CHAPTER 2
REVIEW OF THE LITERATURE

For decades researchers in foreign language education have been investigating the relationships between motivation and language learning strategies and have found that both are significantly correlated with L2 proficiency (e.g., O'Malley & Chamot, 1990; Creen, 1991; Park, 1997). Besides, quite a few studies have shown that language learning motivation and language learning strategies play an important role in language learning (e.g., Dörnyei, 1998; Oxford & Shearin, 1994). In recent years, more and more efforts have been made to investigate the relationship between students' language learning motivation and their learning strategies. The importance of these two crucial factors in language learning has been identified and more empirical studies for further research are needed. The relevant literature is reviewed and organized into the following three main sections: an overview of and studies on language learning motivation, an overview of and studies on language learning strategies, studies on relationships between L2 learning motivation and L2 learning strategies and the shift from language learning strategies to language learning behaviors.

An Overview of Language Learning Motivation

Motivation has been a term frequently used in psychological and educational research domains for decades. Keller (1983) regarded ability and motivation as the major variables in educational success and summarized that interest, relevance, expectancy, and outcomes are the four major components of motivation, which refer to "the choices people make as to what experiences or goals they will approach or avoid, and the degree of effort they will exert in that respect" (p. 389). A number of definitions of motivation given in L2 learning contexts along with supporting research studies will be reviewed in the following sections.

Definitions of Motivation

Spolsky (1989) proposed a model for second language learning that stated that knowledge and skills at some future time is actually a result of a combination of knowledge and skills one has at the moment as well as ability, motivation, and opportunity. If any of the above elements are absent, there will be no learning. The conclusion pointed out the importance of motivation in language learning. Oxford and Shearin (1994) found that motivation is an influential factor that affects language learning and achievements. Brown (1994) defined motivation as "the extent to which you make choices about goals to pursue and the effort you will devote to that pursuit" (p.34). Although Brown's definition of motivation is clear and concise, there are still attempts to try to define motivation from different perspectives.

From the behavioristic psychologists' perspective, motivation is defined as "the anticipation of reinforcement" (Brown, 1994, p.35). According to the theory of reinforcement, learners pursue their goals firstly to receive rewards, such as praise, grades, or certificates and secondly, to avoid punishment. Distinct from behavioristic viewpoints, cognitive psychologists have different concepts about the sources of motivation and in the power of self-reward (Brown, 1994). Compared to extrinsic rewards in the reinforcement theory, self-reward seems to be a more crucial element of motivation in the eyes of cognitive psychologists. For example three of the most influential cognitive theories of motivation (Brown, 1994) are as follows: Ausubel's drive theory, which states "motivation stems from basic innate drives", Maslow's hierarchy of needs theory, which explains the human's needs progress as "from the satisfaction of purely physical needs up…to 'self-actualization'", (Brown, 1994, p. 35-36) and Brown's self-control theory. From the above theories, it is undeniable that motivation has been widely studied in the field of psychology and education. Therefore, it is not surprising that a great diversity of opinions exist since motivation can be interpreted differently based on different theories (Dörnyei, 1998). Thus, Dörnyei (1998) suggested that the only thing about motivation most researchers would agree on is that it, by definition, concerns the direction and magnitude of human behavior

including "the choice of a particular action, the persistence with it, and the effort expended on it… in other words, motivation is responsible for why people decide to do something, how long they are willing to sustain the activity, and how hard they are going to pursue it" (p. 8).

In addition to researchers' various concepts of "motivation," interesting debates on the issues of intrinsic and extrinsic motivation in language learning have been observed. In defining intrinsic motivation, Deci (1975) stated that "intrinsically motivated behaviors are aimed at bringing about certain internally rewarding consequences, namely, feelings of competence and self-determination" (p.23). Those who are intrinsically motivated to learn seem to engage in the learning activities for their own sake. On the other hand, those who are extrinsically motivated seem to anticipate rewards from outside and beyond the learning task itself. For example, some learning behaviors are motivated by rewards, like money, prize, grade or positive feedback, while others are motivated to avoid punishment.

In language motivation research, Gardner's motivation theory has been considered the most influential on related studies. Gardner (Gardner, 1985; Gardner & Lambert, 1972) proposed that motivation is strongly influenced by two orientations of language learning: integrative orientation and instrumental orientation. Integrative-orientation learners are those who identify with and value the target language and community, and who approach language study with the intention of entering that community. At the same time, instrumental-oriented learners are those who are more likely to regard language learning as enabling them to do useful things, but as having no special significance in itself. After years of revision and study on motivation, in order to examine motivation from a broader and social macro-perspective, Dörnyei and Csizer (2002) proposed seven dimensions of orientation of motivation. They include integrativeness, instrumentality, direct contact with L2 speaker, cultural interest, validity of L2 community, milieu, and linguistic self-confidence.

Definitions of Language Learning Motivation

Motivation to learn a second or foreign language is a topic far more complex than purely human motivation or general learning motivation for it involves the complicated nature of the language. According to Dörnyei (1998), language is at the same time (a) a communication coding system that can be taught as a school subject; (b) an integral part of the individual's identity involved in almost all mental activities; and (c) the most important channel of social organization embedded in the culture of the community where it is used. Thus, L2 learning involves not only the mastering of new information and knowledge, but also the cognitive factors associated with it, the communication function embedded in it, the individual's self identity, cultural understanding of the target language, and the interaction between the individual and the environment.

Crookes and Schmidt (1991) suggested that L2 motivation has internal and external features, including interest, relevance, expectancy, outcomes for internal factors, and the decision to choose, persists and maintain external characteristics. In Dörnyei's definitions, intrinsic motivation involves a behavior performed for its own sake to experience pleasure and satisfaction. On the contrary, extrinsic motivation deals with behavior as a means to receive some extrinsic reward like good grades or to avoid punishment (Dörnyei, 1998). He further stated that "without sufficient motivation, even individuals with the most remarkable abilities cannot accomplish long-term goals, and neither are appropriate curricula and good teaching enough on their own to ensure student achievement."

