the final three factors were decided, correlation analyses was conducted to identify how the items loading on the factors were correlated one another. As shown in Table Y, the Cronbach's alphas of the items loading in factor 1, factor 2 and factor 3 are .70, .77, and .53 respectively. In general, the internal consistency of the sub-scales is appropriate reliability for survey scales, except the intrinsic motivation.

The analysis indicates to all of the scales are positively and significantly correlated. The data also shows that the sub-scales of motivation were significantly correlated. To the degree that they correlate, the subscales share variance, and the magnitude of r^2 indicates the amount of variance that is interrelated (Hatch & Lazaraton, 1991, pp.440-1). Since the correlation between extrinsic motivation and international orientation is .38, it could be said that the two sub-scales overlap to the extent of r^2 (or 14%). This suggests that the overlap of the two sub-scales is 14%, or 14% of the variance in extrinsic motivation can be accounted for by the variance of international orientation and vice versa. The variance of international orientation and intrinsic motivation that overlap is 16% ($r = .40$) while extrinsic and intrinsic motivation overlap to the extent of 9% ($r = .30$). Their international orientation in learning English is closer to intrinsic motivation ($r = .40$) than their extrinsic motivation ($r = .30$). It may imply that intrinsic motivation has a closer relationship with integrative orientation than those among the other motivational orientations while intrinsic motivation and extrinsic motivation are the least correlated among the three sub-scales of motivation. This is probably understood as evidence that EFL learners in this study do not have a single sub-scale only but have the three sub-scales of motivational orientation, with different degrees of

motivation. The inter-correlation among the three sub-scales may imply that the learners had a combination of the motivational orientations in learning English in EFL setting and the motivational orientations of learning English: international orientation, extrinsic and intrinsic motivation are not mutually exclusive.

International Orientation: A Response to Globalization

As a basic classification scheme, twelve items of motivational types were hypothesized to identify the types of motivation that EFL learners have in Indonesian context. Two main types of motivation: extrinsic and intrinsic motivations were the main types each, of which was identified with four items. The other four items was meant to identify integrative motivation, which were hypothesized to be grouped under extrinsic motivation. This motivation has more in common with integrative motivation since the learners were assumed to learn the target language as means of an end. Instrumental motivation, which has been contrasted with integrative motivation, was considered the same type with extrinsic motivation in the current study. Both types of motivation relate with reasons of learning English in order to arrive at some instrumental end, which are external to their learning. The basic classification scheme proposed was used to develop a questionnaire to identify learners' motivational orientations in an EFL setting in the context of Indonesia. The three motivational orientations which were grouped under two types of motivation were considered initially for collecting data. The motivational orientations were also common terms utilized by motivational taxonomies developed in previous studies.

Referring to different concepts of motivation, different studies on motivation have produced different numbers of motivational classifications. Dornyei (1990) conducted a study with 134 young learners in Hungary to determine their motivation constructs relevant to foreign language learning. His study provided evidence that there were seven types of motivation. Belmechri and Hummel (1998) conducted a study with 93 students in Quebec City area and with a means of factor analysis the findings of their study introduced 11 constructs of students' orientations and motivation to learn ESL. A similar study conducted by Noels, Pelletier, Clement and Vallerand (2000) was also aimed at identifying motivational constructs and in their study in-

roduced seven types of motivation among 159 participants. Another study which identified the motivational constructs in learning another language was also conducted by Li (2014) and the study revealed that 12 factors of the motivational questionnaire were produced. As a result of the reliability and the factor analyses in the current study the motivational orientations were classified into three main types of motivational orientations- not two- : extrinsic and intrinsic motivation, and *international orientation*.

It is interesting to note that, similar to the current study, the four studies included *travel orientation* in the factor analyses of their studies but the studies yielded different groupings for the orientation of the travel. In Belmechri and Hummel's study, travel orientation constituted one construct with three variables. In Dornyei's study the construct consisted of a single item with the name *desire to spend some time abroad*. In a study by Noels, Pelletier and Vallerand (2000) the travel orientation was considered as either extrinsic or intrinsic motivation depending on how self determined the students perform the activity, while in Li's study the travel orientation had 4 variables. *Traveling abroad* seems to be an emerging issue in recent studies exploring motivation constructs in foreign language learning. This reason tends to be grouped under integrative and intrinsic motivation (Irie, 2003; Warden & Lin, 2000).

