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**Different decisions, different motivations:
Differences in motivation between students who make different decisions
whether to attend a voluntary EFL course in Taiwan**

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Second Supervisor: Professor Joe Elliot

A Thesis Submitted for the Degree of Doctorate of Education

**School of Education
Durham University
2012**

Abstract

According to Dörnyei's (1998) process model of second-language motivation (also known as L2 motivation), motivation is a key characteristic of students' likelihood of future persistence and performance. In this study, the initial motivation of three groups of students who were offered a highly valuable and free voluntary course was examined. The three groups were Group A: students who did not register for the course; Group B: students who took the course but dropped out; and, Group C: students who completed the course. If motivation is a key characteristic, then there should be different initial motivations for each of these three groups. It was expected that the motivation of students in Group A would be significantly different to that of students in Group B, and especially to students in Group C.

There were five measures of motivation: intrinsic motivation, extrinsic motivation, integrative motivation, cultural interest and anxiety. The results revealed that students who completed the course (Group C) had significantly higher intrinsic, extrinsic and integrative motivation and lower anxiety relative to students who did not register for the course (Group A). However, there were no differences in motivation between Group A and Group B suggesting that students who start a course and drop out are (motivationally) no different from those who do not take the course at all.

The thesis also examines motivation over time. Dörnyei's process model suggests that L2 motivation changes throughout the learning process. However, few studies have examined whether such a temporal shift occurs. In this study, the motivation of the three groups was assessed at beginning of the semester and then 18 weeks later. The results only partially supported Dörnyei's claim. Changes in motivation were observed for two of the five measures employed. All three groups had higher intrinsic motivation and lower anxiety.

The key finding of this study is the difference in motivation at Time one (before the course) for the three different groups. Students who decided to take a voluntary course and stayed on that course (Group C) were clearly more motivated than those who decided to take the course but then dropped out (Group B), and more motivated than those who did not take the course at all (Group A). However, regardless of their decisions to take a course and stay on it, leave it or not take the course at all, students' motivation over time tended to stay relatively stable. Where motivation did change over time, it was encouraging to note that intrinsic motivation improved and anxiety reduced regardless of the decision taken.

The implications of the findings are that learners' decisions to attend courses are importantly determined by their initial motivations. It seems that initial motivations are potentially diagnostic of future decisions to engage with an important course. Given that changes in motivation did not differ by group, it seems important that educators develop initial motivation. Based on the findings of this study, suggestions are made for directions teachers might develop motivation in a way that minimises the number of students who either drop out or decide not to take the course.

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I would like to express my gratitude to Professor Richard Remedios and Professor Joe Elliot for their assistance and advice in the compilation of this thesis. Without their patience and understanding, this thesis could not have been completed. Writing a doctoral thesis is like learning a foreign language and involves many fluctuating frustrations and lengthy struggles. Therefore, I am profoundly grateful to my supervisors for their kind and helpful support. Meanwhile, I am very grateful to the colleagues and students who facilitated my investigation at Chia Nan University. Finally, this thesis is dedicated to my father and mother who have always shared their love and supported me on the long road of this study.

Declaration

Material contained in the thesis has not been submitted previously for a degree in this or any other institution.

Statement of copyright

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List of Acronyms

AMTB	the Attitude/Motivation Test Battery	27
CEFR	Common European Framework of Reference for Languages	17
GEPT	General English Proficiency Test	17
IELTS	the International English Language Testing System	17
TOEFL	Test of English as a Foreign Language	17
TOEIC	Test of English for International Communication	17
TRAPD	Translation, review, adjudication, pretesting and documentation	100