Gardner (1985) defines L2 motivation as "the extent to which an individual works or strives to learn the language because of a desire to do so and the satisfaction experienced in this activity" (p.10). To be more specific, there are three major components of language learning motivation: motivational intensity, desire to learn the language, and attitudes toward learning the language. According to Gardner's arguments, these three components belong together because the truly motivated individual displays all three.

Table 2.1

The Constructs and Scales of Gardner's AMTB (adapted from Hashimoto, 2002)

Construct A	Integrativeness
Subtest 1	*Integrative orientation*
Subtest 2	*Interest in foreign languages*
Subtest 3	*Attitudes toward the target language group*
Construct B	Attitudes toward the Learning Situation
Subtest 4	*Evaluation of the language instructor*
Subtest 5	*Evaluation of the language course*
Construct C	Motivation
Subtest 6	*Motivational intensity*
Subtest 7	*Desire to learn the language*
Subtest 8	*Attitudes toward learning the language*
Construct D	Instrumental Motivation
Subtest 9	*Instrumental orientation*
Construct E	Language Anxiety
Subtest 10	*Language class anxiety*
Subtest 11	*Language use anxiety*

Gardner's (1985) Attitude/Motivation Test Battery (AMTB), as shown in Table 2.1, is a 130-item multi-component motivation test, which is highly esteemed and used by motivational researchers in many studies. The AMTB was developed by Gardner to emphasize non-linguistic goals, such as improved understanding of the other community, desire to continue studying the language, and interest in learning other languages. The development of the AMTB follows more than 20 years of research, much of which has involved the study of English-speaking students learning French as a second language. As Dörnyei (2001b) suggested, the AMTB is still the only published standardized test of motivation in L2 learning. The constructs and scales of the AMTB are shown in Table 2.1.
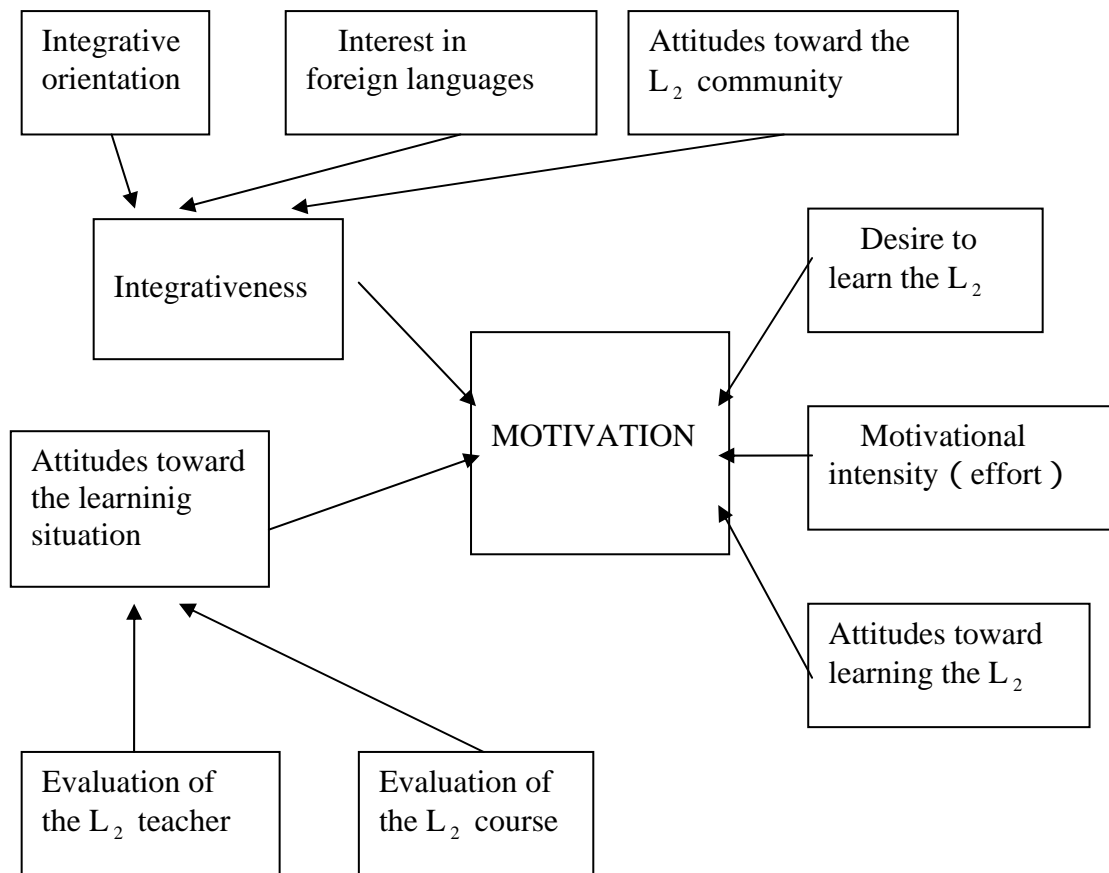
Integrative orientation

Interest in foreign languages

Attitudes toward the L_2 community

Integrativeness

Desire to learn the L_2

MOTIVATION

Attitudes toward the learninig situation

Motivational intensity   effort

Attitudes toward learning the L_2

Evaluation of the L_2 teacher

Evaluation of the L_2 course

Figure 2.1

Gardner's conceptualization of the integrative motive (1985) (pp. 82-83)

As seen in Figure 2.1, Gardner's conceptualization of the integrative motivation is composed of integrativeness, attitudes toward the learning situation, desire to learn the L2, motivational intensity, and attitudes toward learning the L2. Integrativeness includes integrative orientation, interest in foreign languages, and attitudes toward the L2 community. Attitudes toward the learning situation are made up of an evaluation of the L2 teacher and an evaluation of the L2 course.

Dörnyei (1994a) conceptualized L2 motivation within a framework of three relatively distinctive levels. As seen in Table 2.2, the three levels are language level, learner level, and learning situation level. This kind of framework is "useful in emphasizing the multidimensional nature of L2 motivation" (Dörnyei, 1998, p. 126).