Initially, the travel orientation in this study was expected to be grouped together with the other variables of extrinsic motivation. After the analysis it turned out to load on the construct which was labeled *International orientation*. International orientation yielded in the factor analysis conducted in the current study seems to respond an issue that in the context of globalization motivation in learning a foreign language needs redesigning. As Ryan (2006) indicates that the majority of learners of English in the world expend extraordinary effort to learn the language without holding immediate prospect rewards. Ryan also suggests that language learning motivation should be reconceptualized in order to provide the growing majority of English learners who need English as a means of communication in the context of globalization. The empirical evidence in the current study seems to indicate that *international orientation* represents the aspiration of the group of English learners who are hard to be grouped under either extrinsically or intrinsically motivated.

The “integrative” orientation in the current study was called international orientation. International orientation may be similar to integrative motivation of Gardner and Lambert (1959; 1972) in the sense that language learners should have desire for communication and interaction with people coming from another group. Integrative motivation of Gardner (2000) is defined as the desire for interaction with the target language community and willingness to identify with the native speakers of the language. International orientation refers to the reasons for learning English in order to meet with speakers of English. The speakers of English are not necessarily speakers of English from Anglophone countries, and understand their cultures. This orientation covers the notion of traveling abroad. The international orientation seems to be conceptualized as a form extrinsic motivation, which refers to activities performed in order to attain some separable outcome (Ryan and Deci, 2000a), such as *travelling abroad* and *interacting with speakers of English*. Integrative motivation is also performed in order to attain outcome which are external to the language learning itself, namely integrating with the native speakers of the target language. Noels, Pelletier, Clement and Vallerand (2000, p. 54) suggests that integrative orientation could be a form of extrinsic motivation. The integrative motivation is multi-faceted and the motivation is partly instrumental and partly integrative in foreign language contexts (Dornyei, 1990, p. 69). This seems necessary to further explore whether the international orientation lies in a motivational continuum of the SDT or it is another orientation parallel to the extrinsic and intrinsic orientations.

The finding of the current study is in line with the finding of a study in the same context, which was conducted by Lamb (2004) in another province in Indonesia. The findings of his study indicate that integration with Anglophone countries was not relevant with Indonesian learners. To EFL learners in Indonesia, learning English seems to be a part of the globalization processes (Setiyadi & Sukirlan, 2016). All aspirations that the EFL learners in Indonesia have are associated with developing a global identity that gives them a sense of being to a worldwide culture (Lamb, 2004, p. 15). A study by Ke and Cahyani (2014) also support the finding of the current study that the concepts of the emerging paradigms of English as a Lingua Franca should be considered in teaching English in Asian countries. Some other studies also provided no evidence that an integrative orientation existed in language

learning (Belmechri & Hummel, 1998; Warden & Lin, 2000; Zhao, 2012). A study by Thang, Ting and Mohd Jaafar (2011), which involved Malaysian students, may support the finding in this study that EFL students tend to be more extrinsically motivated in learning English and the students seem not to be interested in the integration into L2 community (p. 51). However, a study which was conducted with students in Philippines (Ditual, 2012) provided evidence that they were both instrumentally and integratively motivated. That the students in this study were integratively motivated was understood since the motivational orientations of the English learners in this study were measured by using Gardner' Attitude and Motivation Battery Test, which is meant to identify integrative orientation in learning English. It may be challenging to explore whether the different motivational orientations of the EFL learners in Asian settings are culturally loaded and whether they need motivational measurements specifically developed for the context of EFL learners in Asia. This seems to call for further research.

English has come to be used for interactions between people who speak English either as their native language or English as their second / foreign language. English has become lingua franca and more people learn the language for international interaction and communication (Meierkord , 2013). As a lingua franca the language may break down national barriers between those who feel inferior and superior by establishing smooth conditions of communication for transnational identifications (Lacey, 2013). This reason seems to trigger language learners in EFL context to have reasons of learning English which were grouped under *international orientation* in the current study.

The integrative motivation in learning English seems to be relevant in the context and time when the research was conducted (Gardner & Lambert, 1959). Since the role of English has been changing as an international language and becoming associated with global culture (Cziser and Dornyei, 2005, p. 30), an appropriate theory of language learning motivation and its learning, especially in the EFL context, is required (Ryan, 2006, p. 29). Lamb (2004) also suggests that the notion of integrative motivation in the context of Indonesian EFL setting needs to be examined. Rueda & Chen (2005) indicate that developing motivational theories in foreign language learning are important but they are not universally applicable since learners from differ-

ent ethnic groups perceive target language and purpose of acquiring foreign language differently (Clement & Kruidenier, 1983). The current study seems to indicate that the integrative motivation, which has been developed in ESL setting and in which the integration becomes an issue in the community, is not relevant for Indonesian EFL learners in the era of globalization. The EFL learners in the current study have “integrative” international orientation but they need to integrate with people from other countries by using English as a lingua franca.

Extrinsic and Intrinsic Motivation: Are They Antagonistic or Complementary?