Chapter 1 Introduction

1.1 Background to the research study

With the development of globalization, more and more countries are seeking ways to work together, especially in terms of economic and environmental issues. Taiwan, with its heavy dependence on international trading, is no exception. As it is a small island in the Pacific, however, it has only a few natural resources such as oil, gas or mining. Farming is also limited owing to its topography. Within its 36,000 square kilometers, 32% of the land is covered by mountains more than 1000 metres high. Under these circumstances, the construction of a solid economy to support Taiwan's 23 millions residents relies on manufacturing and international business. The competition and cooperation of the market require an accurate and fluent language ability to understand data effectively and deliver strategies promptly. Foreign language abilities can play an important role in achieving this goal. Hence, the government of Taiwan has developed various policies to promote the study of English. One of the essential methods is to improve English competence in the education system, by making English a compulsory subject in primary school and providing extra funding to promote students' English competence in higher education. Each year, the Ministry of Education grants special budgets for universities so that they can promote English projects, including voluntary English courses and activities for students. Meanwhile, language education has also become an important criterion in evaluating universities. Therefore, most universities are eager to receive funding so that students can benefit from the voluntary language courses and activities. Nevertheless, despite the implementation of these projects, students do not always take advantage of these free courses and activities. Even with

such great stimulus from the university and government, students' enthusiasm for learning does not seem strong enough to drive them to participate in the voluntary courses. This study examines the situation the students face from the perspective of language learning motivation.

1.2 Scope of the study

The purpose of this study is to examine students' motivation to enrol on voluntary English language courses. There are many factors which influence students' participation in language courses: for example, social attitudes towards languages, the practical function of the target language, the time of implementation, the teachers of the course and so on. The practical purpose of learning a foreign language gives students a reason to start a language course. In other words, most of the students should have realized that if they learn English well enough, their future career could be advantaged. Since the courses are free and offer a good chance of a prosperous future, it is assumed that most students will participate in and complete the courses. The fact is, however, that some students choose to register on the course and some choose not to do so. Moreover, among the registered students, some choose to complete the course and some do not. Consequently, the question arises as to what the motivation is behind these different responses.

The context of this study is Taiwanese higher education. Therefore, the language education context in Taiwan is examined and explored before the theoretical discussion commences. Furthermore, since the decisions to be discussed concern language learning, various motivation theories about learning a foreign language are reviewed and the perspective narrowed down. Based on this discussion, several motivation factors can be extracted to answer the research questions.

The investigation was held in a Taiwanese university in order to identify the possible contributions of different factors to students' decision-making about voluntary language

courses. Due to the nature of the voluntary courses in this study, language courses in university level provides much more opportunities for voluntary courses. Therefore, university context was chosen to be investigated instead of secondary schools. Questionnaires were developed and delivered to collect the data. The results of the study were then analysed. Finally, an overview based on the theories discussed in chapter 2 and the results discussed in chapter 6 attempted to explain the phenomenon described in the Introduction.

1.3 Significance of the study

The value of this study is that it provides an overview of students' motivation regarding the free courses available to them on a purely voluntary basis. Compared with mandatory courses, voluntary courses can reveal much more about learners' decisions as there is no obligation to attend them. Some paid language and accredited courses are not mandatory either, of course, but students may have limited freedom to choose since they have invested something. However, because of the voluntary nature in this study, there is freedom for students to choose without restrictions. Therefore, it becomes possible to examine students' initial motivation. These voluntary courses are offered by the government as part of English promotion projects. Though the budget varies from year to year and from university to university, the total amount is considerable. If there are only a few students benefitting from the projects, it will be a waste of money and effort. For most students in Taiwan, English language learning experience always involves compulsory required courses. From primary school, high school to higher education, English is a required course in the formal educational system. Hence, teachers need to work hard to enhance students' motivation to learn English, since many of them are not sitting in the classroom voluntarily. Meanwhile,

when students are required to take language courses, it may be difficult to see the origins of the motivation. While most students have no choice about taking the English courses, both teachers and students can quite easily forget how and why they need to learn and teach English. The voluntary courses in this study provide an opportunity to review the impact of motivation on language learning, with regard to whether students want to participate in a course and complete it.

The investigation conducted in this study offers a way of understanding the psychological element of students' motivation. Some possible motivational elements are analyzed. Students' motivation was assessed in two different phases within a semester, so that changes in motivation could be studied. The researcher was aiming to use the results to help devise a more appropriate course curriculum and to assist universities in providing more relevant courses, depending on their motivational needs, and to promote student participation in the courses. The analysis suggested that a better designed curriculum needed to correspond more closely to students' actual levels of motivation, especially in the preactional phase. More related motivational strategies are also suggested for integration within the courses in order to sustain motivation in the actional phase. It is only when students register and attend a course that teachers can demonstrate their teaching strategies and create an effective context for developing motivation.