Table 2.2

Dörnyei's Framework of L2 Motivation (Dörnyei, 1994a, p. 280)

| LANGUAGE LEVEL | Integrative motivational subsystem |
| | Instrumental motivational subsystem |

LEARNER LEVEL	Need for achievement
	Self-confidence
	• Language use anxiety
	• Perceived L2 competence
	• Causal attributions
	• Self-efficacy

LEARNING SITUATION LEVEL

Course-specific motivational	Interest (in the course)
components	Relevance (of the course to one's needs)
	Expectancy (of success)
	Satisfaction (one has in the outcome)
Teacher-specific motivational	Affiliative motive (to please the teacher)
components	Authority type (controlling vs. autonomy-supporting)
	Direct socialization of motivation
	• Modeling
	• Task Presentation
	• Feedback
Group-specific motivational	Goal-orientedness
components	Norm and reward system
	Group cohesiveness
	Classroom goal structure (cooperative, competitive or individualistic)

In addition, Williams and Burden (1997) summarized motivational components related to L2 instruction and conceptualized a framework with two categories: internal factors and external factors. As shown in Table 2.3, 'internal factors' in language learning include intrinsic interest in activity, perceived value of activity, sense of agency, mastery, self-concept, attitudes towards language learning in general, other affective states, developmental age and stage, and gender, while 'external factors' are composed of significant others, the nature of interaction with significant others, the learning environment, and the broader context.

Table 2.3

Williams and Burden's (1997) Framework of Motivation in Language Learning

Internal factors	External factors
Intrinsic interest in activity	Significant others
˙arousal of curiosity	˙parents
˙optimal degree of challenge	˙teachers
Perceived value of activity	˙peers
˙personal relevance	Nature of interaction with significant others
˙anticipated value of outcomes	˙mediated learning experiences
˙intrinsic value attributed to the activity	˙nature and amount of feedback
Sense of agency	˙rewards
˙locus of causality	˙nature and amount of appropriate praise
˙locus of control RE process and outcomes	˙punishments, sanctions
˙ability to set appropriate goals	The learning environment
Mastery	˙comfort
˙feelings of competence	˙resources
˙awareness of developing skills and mastery in a chosen area	˙time of day, week, year
˙self-efficacy	˙size of class and school

Table 2.3 (*continued*)

Internal factors	External factors
Self-concept	˙class and school ethos
˙realistic awareness of personal	The broader context
˙strengths and weaknesses in skills required	˙wider family networks
˙personal definitions and judgments of success and failure	˙the local education system
˙self-worth concerning learned helplessness	˙conflicting interests
Attitudes to language learning in general	˙cultural norms
˙to the target language	˙societal expectations and attitudes
˙to the target language community and culture	
Other affective states	
˙confidence	
˙anxiety, fear	
Developmental age and stage	
Gender	

Dörnyei (1998) commented that Williams and Burden's framework of motivation in language learning is similar to Dörnyei's list (1994a) because both frameworks represented a very detailed treatment of the particular issue in the L2 literature, and it is easy for researchers to understand the frameworks. According to Williams & Burden (1997), motivation may be caused by a state of cognitive and emotional arousal, which leads to a conscious decision to act and gives rise to a period of sustained intellectual and physical effort in order to attain previously set goals.

Given various definitions of language learning motivation, the more influential ones are briefly stated as follows. Gardner gave a clear definition on motivation in the second language-learning context stating that it referred to "the combination of effort

plus desire to achieve the goal of learning the language plus favorable attitudes toward learning the language" (Gardner, 1985, p.10). Therefore, motivation to learn a second language is regarded as "the extent to which an individual works or strives to learn the language because of a desire to do so and the satisfaction experienced in this activity" (p.10). He also stated that there are four elements of motivation: a goal, a desire to reach the goal, positive attitudes toward learning the language, and effort. Dörnyei (1998) conceptualized three components of motivation: motivational intensity, desire to learn the language, and attitude towards the act of learning the language. He commented that "L2 motivation is a multi-faceted construct, and describing its nature and its core features requires particular care" (Dörnyei, 1998, p.118).

Early Studies on L2 Learning Motivation and Influential Models

In early studies of L2 learning motivation, Wallace Lambert and Robert Gardner (1959) found that L2 achievement was not only related to attitudes towards the language but also to language learning motivation. These two Canadian social psychologists are highly respected because of their pioneering work and their insightful 12-year-long research study in the field of L2 motivation. Since their influential study on L2 motivation, a series of studies have been conducted to investigate the role of motivation in L2 learning. Gardner and Lambert (1972) emphasized the importance of motivation in their seminal work. They argued that although language aptitude accounts for a considerable proportion of individual variability in language learning achievement, motivational factors could override the aptitude effect. Clément and Kruidenier (1983) found in their Canadian research that besides an instrumental orientation, there were three other distinct orientations to learning a L2, namely, knowledge, friendship, and travel. Moreover, when the L2 was a foreign language instead of a second language, a fourth orientation was identified, socio-cultural orientation.

Ely (1986) conducted a survey with students in Spanish classes to discover motivational types and investigate the relationships between types and strengths of

motivation. The results supported the integrative and instrumental orientations, but the motivation types and the motivational orientations were not exactly equal.

According to Deci and Ryan (1985) and Brown (1991), both extrinsic and intrinsic motivations are reported to be effective, but intrinsic motivation is more valuable in second language learning (e.g., Ramage, 1990; Brown, 1991; Chang, 1997). Deci and Ryan (1985) claimed that intrinsic motivation leads to more effective learning. Ramage's (1900) study on foreign language high school students found that those who were intrinsically motivated to learn were interested in continuing their study beyond the college entrance requirement. On the contrary, those who showed low motivation and had a weaker academic performance learned to just meet the basic college entrance requirements. According to Brown (1991), both intrinsic motivation and extrinsic motivation exist in language learning. On the one hand, intrinsic motivation taps into the learner's natural inquisitiveness and then captivates the learner in the process of a confidence-building and ego-enhancing quest for competence in knowledge or skills. On the other hand, some degrees of extrinsic reward are still important in the language classroom. The ultimate attempt is to intrinsically motivate our students through successful language teaching efforts today made by teachers and educators.