In this study, the international orientation and intrinsic motivation were closely correlated than the other orientation. The closer correlation between the international orientation and intrinsic motivation may suggest that the reasons of the EFL learners which are grouped under the international orientation are closely linked with intrinsic motivation. Their reasons which are grouped under the international orientation in the current study may be distinguished from the reasons to learn the target language in order to arrive at some instrumental end, which are grouped under extrinsic motivation.

Even though their international orientations may be considered as a means for them to go international (external reasons), the reasons may be understood as self-determined behavior of extrinsic motivation. Referring to in the SDT the reasons the EFL learners in the current study have are believed to be self determined behavior. This may suggest that at this point the EFL learners invest energy in an activity because of its importance for achieving a valued goal, which may refer to *identified regulation* of extrinsic motivation in the SDT (Noels, Pelletier, Clement and Vallerand, 2000, p. 39). This is similar to intrinsic motivation (internal reason) in the sense that both of them represent autonomous learning. The finding of the current study may support, to some extent, the notion of the SDT that there are four types of extrinsic motivation with different degrees to which the behaviors are self-determined. In many studies it has been indicated that the four types of motivation lie between one end (amotivation) and the other end (intrinsic motivation) in a continuum of motivational orientations (Noels, Pelletier, Clement & Vallerand, 2000; Vallerand, Pelletie & Koestner, 2008; Ryan &

Deci, 2000b). However, the empirical data in the current study may indicate that international orientation in EFL learning, which bes to extrinsic motivation, is closely linked with self-regulated behavior of intrinsic motivation. Even though the finding seems to be in line with the SDT, the finding may not support the notion of SDT that motivation lies in a continuum. The close relation between the international orientation (external reason) and intrinsic motivation (internal reason) may indicate that motivational orientations do not lie in a continuum. The EFL learners in the current study have orientations which are considered external and internal external to the activity at the same time. Language Learners may have more than just one reason when they engage in one activity over time (Vallerand, Pelletie & Koestner, 2008).

In sum, the finding of this study may support that motivational orientations of EFL learners can be explained by referring to the self determination theory. The emergence of the international orientation in learning a foreign language may be a new paradigm of English as a Lingua Franca in Asian countries. This reasons of the EFL learners in learning the target language in the current study may be easily understood by referring to the motivational principles of the SDT. That the international orientation is closely linked to intrinsic motivation may support the concept that extrinsically motivated learners with more self determination is similar to intrinsically motivated ones in the sense that both types of language learners perform autonomous learning.

The conclusion of the current study must be considered with caution because not all sub-scales of motivation have very high internal consistency, especially the sub-scale of intrinsic motivation. It seems worth exploring motivational orientations with more types of motivation as indicated in the SDT. More items for each type need to be developed in order to have more trustable findings on motivational orientations in EFL. It may be the subject of further research to explore similarities and differences on language motivation between ESL and EFL contexts related to the SDT.

Chapter 7

LANGUAGE LEARNING STRATEGY QUESTIONNAIRE: A SOLUTION TO THE PROBLEM

This research set out to study the ways university students in Indonesia learn English in a formal setting. The study was justified in terms of discussions among English teachers in Indonesia on what language learning strategies differentiate successful language learners from unsuccessful students.

The study reported in this book addresses an issue introduced in Chapter One: whether the west-inspired theories on language learning strategies are relevant for EFL learners in Asia in general and in Indonesia in particular, and whether there is a need to develop a measurement to portray language leaning strategies specifically employed by EFL learners in Asia in general and in Indonesia in particular. In order to answer these questions, a mixed method approach to the research was adopted. Interviews with students, which produced qualitative data, were undertaken at the beginning of the experiment to identify language learning strategies the students used. The result of the interviews was considered in redeveloping the language learning strategies inventory that had been developed in previous studies in the same field. Gain scores on pre-and post-tests of a three-month English program were adopted as a measure of success in learning English. Language learning strategies were measured by providing the students with a predefined learning strategy questionnaire (LLSQ) at the end of the program. Individual differences on attitude and motivation were measured through

Likert-scale questionnaires during the program while other individual differences that were also related to the use of learning strategies were gained from the questionnaire on background of the students.

The methodology adopted mainly generated quantitative data. To classify language learning strategies the students used, the quantitative data were analyzed using reliability analyses and factor analyses. Regression analyses were also undertaken to determine the contribution of language learning strategies to the gain scores. Analyses of variance were also undertaken to identify differences among three groups who were classified into low, middle and high learners based on their gain scores. To determine to what extent individual differences contribute to the use of learning strategies in learning English, t-tests and analyses of variance were undertaken.