Chapter 2 Foreign Language Education in Taiwan

2.1 Curriculum development of foreign language education in Taiwan

Modern foreign language education in Taiwan(Formosa) originated in the Japanese colonial era when the Japanese government took over Taiwan after the Sino-Japanese war of 1895. To safeguard Japan's ruling status, some special language schools were founded in Taiwan to train simultaneous interpreters, although there was no clear overall plan or policy. From 1898 to 1919, the colonial government established a rather simple and crude formal school system to educate local people. Despite integrating other subjects like maths or music, education in this period focused on Japanese language competence so that the colonial administration could be firmly obeyed. From 1919 to 1937, a more complete education system including higher education was established. At this stage, although Chinese was still taught as a subject, the instruction in all other subjects was delivered in Japanese. Nevertheless, when the Second World War began, Chinese had been removed from the curriculum and only Japanese could be used in schools. In time, the Japanese colonial government established different language education policies. Nevertheless, the main emphasis of these policies was on the practical goal of governing its colony, Taiwan. Unlike the other western colonial powers, the Japanese government desired not only economic profits but also a reputation as the most powerful country in Asia. Therefore, they made Japanese language education compulsory and attempted to assimilate the Taiwanese. Consequently, motivation during that time to master a foreign language was not only aimed at better economic status but also at achieving an honourable social status.

(http://big5.chinataiwan.org/twzlk/jy/gk/200512/t20051216_220819.htm)

When the KMT (Kuo min tang) government (having fled from China) took over Taiwan after the Second World War, it retained the education system that had been left by the Japanese government. Instruction changed from Japanese to Mandarin, however. When KMT

(Kuo Ming Tang) left China, the US government assisted with its defense. Owing to this relationship with the United States, English hence became the only foreign language to be taught in the high school curriculum. Being able to speak English meant being close to the powerful US. English competence hence became a symbol for better opportunities in terms of both economic and social status. At this stage, the English curriculum was compulsory in junior high school. In senior high school and higher education, English was set as a required credit. This situation changed in 2004 when the national curriculum extended English education to primary schools. Depending on the resources of each school, there are some flexible teaching hours for English courses in different phases of education. For Year 1 and 2 students, the school can arrange 2-4 hours English classes per week. For Year 3-6 students, they can receive 3-6 hours English classes per week. For Year 7-9 students, there are 4-6 hours English classes per week. As to the senior high school students, there are 5-6 hours English classes. For the college level students, the total credits of English language courses are 6 to 12 depending on the policy of each university.

In Taiwanese higher education, English curriculums are established as required courses, although the credit may be different from university to university. Nevertheless, most of these English courses exist within the scope of general education and teachers do not require students to follow very strict criteria. Some students therefore view English courses as a fruitless labour and pay little attention to them. With the rise of the global community, however, English now often plays a very significant role in students' future careers. Therefore, more and more universities set what is known as the English Threshold. This means that students cannot receive their degree if they cannot reach a certain standard in English. The Ministry of Education has determined that the threshold should fit the criteria of the Common European Framework of Reference, although universities can decide their own pass levels. Therefore, helping students to pass English tests is an important goal in higher education.

Moreover, the percentage of students achieving the different levels of CEFR has become an important indication of the quality of universities. In Taiwan, the common language tests that students take are TOEIC, TOEFL, IELTS and GEPT. The results of these tests are transformed into the CEFR criteria so that universities can determine students' levels of English proficiency. Nevertheless, for students who cannot achieve this requirement during their graduation, most universities provide remedial courses as an alternative solution.

Throughout the changing political and economic circumstances, foreign language education also modifies its role in these macro contexts. Thus, foreign language education was initiated by political power and gradually shifted into a social context influenced by economic development.

2.2 The impact of social context on language learning in higher education

Another significant phenomenon of language education in Taiwan is the value that society places on English. Other foreign languages are also taught, such as Japanese, which remains popular owing to its historical background and mass availability. However, English is the most valued foreign language on account of its influence on business, internet and the media. When foreign languages are mentioned, it is English that people usually refer to.