More Studies on L2 Learning Motivation in Language Education

The 1990s was a turning point for L2 learning motivation researches, called a "motivational renaissance" by Gardner and Tremblay (1994). Before this period, a great deal of the research on L2 motivation had been largely dominated by a social psychological approach inspired by the influential work of Robert Gardner, Wallace Lambert, Richard Clément and their Canadian associates (e.g., Gardner, 1985; Gardner & Clément, 1990; Gardner & MacIntyre, 1993a). However, a growing number of researchers attempted to broaden research agenda on L2 motivation. The educational shift in L2 motivation research has enriched the studies of language learning motivation. For example, researchers started to sense the need to distinguish between general and L2 motivation theories. In earlier studies, most emphasis was placed on attitudes and

other social psychological aspects of SL learning. "We seek to encourage a program of research that will develop from, and be congruent with the concept of motivation that teachers are convinced is critical for SL success (Crookes and Schmidt, 1991. p. 502).

Coleman (1994, 1995, 1996) investigated the L2 motivation of British university students as compared to students in Ireland, Germany, Italy, Portugal, Austria and France. This study covered a wider range of participants and was rich in data for describing the proficiency, background, attitudes and motivations of the samples, and the results provided various comparative analyses. Dörnyei, Nyilasi and Clément (1996) conducted a survey on Hungarian eighth-graders with regard to their motivation to learn five different target languages: English, German, French, Italian, and Russian. One of the major findings was that learners regard English learning as a priority because there was a strong socio-cultural association with the US. Gardner and Tremblay (1994) conducted a study on AMTB, and two paired–associates learning tasks (English/French, English/Persian). The results showed that affective attributes influence the measure of motivation, and motivational attributes influence second language acquisition.

To support the "education-friendly" approaches in motivation research, Oxford (1996) has called the shift a 'revolution in our thinking.' During this period, researchers have developed many theories and conducted many studies related to learning motivation. For example, Crookes and Schmidt (1991) stated that it was challenging for the authors to distinguish the various levels of motivation and motivated learning. The four levels are the micro level, the classroom level, the syllabus/curriculum level and extracurricular level. In addition, Dörnyei (1996) studied young adult English learners in Hungary identified three related dimensions of integrative motivational subsystems: (1) interest in foreign languages, cultures, and people; (2) desire to broaden one's view and avoid provincialism; and (3) desire for new stimuli and challenges.

Dörnyei and Csizer (1998) conducted a survey on 200 teachers and asked them to rate the importance of a set of strategies and to estimate how often they used the strategies in their own teaching. Based on the results, they made a list of "Ten commandments for motivating language learners."

Table 2.4

Ten Commandments for Motivating Language Learners (Dörnyei & Csizer, 1998)

1. Set a personal example with your own behaviors.

2. Create a pleasant, relaxed atmosphere in the classroom.

3. Present the tasks properly.

4. Develop a good relationship with the learners.

5. Increase the learner's linguistic self-confidence.

6. Make the language classes interesting.

7. Promote learner autonomy.

8. Personalize the learning process.

9. Increase the learners' goal-orientedness.
10. Familiarize learners with the target language culture.

In conclusion, many factors determine language learners' motivation for language learning, such as their integrative or instrumental orientations, extrinsic or intrinsic motivation, socio-cultural association with the target language. There are many reasons accounting for the different motive types in different participants in the studies. However, motivation is probably the most important of all in language learning. A lot of studies indicated that motivation is the key to learning a foreign language well (Brown, 2000; Dörnyei, 1998; Oxford & Shearin, 1994).

Studies on EFL Learning Motivation in Taiwan

In Taiwan, many studies have been done regarding learning motivation. Furthermore, researchers in the EFL field work hard to examine the multiple roles of motivation in the learners' different learning stages, ranging from elementary school, junior high school, vocational high school, senior high school and college. Chang (1997) found that intrinsic motivation is more beneficial to promote than extrinsic motivation in second language learning. He claimed that intrinsic motivation helps to

develop the learners' creativity, foster the learners' desires for challenges, and give learners enjoyment.

Kan (2005) conducted a cross-sectional quantitative study exploring Taiwanese students' learning motivation from third grade to ninth grade. The results had several important findings. Firstly, motivational intensity decreased from Grades 3 to 9. Secondly, junior high school students' English learning motivation was found to be significantly weaker than elementary school students. Thirdly, students of high social economical status (SES) were found to have significantly stronger motivation than those of mid and low SES. In addition, the findings showed that elementary school students showed significantly stronger integrative, intrinsic and extrinsic motives than junior high school students.

In Peng's study (2002) on senior high school students' EFL motivation and strategy use, she focused on the relationship between strategy use and motivation as well as two individual variables, achievement and gender. The results showed significant correlations between the use of strategies and each motivation type, namely motivational intensity, intrinsic motivation, extrinsic motivation, and requirement motivation. In terms of the two individual variables, learners' achievement was significantly correlated with their strategy use and with motivation, while gender did not have a significant effect on strategy use.

Huang (2004) conducted a study to investigate Taiwan's university freshman's English learning motivation, willingness to communicate (WTC), and frequency of communication in English in their Freshman English classes. The findings showed that significant linear correlations were found among the freshmen's English learning motivation, WTC, and frequency of communication. Furthermore, WTC in English in three different English proficiency levels was found the more dominant predictor of frequency of communication for the high-level and low-level than for the mid-level participants. Finally, WTC in English turned out to be a more powerful predictor of frequency of communication in English for the male participants, compared to that of the female participants.

The above studies have shown that motivation proves to play a determining role in students' English learning in school settings ranging from elementary to college level. Furthermore, when investigating the role of motivation in language learning, additional elements, such as gender, social status and WTC have been taken into consideration in the studies in Taiwan. These studies have enriched people's understanding of English learning motivation and provided the researchers with valuable data and different perspectives with regard to leaning motivation.