As a basic classification scheme, metacognitive, cognitive and social categories were used to identify language learning strategies implemented by students. The basic classification scheme proposed was used to develop a language-learning strategy questionnaire (LLSQ). The three categories mentioned above were considered initially for collecting data since they were also common terms utilized by language learning taxonomies developed in previous studies.

Referring to the classification of language learning strategies introduced in the previous studies in the same field, as mentioned earlier the taxonomy of language learning strategies developed in this study contained three categories: metacognitive, cognitive and social strategies. After a series of reliability tests and exploratory factor analysis, the LLSQ was shown to contain metacognitive, deep level cognitive and surface level cognitive strategies. To justify the strategies into metacognitive, deep level cognitive and surface level cognitive categories, the cognitive domain of Bloom's taxonomy (1956) was considered. Finally, the classification consists of metacognitive and cognitive strategies, and the cognitive strategies have two subcategories: deep level cognitive and surface level cognitive strategies. This classification is also consistent with the classification in language learning proposed by Wenden (1991a), who classifies language learning strategies into cognitive strategies and self-management strategies, which refer to metacognitive strategies in this study. In general, the classification consisting of two main

categories: metacognitive and cognitive strategies, of which cognitive strategies in this study has two subcategories: deep level cognitive and surface level cognitive strategies, supports similar findings in general education (Entwistle, 1981 and 1987; Dansereau, 1978; and Newble & Clarke, 1986).

This study has attempted to advance the previous studies. By considering the findings of the previous studies, an initial questionnaire was developed and contained 57 items. Data collected by interviewing language learners and observing them during the experiment was used to redevelop the questionnaire, and, finally, after revision the questionnaire contained 80 items of language learning strategies. Reliability tests and exploratory factor analyses were undertaken to revise the reliability of the questionnaire and to interpret the underlying constructs of the questionnaire. In developing a questionnaire of language learning strategies, the questionnaire was revised by tracing back theories in general education in relation to language learning. It was also refined by interviewing students and observing them. Statistical analyses in developing a questionnaire were relatively more advanced than the previous studies in the same field.

To determine how learning strategies differentiate successful language learners from unsuccessful ones, a comparison of means of the strategy use was undertaken. The comparison reveals that the successful language learners employed all of the strategies under the three categories at a higher frequency. This data in this current study support the findings conducted by Wenden (1985) and Huang and Van Naerssen (1987). Besides the frequency of use of the learning strategies that discriminates between successful and unsuccessful learners as discussed earlier, the apparent success in learning a foreign language relies much on the use of metacognitive strategies. Even though it is debatable whether learning strategies determine proficiency or proficiency determines learning strategies, this current study provides empirical evidence that seems to support a cause-and-effect relationship between learning strategies and learning outcomes.

Besides indicating that language learning strategies affected the success in learning English, this study also contributes a notion to the debate of the teachability of learning strategies, supporting the findings by Turner (1983), Dansereau (1985), Brown et al. (1986), Weinstein and Mayer (1986),

Prokop (1989) and Nunan (1996). This study provides empirical data that language learners benefit from the strategy training. The data provided in this study suggests that the students trained themselves to use certain strategies, even though they were not intentionally taught to use them.

The findings that show how the use of language learning strategies affects language performance. In general, research on language learning strategies has failed to show the relationship between language learning strategies and L2 proficiency (Park, 1997, p.216). Experimental studies exploring the relationship between language learning strategies and language performance are also very rare. Park (1997) conducted a similar study exploring the relationship by using Oxford's SILL (ESL/EFL student version) and TOEFL but his study was a post-facto design study. His post-facto design, which did not provide a treatment, might only reveal the correlation between the two variables but is not appropriate to estimate the prediction equation between the two variables. In contrast, the study reported in this thesis was an experimental study, which reports the correlation and the prediction equation between the use of language learning strategies and English performance.

The findings reported in this book also suggest that it is important to consider the individual differences of attitude and motivation in teaching English. These individual differences proved to be significantly correlated with language learning strategies and consequently with learning outcomes. The findings suggest that the two individual variables have a cause-and-effect relationship. Attitude seems to be the cause and motivation to be the effect in the relationship.

As mentioned earlier, some studies were conducted to explore how language learning strategies were grouped, some studies to explore how language learning strategies correlated with language performance, and some other studies to investigate the correlation of language learning strategies with individual differences. This book reports the classification of language learning strategies, the correlation of learning strategies with language outcomes and the correlation of motivation with the use of language learning strategies.

The classification of language learning strategies is complex. Many studies have proposed different learning strategies and different ways of grouping similar learning strategies. Nonetheless, the present findings on the language learning classification have some implications for the teaching and learning English in a tertiary EFL setting, especially in Indonesia.