With the growth of globalization, being able to speak English is emphasized and is taken as a synonym for globalization. Globalization is a concept which involves of interacting different cultural elements and is reflected in different areas such as economics, education and so on. The changes happening in one country may quickly have an influence on another region. Being able to understand such changing information is essential in the modern world and people generally need to cooperate with each other to do so. In order to achieve successful cooperation and competition, people need to communicate with each other effectively in a common language. Due to complex historical reasons, the official language in

a country or a region usually carries not only its culture but also political power. This transition is similar to that of the conception of the 'global village'. After the fall of the British Empire following the Second World War, its powerful political influence passed to the US. This historical and political background constitutes the foundation of English's universality. Globalization has often been seen as being equivalent to 'Americanization'. When people learn English, they perceive not only knowledge but also culture. This universality of English exists just like any powerful official language in history. When the power beyond the language disappears, its influence may gradually vanish. At the same time, there are other reasons to support the expansion of English. The real growth in English as an international language followed modern transportation and the Internet era. With better transportation, people can travel more easily and the relative distance between people diminishes accordingly. Moreover, modern technology brings the Internet into people's lives and this makes instantaneous communication possible. People can chat with someone across an ocean just as they chat with a neighbour over the fence. Today, the concept of the 'global village' has matured. The reason why people can reach this global tower of Babel should surely be credited to the imaginary 'single' language, which is in fact how modern English functions. English has become a tool for communication between not only the English native speakers, but also speakers with different first languages. People use English to communicate with each other even when none of the speakers' native language is English. This phenomenon gives a thriving development in the sub-field of applied linguistics which has been referred as 'English as a lingua franc' (ELF). There are also other more general terminologies to depict this phenomenon of English as a contact language between people who share no common native languages. They are referred as 'English as an international languages', 'World Englishes', 'English as a global language' and 'English as a world language'. (Seidlhofer, 2005:pp.339-341) Consequently, English is seen as one of the

important elements in globalization. Taiwan, no exception in the global village, desires to possess this effective tool so that it will not be excluded from international markets. A passion for learning English has swept the whole island in this post-Internet era. Parents, schools, companies and even government push children, students and adults towards learning English.

English learning has become a national campaign in Taiwan. Kindergartens have provided bilingual education for years and parents try their best to make their children enrol on such programmes. (However, Taiwanese government has recently realized the danger that little children may lose the ability in Mandarin and has started to restrict the teaching hours of English in pre-primary education.) Many students, from primary school to high school, are forced by their parents to attend English cramming schools. The government is eager to promote the English-speaking ability of all its citizens. There are 'English villages' that create an entire English environment in which students speak only English. Though the attempt to make English an official second language cannot be accomplished for political and other reasons, many policies promote English learning. Government officials are required to pass English tests when they want to receive a promotion. Moreover, even taxi drivers and restaurant waiters are encouraged by the government to learn English on special training courses as they may have a chance to meet and greet foreign tourists. As regards higher education, the government requires universities to provide English instruction courses and hold international conferences to achieve the goals of globalization and funds extra programmes, as previously mentioned.

Even before the arrival of this increase in English learning, English had already become an important foreign language in Taiwan because of the powerful US influence mentioned above. English nowadays not only enables privileged economic and social status, but is also a necessary means of survival in this globalized world. Without abundant natural resources, the only way for Taiwan to survive is to become a member of the international

market and it could be crowded out of this if its people's basic language ability is not sufficiently developed. Therefore, it is not merely a passion for western culture that drives people to learn English but a kind of anxiety derived from a fear of failing to achieve economic success. Thus, by understanding the role that English plays in Taiwan, it is much easier to comprehend the emphasis which is placed on its national campaign for English learning.

Nevertheless, for English learning competence, there is still a 'double peak' phenomenon related to students' economic and social status. Those whose parents can afford better language teachers and courses achieve much better learning results than those who can only manage limited teaching hours in schools. (See p.16) Consequently, some students can meet the goal of high English competence and be a part of globalization, as the government and their parents wish, but other students who cannot achieve the requisite competence in English have a very different experience and this frustration can reduce their interest and confidence in terms of continuing to learn English. Even if they achieve a great deal later on in their profession they still need sufficient language competence to reach the Language Threshold before their university graduation. In order to support these students and to improve the general standard of English competence, the government in Taiwan provides a budget for various English projects that offer extra free courses and related activities in higher education. In higher education, the Ministry of Education has granted an additional annual budget to the English Proficiency Promotion Project since 2003 in order to fund extra free English courses for students in higher education. Meanwhile, there is another project having granted budget of free English courses for promoting teaching excellence of universities since 2005. (<http://ice.nkfust.edu.tw/eng/upgrade/list.htm>) All university students are eligible for these free courses and can participate in the English learning activities provided. This study examines the nature of these free language courses and the related

changes in students' motivation.