An Overview of Language Learning Strategies

Language learning strategies have been widely studied because of their importance in the process of language learning. Therefore, many researchers have tried to define the term language learning strategy from different perspectives. Rubin (1975) defined learning strategies as "the techniques or devices that a learner may use to acquire knowledge" (p. 43). Bialystock (1979, 1981) presented four categories of learning strategies in SLA, consisting of inferencing, monitoring, formal practicing, and functional practicing. O'Malley et al. (1985) defined learning strategies as any set of operations or steps used by learners that will facilitate storage and retrieval of information. Weinstein and Mayer (1986) define learning strategies as "methods or techniques that are used by learners to improve their comprehension, learning and retention of information." Rubin (1987) further interpreted learning strategies as "any sets of operations, steps, plans, routines used by the learner to facilitate the obtaining, storage, retrieval, and use of information" (p. 19). Moreover, Mayer (1988) defined learning strategies as "behaviors of a learner that are intended to manipulate a person's cognitive processes during learning" (p. 11).

Chamot and Kupper (1989) conducted a study and they defined learning strategies as "techniques which students use to comprehend, store, and remember new information and skills" (p.13). According to Stern (1992), "the concept of learning strategy is dependent on the assumption that learners consciously engage in activities to achieve certain goals and learning strategies can be regarded as broadly conceived intentional

directions and learning techniques" (p. 261). From the above definitions raised by scholars and researchers, the importance of learning strategies in language learning cannot be denied. According to Oxford (1990b), strategies are particularly significant for language learning "because they are tools for active, self-directed involvement, which is essential for developing communicative competence" (p.1).

Since the 1970s a large number of researchers have tried to conduct studies on language learning strategies and brought up various classifications of language learning strategies (Rubin, 1975; Naiman et al., 1978; O'Malley et al., 1985; Wenden and Rubin, 1987; Oxford, 1990; Stern, 1992; Ellis, 1994). These classifications adopted by the researchers contributed greatly to language learning since they provided more concrete and detailed explanations for various models of language learning strategies. In the following section, Naiman et al.'s (1978), O'Malley et al., (1985), Rubin's (1987), Oxford's (1990b), and Stern's (1992) classifications of language learning strategies will be reviewed in detail.

Naiman et al.'s Classification of Language Learning Strategies

Naiman, Frohlich, and Todesco (1978) interviewed thirty-four proficient language learners about their use of language learning strategies. The results indicated that personality traits, cognitive styles, and learning strategies could enhance language learning. The results also indicated that good language learners employed primary strategies frequently, whereas secondary strategies were rarely employed. In addition, they proposed a classification scheme for language learning strategies consisting of five primary categories. As seen in Table 2.5, primary strategies include the active task approach, the realization of language as a system, the realization of language as a means of communication and interaction, management of affective demands, and monitoring L2 performance. Moreover, strategies such as responding positively to learning opportunity, making L1/L2 comparisons, emphasizing fluency over accuracy, coping with affective demands in learning were defined as secondary strategies.

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Table 2.5

Naiman et al.'s (1978) Classification of Language Learning Strategies

(adapted from O'Malley & Chamot, 1990 , p. 5)

Primary Strategies	Secondary Strategies
Active task approach	1. Responds positively to the learning opportunity or seeks and exploits the learning environment
	2. Adds related language learning activities to regular classroom programs
	3. Practices
	4. Analyzes individual problems
Realization of language as a system	1. Makes L1/L2 comparisons
	2. Analyzes target language to make inferences
Realization of language as a means of communication and interaction	1. Emphasizes fluency over accuracy
	2. Seeks communicative situations with L2 speakers
	3. Finds social-cultural meanings
Management of affective demands	Copes with affective demands in learning
Monitoring L2 performance	Constantly revises L2 system by testing inferences and asking L2 native speakers for feedback

O'Malley et al.'s Classification of Language Learning Strategies

O'Malley et al. (1985) defined learning strategies as any set of operations or steps used by learners to facilitate storage and retrieval of information. By interviewing 70 ESL high school learners, O'Malley and his colleagues identified three categories of language learning strategies, which were meta-cognitive strategies, cognitive strategies, and social affective strategies (O'Malley et al., 1988). Meta-cognitive strategies refer to strategies which require planning for learning, thinking about the learning process when it is taking place, monitoring one's production or comprehension, and evaluating learning after an activity is completed.
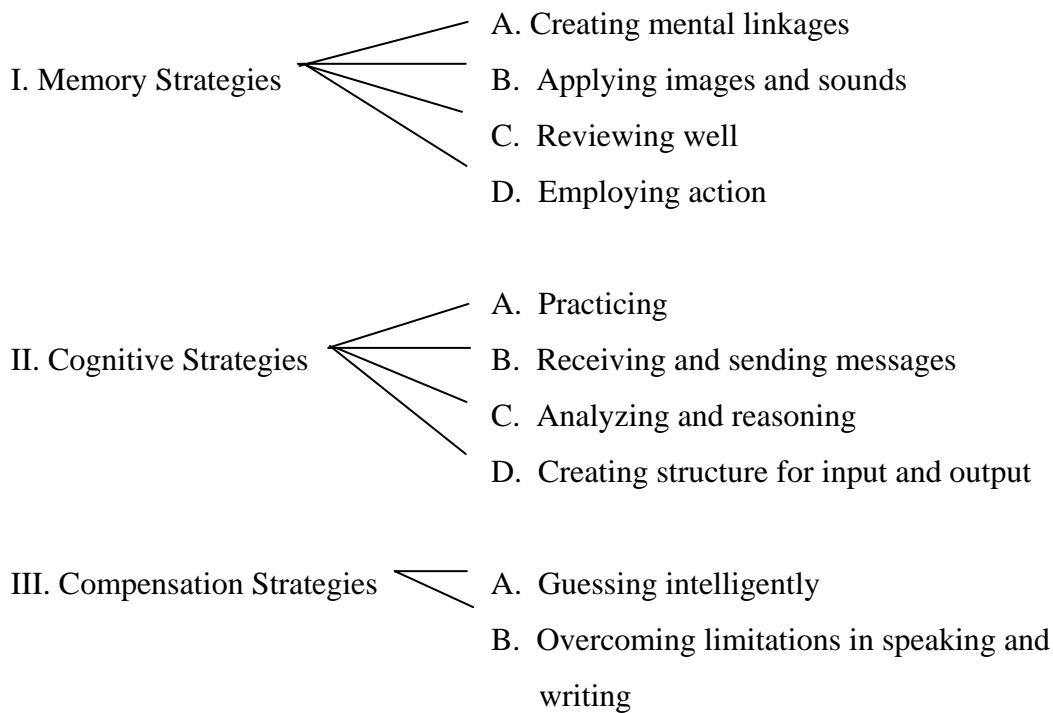
Rubin's Classification of Language Learning Strategies