Through strategy assessment developed in this study, language teachers can provide their students with information on the language learning strategies they are using. The information can be analyzed together with the students to help them recognize how effectively they are learning. Among the available strategy measurements, the Language Learning Strategy Questionnaire (LLSQ), which has been developed and used in this study, is one form of questionnaire for which reliability and validity has been provided.

It has been determined that language learning strategies predict success in learning English in Indonesia and that some individual strategies predict success more significantly than others. It has also been shown that low achievers employ strategies that are predictive of success less frequently than do the high achievers. Teachers should provide opportunities for their students to employ self-evaluation and self-correction since these techniques enable the students to use their metacognitive strategies optimally. These proved to best predict the success in learning English among the other two groups of strategies. Consequently, teachers should not provide direct solutions to the students' language problems. Instead, they should provide opportunities for their students to be involved in the highest level of mental processes: metacognitive strategies.

To employ metacognitive strategies, the students in a tertiary EFL setting should have analytical skills in the linguistic forms in order to be able to compare their actual performance and the expected performance. The analytical skills in the linguistic forms seem to be essential for the metacognitive strategies to work optimally. The use of metacognitive strategies leads to a learner being an active participant in the learning process a whole range of cognitive processes and in the learner's thought to grapple with solution themselves. They are forced to process the language content material more deeply and integrate it within their already existing cognitive framework. These conditions probably account for the greater achievement of learners

using metacognitive strategies extensively. The students must be consciously concerned about correctness of language forms. This can be done by providing the students with formal study grammar for the conscious monitor.

This study has proposed a classification of language learning strategies consisting of three subcategories: metacognitive, deep level cognitive and surface level cognitive strategies. This classification is not final; further studies need to be done to replicate the findings related to strategies so that more consistent findings become available within and across populations. Particularly important is more information on how students from different age levels and different educational settings use language learning strategies in EFL settings.

The implications suggested in this study that English teachers should encourage their students to use metacognitive strategies and that they still need to teach grammar, may be applicable to a context that has similar conditions with those of the participants in this study. Teachers need to formally teach language learning strategies, assess them and give feedback to students on strategies used. Language learning strategies also need to be included in teacher training curriculum and staff development program so that English teachers will be familiar with effective learning strategies for their students. Further studies need to be done to replicate the findings of this study by assessing the use of learning strategies with different measurement modes so that more consistent findings becomes available within and across populations. Particularly important is more information on how students from different levels of age and different educational settings, which were not explored in this study, use language learning strategies in EFL setting by conducting studies involving bigger samples.

Language Learning Strategies Questionnaire (LLSQ)

Directions

You will find some statements about learning English. On the separate worksheet, write the response (1, 2, 3, 4, or 5) that tells HOW TRUE OF YOU THE STATEMENT IS.

1. **Never or almost never true of me**
2. **Usually not true of me**
3. **Somewhat true of me**
4. **Usually true of me**
5. **Always or almost always true of me**

Never or almost never true of me means that the statement is very rarely true of you.

Usually not true of me means that the statement is true less than half the time.

Somewhat true of me means that the statement is true of you about half the time.

Usually true of me means that the statement is true more than half the time.

Always or almost always true of me means that the statement is true of you almost always

Answer in terms of how well the statement describe you. Do not answer how you think you should be, or what other people do. **There are no right or wrong answers** to these statements. Put your answers on the separate Worksheet. Work as quickly as you can without being careless. If you have any questions, let the instructor know immediately.

Example

1. **Never or almost never true of me**
2. **Usually not true of me**
3. **Somewhat true of me**
4. **Usually true of me**
5. **Always or almost always true of me**

Read the item, choose a response (1 through 5), and write it in the space after the item.

If I see native speakers, I try to talk with them in English. _____

You have just completed the example item. Answer the rest of the items on the answer sheet.

1. **Never or almost never true of me**
2. **Usually not true of me**
3. **Somewhat true of me**
4. **Usually true of me**
5. **Always or almost always true of me**

In Speaking

1. I use rhymes to remember new English words.
2. I try to remember new English words by pronouncing them.
3. I speak a word or a sentence several times to remember it.
4. I try to learn a new pattern by making a sentence orally.
5. I try to translate Indonesian sentences into English sentences and produce them orally.
6. I try to remember what the English word equivalent to Indonesian word is.
7. I tape record the sentences I produce.
8. I mix Indonesian words and English words if I do not know the English words.
9. I put words into rules that I know in speaking.
10. Before I respond orally to questions, I write out the answers.
11. I try to correct my mistakes that I produce orally.
12. I try to speak with myself to improve my speaking.
13. I try to evaluate my utterances after speaking.
14. I notice my English mistakes, and use that information to help me do better.
15. I prepare a topic or grammatical rules in speaking practice.
16. I ask somebody to correct me when I talk.
17. I practice speaking with my friends or my teachers.
18. I practice English with native speakers.
19. I ask questions in English.
20. If I cannot think during a conversation in English, I use gestures.