Chapter 3 Literature review: motivation in language learning

3.1 Gardner's socio-educational construct

In this chapter, different theories concerning with language motivation are introduced. First, the discussion about Gardner's social psychological model initiated the debate of interpreting motivation in language learning. As the argument of different scholars processed during 90s, Gardner developed his revised frame on the motivation constructs. Meanwhile, several motivation theories which developed in the 90s were discussed to account motives which directed learners' language learning. Further, as the basis of this study, Dörnyei's process oriented model illustrated the temporal dimension of second language learning motivation. Meanwhile, researches taken under the context of Taiwan were referred to depict the influence of motivation on language learning in the circumstance of Taiwan. Finally, the research questions were drawn out through examining diverse motivational factors.

3.1.1 The initial constructs and assumptions

The focus of this section is language learning motivation theories. Over the past decades, a considerable number of studies have looked at language learning motivation. The first attempt to build a motivation model for language learning was launched by Gardner and his associates. Therefore, it is essential to examine the studies which initiated language learning motivation research.

The researches by Gardner and his associates threw new light on the state of language learning motivation. They applied elements of social psychological theory to language learning motivation theory. In proposing what is known as an integrative orientation, Gardner and Lambert (1972, p.14) launched a discussion on language acquisition in terms of both linguistic processes and social process perspectives. The unique language context in Canada provided the germ for this significant proposition. Both French and English are official languages in Canada and different regions prefer one to the other. This creates

varying attitudes toward each language, related to the different language communities. Gardner and Lambert defined integrative orientation as a reflection of language learners' willingness to be associated with a target language community. On the other hand, a second type of orientation, instrumental orientation was defined as the desire to obtain social recognition or economic advantage. The different orientation may account for the diverse purposes of learners and lead them towards dissimilar learning processes. As regards different learners in different cultural contexts, attitudes toward the language community may influence their integrative and instrumental orientations. Subsequently, social psychological factors became important in the stages of language learning motivation.

Gardner & Lambert (1959) conducted an empirical research that involved 43 male and 32 female English speaking grade 6 high school students who completed 7 years formal training in French. By using factor analysis, the result showed that both language aptitude and an integrative motive are important for successful acquisition of a second language. Beside the studies in Canada, Gardner (1972, p.17) and his colleague further carried out studies in non-Canada settings. They investigated English-speaking American high school students studying French in bicultural communities in Louisiana, Maine and Connecticut. The results provided evidence for the separate roles played by intelligence and aptitude and by attitudes and motivation in the development of second language competence. They also applied the same analytic scheme on 103 senior high school students in Philippines where English is the predominant language of instruction but hardly ever a home language. In North American settings that take target language as foreign language learning, integrative motive could benefit students more. while in the Philippines setting which take target language as second language, instrumental motives could play more important role. The result

demonstrated that when there is a vital need to master a second language, the instrumental approach is very effective.

Gardner (1985, p.2) claimed that second language learning was a social psychological phenomenon and emphasized the importance of the language context. Accordingly, the learning of a second language was included not only in linguistic codes but also in cultural definitions. The degree of language learning success was held to be influenced by attitudes towards the target language and the language community. Gardner viewed motivation as a combination of effort, want and affect, which combined efforts and desires to achieve the language learning goal. On the other hand, orientation was described as a ranking classification. Gardner posited that both integrative and instrumental orientations were extrinsic motives for language learning to be achieved for goal satisfaction. He stated that an intrinsic motive is an inner interest of an individual. Exploring various types of motivation is argued to explain individual success in language learning. An example of integrative motivation/orientation demonstrates this distinction. Someone with integrative orientation may be more highly motivated than someone who possesses other orientations. The individual may still not be able to take action to learn the second language with only integrative orientation, however. S/he needs to fulfil three factors of motivation, i.e. effort, desire and affect.