Rubin (1987) made the distinction between strategies contributing directly to learning and those contributing indirectly to learning. According to Rubin, there are three types of strategies, learning strategies, communication strategies, and social strategies. Learning strategies are composed of two subparts: cognitive learning strategies and metacognitive learning strategies. Communication strategies are less directly related to language learning because their focus is on the process of taking part in a conversation and getting the meaning conveyed, or clarifying what the speaker intended. Social strategies are those activities learners engage in which provide them with opportunities to be exposed to the L2 and to practice their knowledge. Although social strategies provide exposure to the target language, they contribute indirectly to learning since they do not lead directly to the obtaining, storing, retrieving, and usage of the language.
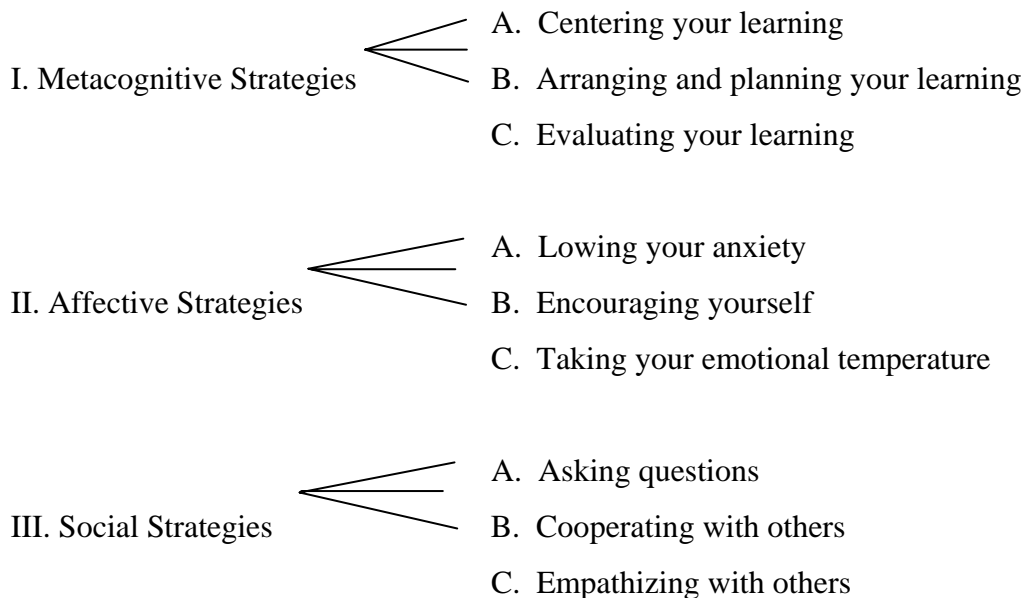
Oxford's Classification of Language Learning Strategies

Oxford holds positive attitudes towards the significant role of learning strategies in language learning. She defined learning strategies as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (p. 8). As seen in Figure 2.2, she divided learning strategies into two major groups and six categories. The two major groups were direct and indirect strategies. The former was composed of memory, cognitive, and compensation strategies; the latter consisted of metacognitive, affective, and social strategies (Oxford, 1990 b).

DIRECT STRATEGIES

I. Memory Strategies

    A. Creating mental linkages

    B. Applying images and sounds

    C. Reviewing well

    D. Employing action

II. Cognitive Strategies

    A. Practicing

    B. Receiving and sending messages

    C. Analyzing and reasoning

    D. Creating structure for input and output

III. Compensation Strategies

    A. Guessing intelligently

    B. Overcoming limitations in speaking and writing

INDIRECT STRATEGIES

I. Metacognitive Strategies

    A. Centering your learning

    B. Arranging and planning your learning

    C. Evaluating your learning

II. Affective Strategies

    A. Lowing your anxiety

    B. Encouraging yourself

    C. Taking your emotional temperature

III. Social Strategies

    A. Asking questions

    B. Cooperating with others

    C. Empathizing with others

Figure 2.2

Diagram of the strategy system composed of two major groups and six categories (Oxford, 1990b, p. 17)

In addition, Oxford (1990b, p. 9) also proposed 12 features of learning strategies listed as follows:

1. They contribute to the main goal and communicative competence.
2. They allow learners to become more self-directed.
3. They expand the role of teachers.
4. They are problem-oriented.
5. They are specific actions taken by the learner.
6. They involve many aspects of the learner, not just the cognitive.
7. They support learning both directly and indirectly.
8. They are not always observable.
9. They are often conscious.
10. They can be taught.
11. They are flexible.
12. They are influenced by a variety of factors.

Stern's Classification of language learning strategies

According to Stern (1992), there are five main language learning strategies, namely, management and planning strategies, cognitive strategies, communicative-experiential strategies, interpersonal strategies, and affective strategies. In general, management and planning strategies are related with the learner's intention to direct their own learning. That is, language learners can take charge of the development of their own learning with teachers' or advisers' help. Cognitive strategies refer to steps or operations used in learning or problem solving that require direct analysis, transformation, or synthesis of learning materials. Communication-experimental strategies are techniques, such as circumlocution, gesturing, paraphrasing, or asking for repetition and explanation, are used by learners to keep a conversation going and to avoid interrupting the flow of communication. Interpersonal strategies imply that learners monitor their own development and evaluate their own performance. Moreover, to become acquainted with the target culture, learners contact native speakers and cooperate with them to

achieve the goal. Affective strategies refer to the approaches learners use to overcome emotional problems in language learning, such as feelings of strangeness towards the language and negative feelings for the native speakers of the L2.