1. **Never or almost never true of me**
2. **Usually not true of me**
3. **Somewhat true of me**
4. **Usually true of me**
5. **Always or almost always true of me**

In Listening

1. I try to guess what somebody is saying by using grammatical rules.
2. I learn English by watching English TV programs.
3. I learn English by listening to English songs or other listening scripts.
4. I try to understand what somebody is saying by translating into Indonesian.
5. I draw an image or picture of the word in order to remember the word.
6. I connect the pronunciation of the word with the Indonesian word which has a similar sound.
7. I concentrate on the grammar rather than on the communication.
8. I try to understand the idea by referring to previous experiences I have had.
9. I try to guess by using a word (s) that is familiar to me.
10. In Listening, I take notes to remember ideas.
11. I try to understand every individual word to understand the passage
12. I listen to what I say to practice my listening skill.
13. Before practicing my listening skill, I prepare a topic, pronunciation or grammatical rules which give me the greatest trouble.
14. I try to remember a sentence(s) spoken face-to-face or on cassettes and analyze them by myself.
15. After a listening practice, I check and recheck my understanding.
16. I correct the mistakes that I produce orally.
17. I try to be aware of which sounds give the greatest trouble. In this way I can pay special attention to them while I listen and practice.
18. If I cannot understand what somebody is saying, I ask him/her to slow down or say it again.
19. Listening to what somebody is saying improves my listening skill.
20. In a group discussion, my listening skill is improved.

1. **Never or almost never true of me**
2. **Usually not true of me**
3. **Somewhat true of me**
4. **Usually true of me**
5. **Always or almost always true of me**

In Reading

1. To understand unfamiliar English words while I am reading, I guess from available clues.
2. I learn English by reading English books or magazines.
3. I connect the spellings of English words with similar Indonesian words to understand the meanings.
4. I try to understand sentences by analyzing their patterns.
5. I try to translate word for word.
6. I try to understand the passage by using my general knowledge and experience.
7. I use the key words to understand the whole ideas.
8. I read the passage aloud.
9. I take notes to remember the ideas.
10. While I read a text, I try to anticipate the story line.
11. I read a text more for ideas than words.
12. I correct my mistakes by rereading the text.
13. I choose a topic or certain materials for my practice.
14. 14. I check and recheck my understanding after reading a passage.
15. 15. If I cannot understand a reading passage, I try to analyze what difficulty I actually have.
16. In reading, I pick out key words and repeat them to myself.
17. I try to be aware of which words or grammar rules give me the greatest trouble. In this way I can pay special attention to them while I read and practice.
18. 18. I discuss reading passages with my friends.
19. If I do not understand the content of a reading passage, I ask my friends or my teachers for help.
20. I improve my reading skill by reading letters from my friends.

- 1. Never or almost never true of me**
- 2. Usually not true of me**
- 3. Somewhat true of me**
- 4. Usually true of me**
- 5. Always or almost always true of me**

In Writing

1. If I do not know how to express my ideas in English while writing, I keep writing using certain rules that I know.
2. I write what I am thinking about.
3. I keep a diary.
4. I try to remember the meanings of words or the patterns by writing them
5. I write sentences to apply certain rules.
6. I try to translate word for word.
7. I mix Indonesian words and English words in writing.
8. I write the main ideas first as a guideline.
9. I use Indonesian words if I do not know the English words.
10. I use Indonesian patterns to keep writing in English.
11. I consult a dictionary to find out the meanings of words.
12. I write out new material over and over.
13. I try to memorize the meanings of words.
14. I rewrite my composition by correcting the mistakes that I notice.
15. I choose a topic to improve my writing skill.
16. I read my writing and correct the mistakes.
17. I try to be aware of which words or grammar rules give the greatest trouble, this way I can pay special attention to them while I write and practice.
18. I write a message to my friends in English for practice.
19. I write letters in English to my friends.
20. I ask my friends or my teachers to correct my writing.

Language Learning Strategy Questionnaire Worksheet

Name :

IN LISTENING		IN SPEAKING		IN READING		IN WRITING	
1		1		1		1	
2		2		2		2	
3		3		3		3	
4		4		4		4	
5		5		5		5	
6		6		6		6	
7		7		7		7	
8		8		8		8	
9		9		9		9	
10		10		10		10	
11		11		11		11	
12		12		12		12	
13		13		13		13	
14		14		14		14	
15		15		15		15	
16		16		16		16	
17		17		17		17	
18		18		18		18	
19		19		19		19	
20		20		20		20	

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Chapter 8

CONCLUSION

The original classification of the language learning strategies of the questionnaire was based on theory driving decision making and theories of skill-based learning strategies. The result of reliability of the items under each skill-based category indicates that the scales were internally consistent. Since, four scales had significant inter-correlations, they were justified to be grouped into one single measurement, and named Language Learning Strategy Questionnaire or the LLSQ.