On this understanding, Gardner built up a social psychological model which viewed linguistic distinctiveness in relation to personal identity. In other words, language proficiency may imply learners' self-identity and the learner's identity may also imply the language attitude of learners. This identity may reflect attitudes toward language learning. An integrative orientation reflects a more positive attitude toward the target language community.

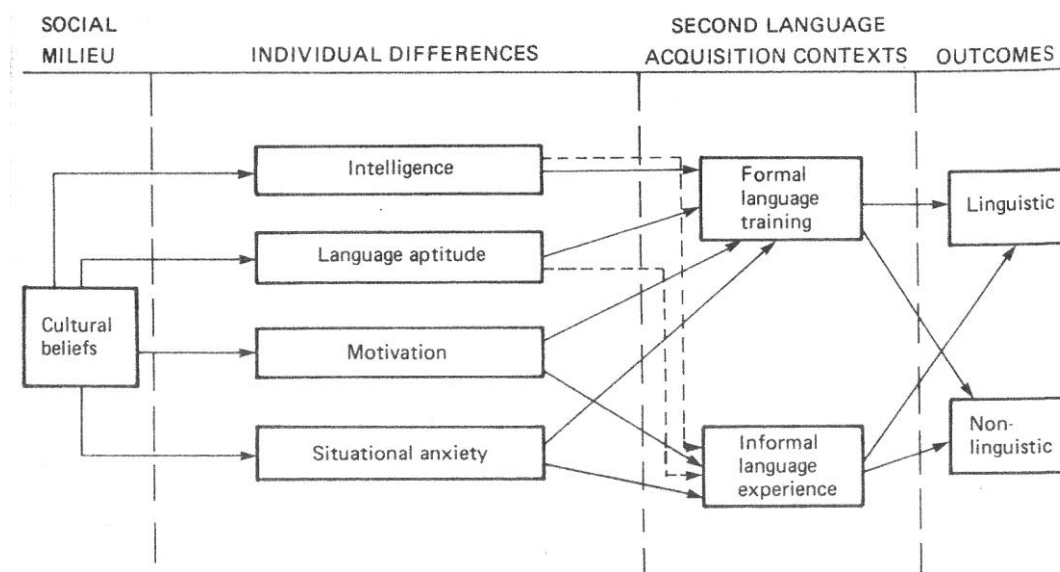


Figure. 3.1 The socio-educational model (Gardner, 1985, p.147)

The socio-educational model (**Fig. 3.1**) was devised to focus on the unique properties of language learning. As Gardner (1985, pp.146-150) posited, language learning could be viewed not only as a subject inside the classroom, but needed to be considered as potentially involving other cultural communities outside the classroom. Firstly, the cultural beliefs of the community defined the main context of language learning. Thus, individual differences (intelligence, language aptitude, motivation and situational anxiety) could further influence learner's language achievement. Formal and informal contexts could then impact on the outcomes of second language learning. Through this dynamic model, cognitive and affective variables were both considered in terms of the language learning environment.

Following the development of the socio-educational model, empirical research was conducted by Gardner and MacIntyre (1991, pp.58-70) in order to investigate the evidence. The results supported the conclusions of the socio-educational model and indicated that 'the sincere and personal interest' in integrative orientation may have a greater effect than the 'practical value and advantages' of instrumental orientation. This revealed that if the integrative orientation did not have enough intensity to form a motivation, it could not have

an effect on the promotion of learners' learning. On the other hand, if both integrative and instrumental 'motivations' had enough intensity to attract learners to persist for longer and desire to learn, learners need to be motivated by both. Accordingly, the socio-educational model gains empirical support for its retention.