Furthermore, Oxford (1990b) created the Strategy Inventory for Language Learning (SILL) to assess learners' strategy use. These strategies are further divided into the following six categories: (1) memory strategies for memorizing new vocabulary items; (2) cognitive strategies for practicing, analyzing, and summarizing the language; (3) compensation strategies for overcoming deficiency in language knowledge; (4) meta-cognitive strategies for managing and evaluating one's learning; (5) affective strategies for reducing one's anxiety and increasing one's motivation; and (6) social strategies for working with others in the learning process.

Since the 1970s many researchers and scholars have made great achievements in the field of learning strategies. Synthesizing the definition of learning strategies mentioned above, the researcher of the present study concluded that language learning strategies are behaviors performed by the language learners, or actions, and measures taken by the language learners to facilitate their learning by means of acquisition, storage, retrieval, and use of new information.

Early Studies on L2 Learning Strategies

Studies on language learning strategies began in the 1960s. Studies on learning strategies in second language acquisition originated from investigating the strategies used by "good language learners" (Rubin, 1975). Rubin (1975) proposed that a good language learner is characterized by being a guesser, having a desire to communicate, making good use of all practice chances, and monitoring his or her speech.

The primary concern in most research on language learning strategies has been on "identifying what good learners report they do to learn a second or foreign language, or, in some cases, are observed doing while learning a second or foreign language." (Rubin and Wenden, 1987)   From these pioneering researches, studies into the learning strategies of successful and less successful students steadily increased (Rubin, 1975;

Stern, 1975; Chamot et al., 1988). Rubin (1971) found that good language learners made use of communication, social, and cognitive strategies in their language learning. Later, Rubin (1975) identified a set of characteristics held by successful learners and suggested that the investigation of strategies used by successful language learners would be a great help for both learners and teachers alike.

Furthermore, Naiman et al. (1978) proposed five general strategies used by good language learners, including (1) being actively involved in the language learning process, (2) viewing the language as a system, (3) developing an awareness of language as a means of both communication and interaction, (4) accepting and coping with the affective demands of the L2, and (5) extending and revising the L2 system by inferencing and monitoring. Moreover, Reiss (1983) found that, when compared to less successful students, the successful learners used more specific strategies, relying on originality and creativity. Abraham and Vann (1980) concluded that it was not so much the number of strategies used by a learner but rather their flexibility and appropriateness. Furthermore, Chamot and Kupper (1989) suggested that effective language learners used a variety of appropriate metacognitive, cognitive and productive strategies.

More Studies on L2 Learning Strategies in Language Education

O'Malley et al. (1983) observed and interviewed 70 ESL students and 20 teachers and found that students of different proficiency levels used different strategies in language learning. They classified these strategies into three categories, namely, metacognitive, cognitive, and social-affective strategies. In addition, O'Malley et al. (1985a) discovered that group interviews with ESL high school students were the most effective techniques, generating far more strategies than they had expected. They categorized these strategies into three main subparts: meta-cognitive strategies, cognitive strategies, and social strategies.

Politzer and McGroarty (1985) attempted to devise questionnaires to assess how often individual learners were using particular strategies, for example, in classrooms or during self-study or interaction. They found that an appropriate variety of strategies

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could be associated with various levels of communicative competence. It also suggested that successful students were not necessarily using more strategies, but different combinations of them. Abraham and Vann (1987) investigated strategies used by two language learners, and found that the successful learner used a greater variety of strategies, and was more flexible in strategy use than the poor ones.

Chamot and El-Dinary (1999) investigated elementary students' learning strategies in French, Japanese, and Spanish immersion classrooms. The findings showed that, when children were reading, although there were no significant differences in the total number of strategies used by high achievers and low achievers, there were some differences in the types of strategies used.

In addition to strategy use, there have also been many studies focusing on less successful learners. In contrast to successful learners, unsuccessful or less successful learners were found to have obvious differences in their use of learning strategies (Halbach, 1998; Oxford, 1993; Reiss, 1983; Vann & Abraham, 1990). For example, Reiss (1983) indicated that less successful learners used general strategies but did not venture beyond what was offered to them in class or from the textbook. Vann and Abraham (1990) investigated strategies used by unsuccessful learners and the findings showed that, although unsuccessful learners were active and had quantitatively similar repertoires of strategies to successful learners, their weakness lay in their inability to apply the appropriate strategy to the appropriate task. Halbach (1998) used diaries to investigated 12 college students' learning strategies and the results indicated that the weaker students seemed to be far less critical of their own performance compared to the better students. Although they had fewer problems, they were not effective users of the strategies of self-monitoring and self-assessment.

To sum up, these studies on language learning strategies, despite some conflicting findings, have reached a common conclusion. That is, effective second or foreign language learners use more strategies appropriately and also use a wider variety of strategies, whereas less effective students not only use fewer strategies, but also use them inappropriately.

Studies on EFL Learning Strategies in Taiwan

There are a great number of studies on EFL learning strategies in Taiwan (e.g., Chen, 2000; Chen, 2002; Huang, 1997; Hong and Huang, 1997; Liao, 2000; Shih, 2004; Yang, 1992; Yang, 1993; Teng, 2000). Yang (1992) used factor analyses to investigate university students' strategy use and concluded that students used formal oral-practice strategies most often, followed by compensation, social, meta-cognitive, functional practice, and cognitive-memory strategies. Furthermore, Yang (1993) conducted another study to identify English learning strategies and techniques used by senior high school students with high achievements in English. The findings showed that high achievers made more use of learning strategies and techniques in both variety and frequency when compared to low achievers.

In Huang's (1997) study, she circulated questionnaires to 300 senior high school students and interviewed 30 students. The findings showed that students did not use many learning strategies because they were unaware of the various strategies which could be helpful in their English learning. Moreover, Huang (1997) investigated the strategies used by senior high school students and found that compensation strategies were used most frequently, followed by meta-cognitive, social, cognitive, affective, and memory strategies.