In the LLSQ students are provided with 20 items in each skill-based category (speaking, listening, reading, and writing). Each category consists of 3 groups of strategies, namely: cognitive strategies, metacognitive strategies, and social strategies. In speaking category item nos. 1-10 are grouped under cognitive strategies, item nos. 11-15 are grouped under metacognitive strategies and item nos. 16-20 under social strategies. In listening item nos. 1-11 are grouped under cognitive strategies, item nos. 12-17 are grouped under metacognitive strategies and item nos. 18-20 under social strategies. Cognitive strategies in reading are measured with item nos. 1-11, metacognitive strategies are measured with item nos. 12-17, and social strategies with item nos. 18-20. In writing cognitive strategies are measured with item nos. 1-13, metacognitive strategies with item nos. 14-17 and social strategies with item nos. 18-20.

In total, the questionnaire consists of 80 items for the four skills. Following the format introduced by Oxford (1990a and 1990b), which has been

used to measure Indonesians' learning strategies by David and Abas (cited in Bedell and Oxford, 1996), the responses *always* got the highest score (4) and those of *never* got the lowest score (1). In the questionnaire students are given instruction; students are asked to write their response to the statements in the LLSQ on the separate answer sheet attached to the questionnaire. They should write their response (1, 2, 3, 4, or 5) that tells *how true of them the statement is*. Number 1 means that it is never or almost never true of them, number 2 usually not true of them, number 3 somewhat true of them, number 4 usually true of them, and number 5 always or almost always true of them.

The use of language learning strategies is culturally influenced; students from different cultural backgrounds have different learning strategies in SLA (Politzer and Groarty 1985). Since language leaning has proved to be culturally loaded, the LLSQ seems to be culturally appropriate for Indonesian students who learn English as a foreign language, not a second language. The questionnaire that is meant to measure the frequency of learning strategy use has been developed based on the language learning strategies used by EFL students in Indonesia.

As expected in Prokop's study (1989, p.121), the ultimate purpose of identifying language learning strategies is to enable the teachers to teach them to those who are not using them. O'Malley et al. (1985, p. 43) also suggest that research and development in language learning strategies is needed to increase teacher awareness of possibilities for using learning strategies as part of their instruction. To identify how the students learn the language and to identify what effective learning strategies they have employed to gain success, we need to measure their learning strategies. Measurement of learning strategy use seems to play an important role and for the purpose we need an instrument to measure students' learning strategies. The LLSQ, a newly developed questionnaire, has provided empirical data in measuring the use of language learning strategies in the Indonesian context and its reliability and validity has also been discussed.

If we believe that there is no second language learning acquisition without learning strategies, it seems that discussion on teaching a second/foreign language will be less important without considering how students

should learn the language. Our teaching should encourage our students to use certain learning strategies that they have proved to be effective in their learning, as suggested in the findings of the research conducted by Chamot et al. (1996). The types of students and tasks with whom the strategies are effective need to be identified, and, in turn, students are encouraged to employ as frequently as possible the effective strategies even though there is a dispute over the teachability of language learning strategies. Some researchers have data to support the teachability. The findings in Chamot et al. (1999, p. 187) revealed that language learning strategies can be trained at high school, and to college students, and in various languages.

Studies conducted by Prakoso (2016) and Suwirta (2016) also reveal that the use of language learning strategies can be trained through explicit training. In the studies in which students' learning strategies were measured through LLSQ, the students could improve their use of language learning strategies in reading after five-week training. The studies show that the students developed their learning strategies significantly in reading and writing after being trained the strategies.

Through strategy assessment, language teachers can provide their students with information on the language learning strategies they are using. The information can be analyzed together with the students to help them recognize how effectively they are learning. Among the available strategy measurements, the LLSQ, which has been developed this study, is one form of questionnaire for which reliability and validity has been provided.

This study is the first that has investigated language learning strategies employed in the four language skills: speaking, listening, reading, and writing in EFL tertiary setting in the university level in Indonesia. In this article a measurement for language learning strategies has been proposed; it consists of skill-based categories, and each category consists of metacognitive, cognitive and social strategies. This measurement has been written in English and the items of the measurement may be translated into Indonesian if the measurement is given to the students with low English competence. Particularly important is more information on how our students understand the measurement, which is written in English, in order that we should consider whether translation of the measurement is needed or not.