3.1.2 Argumentation about theory constructs

For decades, Gardner's theory led the field in L2 learning motivation research. Nevertheless, with growing focus on this research field, many studies were conducted and some gradually showed conceptions other than social-psychological theory. Among those studies, Au (1988) proposed a critical appraisal of Gardner's social-psychological theory on L2 learning motivation. He first (1988, p.77) examined the essential components of the model and then classified them as five propositions: 1.the integrative motive hypothesis: integrative motive was positively related to L2 achievement; 2. the cultural belief hypothesis: cultural beliefs could influence integrative motive; 3. the active learner hypothesis: that integratively motivated L2 learners would achieve high L2 proficiency because they were such active learners; 4. the causality hypothesis: integrative motives causally affected L2 achievements; 5. the two-process hypothesis: language aptitude and integrative motive constituted two independent factors affecting L2 achievement. According to Skehan(1991, p.276), language aptitude suggested that there was a talent for learning languages that was independent of intelligence and the talent was not the result of previous learning experiences. Meanwhile, language aptitude should be relatively stable and vary between people.

Evaluating different studies from Gardner and his associates and other researchers, Au (1988, pp.81-84) disagreed about the integrative motive hypothesis and pointed to the negative relationship between integrative motives and achievement demonstrated in related studies. The notion of cultural belief may also vary between different cultural backgrounds

and hence he doubted the usefulness of the cultural belief hypothesis. Au himself did not conduct empirical studies. However, he looked into two groups of studies. (Au, pp.95-100) One group of studies were conducted by Gardner and his associate via the Attitude/motivation Test Battery (AMTB). The other group of studies used a variety of techniques such as scales adapted from the AMTB, the matched-guise technique and the Spolsky type identity scales. Through analysing these existing studies, Au (1988, pp.85-86) rejected the hypothesis that active learners with higher integrative motive achieved higher L2 proficiency and indicated that the reverse situation might be true and that higher proficiency might lead L2 learners into higher active learning behaviour. Regarding the causality hypothesis, he provided some opposing research results about the cause and effect between integrative motives and L2 achievement. He also argued for support of the hypothesis that linguistic aptitude and integrative motive are two independent factors affecting L2 achievement. However, there was not enough empirical evidence to sustain the notion that these two factors had a relationship and the two-process hypothesis should therefore not be upheld (Au, 1988, pp.87-88).

Responding to Au, Gardner (1988, pp.105-118) discussed the five propositions. He pointed that out more research was needed that used alternative measures and conceptions other than the studies that Au referred to. Many of the articles he referred to were factor-analytic studies. Meanwhile, adducing more significant evidence, he refuted Au's 'assumption' about the integrative motive hypothesis and gave recommendations for continuing research. He also posited that there were many examples that explained cultural belief although he admitted that it could be difficult to evaluate. Nevertheless, this difficulty should not stand in the way of research into cultural characteristics. With regard to proposition 3, he disagreed with Au that the active learner hypothesis was a 'serious mistake'. Instead, he viewed it as showing that the integratively motivated students tended to be more

active and more proficient. As regards the causality hypothesis, he refused to view the integrative motive as the single key factor behind second language proficiency. Instead, what he proposed was that language proficiency could be assisted by integrative and other factors. As regards the two-process hypothesis, he claimed that what he found was a relatively independent relationship between language aptitude and attitudes and made it clear that his studies could be conducted in both formal and informal settings. He revealed that it was never the final formulation of the socio-educational model and with the complex nature of motivation there was no single factor which could be considered as the only strong cause of a learner's proficiency. The purpose of the model that he proposed was to explain the process that influenced language acquisition instead of supporting a specific model.

Similar to Au, Crookes and Schmidt (1991, p. 502) indicated that the development of language learning motivation research up to this time had long been dominated by the social psychological approach, although they acknowledged that Gardner's proposal did raise many issues. Nevertheless, a much broader perspective was required to look at language learning motivation research. They then posited the importance of an action research perspective and sought practitioners' comments. Furthermore, following Bunge (1967), Crookes and Schmidt (1991) emphasized the integral perspective for looking at problems instead of asking partial questions. To elicit more research using approaches other than the social psychological approach, Crookes and Schmidt (1991, pp.502-503) suggested distinguishing between the conceptions of social attitude and motivation, as being unable to draw a distinction between them could lead to difficulties in perceiving (1) the connection between motivation defined in previous second language studies and motivation discussed in other fields, (2) the direct links between motivation and psychological mechanisms of second language learning and (3) the clear implications for language pedagogy of previous second language research. Consequently, the development of a taxonomy was suggested in order to identify extensive

and varied types of motivation. The factors to be included within the language learning motivation model could be much broader. The authors also recommended a problem system which could recognize possible research issues in language learning motivation. Three categories were put forward: description, analysis and experimentation, with the first two being expected to lead to improvements in the system. Their purpose was to encourage more empirical research into alternative theoretical constructs other than Gardner's socio-educational psychology theory. Hence, they launched this appeal to reopen the research agenda in language learning motivation and this appeal was responded by Oxford and Shearin (1994), Dörnyei (1994 a,b) and Oxford (1994).