Contrary to Huang's study, Chen (2000) found that junior high school students used cognitive strategies most frequently, followed by compensation, meta-cognitive, memory, affective, and social strategies. Liao (2000) investigated junior high school students' strategy use and found that compensation strategies were used most, followed by memory, meta-cognitive, social, cognitive, and affective strategies. Chen (2002) conducted a study to investigate language learning strategies used by both high and low English proficiency students at technology college level. She surveyed 276 freshmen in one technology college in central Taiwan and found that students with high English proficiency reported a higher frequency of use of language learning strategies than did low English proficiency students. Both high and low English proficiency students used compensation strategies most frequently. In the majority of studies, compensation

strategy was found to be the most frequently used with both the same educational level and with different educational levels (e.g., Huang, 1997; Liao, 2000; Chen, 2002; Shih, 2004; Chang, 1992; Yang, 1993, 1994; Chang & Huang, 1999).

In conclusion, many studies have found that the use of appropriate language learning strategies helps to improve proficiency and achievements. Another finding in common is that successful language learners often use more strategies, at appropriate times, than less successful learners (Yang, 1996).

Relationships between L2 Learning Motivation and L2 Learning Strategies

Although research indicates that both motivation and learning strategies play crucial roles in successful language learning, little effort has been devoted to research on relationships between motivation and learning strategies in the field of L2 learning (Yang, 1992). Some researchers also suggest that linking aspects of motivation with the use of learning strategies is recommended (e.g., Schmidt et al., 1996). Furthermore, Noel (1996) claims that "learner's use of strategies cannot be understood without understanding the nature of their motivation for learning" (p. 335). In response, many researchers have started to look into the links between the two determining elements in language learning. For example, Oxford and Shearin (1994) reported that learning strategies are affected by goals, expectancies, self-efficacy, and motivation. They found that unclear L2 goals, weak expectancy of success, or a low sense of self-efficacy would constrain the use of appropriate learning strategies "because progress in learning the language just does not seem possible" (Oxford & Shearin, 1994, p. 21).

The following studies all tried to examine the relationships between learning motivation and learning strategies. Ehrman and Oxford's study (1989) on 78 adult learners made up of professional language trainers, teachers, and students, all in the US Foreign Service, found that instrumental motivation in learners was associated with their choice of strategy use. Oxford and Nyikos (1989) studied 1200 students learning foreign languages at Purdue University and found that students' self-rated motivational intensity functioned as a key determinant for the type and frequency of strategy use.

Also, in Oxford et al.'s (1993) study on 107 American high school students who learned Japanese in a satellite setting, it was found that motivation was the single best predictor of language learning achievement, followed by learning strategy use. It is obvious that the above findings support the statement of Gardner (1985) that "attitude and motivation are important because they determine the extent to which individuals will actively involve themselves in learning the language. The prime determining factor is motivation" (p. 65).

To focus on studies conducted in Taiwan, Chang (1997) studied junior high school students' English learning motivation and strategies in relation to their English learning achievement. The results indicated that junior high school students have good learning motivation, but poor learning strategies and moderate achievement. Significant correlations were found between learning motivation and achievement and between learning strategies and achievement. Liao (2000) studied junior high school students' EFL learning motivation and learning strategies and found that the students lacked English learning motivation and tended to be extrinsically motivated. Furthermore, most of the students did not frequently use a variety of learning strategies in the process of learning English. Wu (2004) was aware of the need to investigate vocational high school students' English learning motivation and learning strategies. In her study, she found that, in general, the students' motivation for learning English was not strong, their extrinsic motivation was stronger than intrinsic motivation and they used compensation and memory strategies more frequently. In addition, the two studies had the same finding: the students' English learning motivation, in terms of intensity and types, were significantly correlated with their learning strategies.

A Shift from Language Learning Strategies to Language Learning Behaviors

According to Stern (1992), "the concept of learning strategy is dependent on the assumption that learners consciously engaged in activities to achieve certain goals and learning strategies can be regarded as broadly conceived intentional directions and learning techniques" (p. 261). Based on the above statement, it can be inferred that

language learners use learning strategies either consciously or unconsciously during the process of language learning, either inside or outside the classroom. Since language learning is a challenging task, it is unavoidable for language learners to make use of certain language learning strategies to find the easiest or quickest way to learn the target language. Furthermore, as Oxford (1990b) stated, learning strategies have been defined as behaviors, steps, operations, or techniques employed by learners to facilitate the acquisition, storage, retrieval, and use of information.

From the above statements on language learning strategies, the researcher of this study defined the skills, activities, steps or techniques that English learners employ to improve their English achievement or proficiency, as language learning behaviors. There are several reasons for the shift from language learning strategies to language learning behaviors. First, according to Dadour and Rubbins' study (1996), the experimental group which had received training in strategy instruction, employed more language learning strategies than the control group did. Therefore, if the learners had not received the training in strategy use, they would not have been familiar with these strategies. Secondly, even though a large amount of strategy training has been given to help learners become more successful, most students are only employing the ways or methods they are familiar with to facilitate their language learning.   In Lin's study (1995), she designed an experiment to examine the effect of learning strategy training on junior high school students with low English achievements. The findings suggested that the two-month learning strategy training course effectively increased low achievers' English achievements. Therefore, since most of the students have not been trained, these ways or methods in language learning are defined as language learning behaviors instead of learning strategies.

Thirdly, to better reflect the language learners' real learning situation, and in an attempt to see what the language learners do in two natural learning settings, the researcher divided learning behaviors into two parts, in-class and outside-class learning behaviors. The classification of the two learning environments was aimed at finding out the real learning situations of language learners.

Finally, the questionnaire items regarding learning behaviors, obtain their main concepts from Oxford's (1990b) classification of learning strategy categories. In this study, three strategy categories are employed, including memory strategies, cognitive strategies, and affect strategies. However, to better reflect language learners' learning behaviors, all the questionnaire items have been modified into six sub-categories. In-class English learning behaviors include memory-based, cognition-based, and affect-based learning behaviors. Outside-class English learning behaviors include individual and interactive learning behaviors with the former further divided into schoolwork-oriented and non-schoolwork-oriented English learning behaviors. By using such a framework, it would allow the researcher to look into VHS students' English learning from different perspectives.