This measurement should be given after an English teacher already teaches his/her students in a period of time so that the factor of teacher is assumed to have affected the process of students' learning. Even though there are many factors affecting English learning, such as motivation, language attitude, aptitude, gender, bilingualism, and other individual differences, the factors of teaching methods and materials, which English teachers can change, will play an important role in students' success in learning the language. After identifying what learning strategies our students employ in learning English and contrasting the strategies that successful learners use from those that unsuccessful learners do, we should be willing to change our teaching in such a way and use teaching materials that our students will be conditioned to use the strategies that have been proved to be more effective in learning.

Finally, we have to realize that the power of teaching is to make our students learn. The process of teaching a foreign language by a teacher without the process of learning the language by his/her students is a waste of time. In a turn, English learning or the English subject at Junior/Senior School will be more a burden for students without acquiring any communicative skill.

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GLOSSARY

Active task approach is the situation in which good language learners actively involve themselves in the language learning task.

Affective component of attitude is the feeling towards the attitude object

Appeal for assistance is the situation the learner asks for the correct term or structure.

Approximation is use of a single target language vocabulary item or structure, which the learner knows is not correct, but which shares enough semantic features in common with the desired item to satisfy the speaker.

Attitude is a relatively enduring system of affective, evaluative reactions based upon and reflecting concepts or beliefs which have been learned about the characteristics of a social object or class of social objects.

Circumlocution is the situation when the learner describes the characteristics or elements of the object or action instead of using the appropriate target language.

Cognitive strategy is the task at hand and the manner in which linguistic information is processed.

Communication strategy is a mutual attempt of two interlocutors to agree on a meaning in situations where requisite meaning structures do not seem to be shared.

Communication strategy is a potentially conscious plan for solving what to an individual presents itself as a problem in reaching a particular communicative goal and they group communication strategies under achievement strategies and avoidance strategies.

Conative component or action component of attitude is an individual's intention to behave in certain ways with regard to the attitude object, which is called readiness for action.

Construct validity is how well a theoretical construct is measured.

Content validity is the extent to which an empirical measurement reflects a specific domain of content.

Criterion-related validity is estimating some important form of behavior that is external to the measuring instrument itself.

Critical Period Hypothesis in second language learning (CPH) is that second language acquisition will be relatively fast, successful, and qualitatively similar to first language only if it occurs before the age of puberty.

Deep approach is a process of meaningful learning utilizing connections between concepts in semantic -term memory.

Extrinsic motivation is positive or negative reinforcements which are external to the behavior itself rather than inherent in it.

Foreignizing is trying out the mother tongue expressions in the target language with minimal adaptation.

Formal reduction is the situation when language learners may avoid linguistic forms that they had difficulty with.

Good language learner are learners who are willing and accurate guessers; have strong drive to communicate; are often uninhibited and willing to make mistakes; focuses on form by looking patterns and analyzing, take advantage of all practice opportunities, monitor their speech as well as that of others; and pay attention to meaning.

Integrative attitude to a language is a social and interpersonal orientation and may concern attachment to, or identification with a language group and its cultural activities.

Integrative motivation is the desire for interaction with the target language community and willingness to identify with the native speakers of the language.

International orientation is the reason for learning English in order to meet with speakers of English.

Intrinsic motivation is motivation as incentive which originates within the behavior itself rather than externally, as in playing a musical instrument for enjoyment.

Instrumental attitude is self-oriented and individualistic reason, e.g. vocational reason, status, achievement, personal success and survival.

Language Learning Strategy Questionnaire (LLSQ) is a measurement of learning strategies introduced in the Indonesian context.

Language switch is the situation when the learner uses the native language term without bothering to translate.

Learning strategy is a step or action taken by language learners to enhance any aspect of their learning.

Literal translation is the situation when the learner translates word for word from the native language.

Mental representation is a process of how an event or an experience is represented in the mind.

Message abandonment is the situation when the learner begins to talk about a concept but is unable to continue due to lack of meaning structure, and stops in mid-utterance.

Mime is the situation the learner uses nonverbal strategies in place of a meaning structure.

Non-cooperative is relying on a language other than the target language by code switching.

Opinion is an overt belief without an affective reaction while attitudes contain affective reaction.

Primary strategy is identification, comprehension and retention, and retrieval and utilization.

Reliability is the tendency toward consistency found in repeated measurements of the same phenomenon.

Support strategy is a strategy to allow primary strategies to flow efficiently and effectively.

Surface approach is rote learning through repetition and rehearsal in short term memory.

Topic avoidance is the situation when the learner simply does not talk about concepts for which the vocabulary or other meaning structure is not known.

Validity is the extent to which any measuring instrument measures what it is intended to measure.

Word coinage is the situation when the learner makes up a new word in order to communicate a desired concept.

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