Continued advocacy of the expansion of the theoretical framework was proposed by Oxford and Shearin (1994, pp.13-16), who described the limitations of the socio-educational model. Firstly, they pointed out there were various factors other than integrative and instrumental motivation that initiated learning behavior, although some could not be found in the socio-educational model. Therefore, there was a need to raise more topics in the L2 field. Second and foreign language environments fostered different types of expectancy and attitudes toward language learning and integrative motivation differed in different environmental circumstances. At the same time, with regard to other valuable motivation theories, and in view of the motivation awareness implications for teachers, there was a necessity to look for a broader theoretical framework. What Oxford and Shearin wanted was not to discard the socio-educational model altogether but to stimulate more empirical research into L2 learning motivation and produce a more comprehensive model. They not only suggested the investigation of different contexts, but also argued that the cognitive point of view should be explored from an educational perspective. For example, the perspectives of the cognitive psychologists Piaget and Vygotsky could be integrated within language learning motivation to synthesize results (1994, p.23).

Following these two critiques of the social psychological approach, Dörnyei (1994a, p.273) also revealed that more focus on work in the classroom should be included and that the cognitive aspect of learning was absent in Gardner's motivation constructs. He suggested that the unique characteristics of language learning, which contained a communication coding system, an integral part of the individual's identity and channels of social organization, were different from other actions in learning of other things. Language learning was concerned not only with acquisition of new information and knowledge but also with other components like intrinsic/extrinsic, self-efficacy, self-confidence and the need for achievement. Therefore, the existing language models needed to be expanded to explain the different components of language level, learner level and language situation level.

Gardner and Tremblay (1994) presented a response to Crookes and Schmidt (1991), Dörnyei (1994a) and Oxford and Shearin (1994). The limitations identified were clarified and discussed as follows. Gardner and Tremblay (1994, p.360) argued that integrative/instrumental 'orientation' had not replaced motivation as the primary factor in the socio-psychological model. Though integrative motivation had been considered essential in this model, there was still a certain contrast between integrative and instrumental influences to be made in Gardner and his associates' researches. Gardner and Tremblay (1994, p.361) further claimed that other researchers viewed the integrative/instrumental contrast as the main element in the socio-psychological model and ignored the fact that other factors that could influence second language acquisition were also posited within the model. Secondly, those relevant theories had been considered in explaining motivation within different theoretical frameworks. With regard to pedagogical concerns, they claimed that just like other educational models, the social-educational model attempted to discover the related factors of achievement and find an explanation for these influences. Hence, the ongoing search for these factors should be part of the natural development and would not be limited at that time

point. Thirdly, regarding the distinction between attitudes and motivation, Gardner and Tremblay (1994, p.364) argued that motivation had a behavioural component (effort), a cognitive component (desire) and an affective component (attitude). Attitude and motivation should not be treated as two discrete conceptions as they each involved cognitive and affective features. Therefore, both attitude and motivation should be included in the same theoretical model. Fourthly, regarding the integration of motivation theories and second language learning, Gardner and Tremblay (1994, p.364) stressed the distinction between the person and the situation difference. They described both trait motivation and state motivation. The former referred to relatively stable individual differences and the latter to the actual variation in learning situations. Concerning empirical studies, they agreed that there should be more research to evaluate their hypothesis. Nevertheless, they indicated that there were difficulties in conducting experiments to support this hypothesis. Reliable and valid tests of attributes of interest and equivalent classes were difficult to manipulate in experimental research. Also, other factors like different teachers, schools, and principals should be taken into account before supporting evidence was adduced. Gardner and Tremblay (1994, p.366) stated that motivation, from their perspective, was a complex and dynamic process including various latent factors instead of merely an integrative/instrumental framework. Consequently, they supported the exploration and expansion of L2 motivation constructs and other theories backed up by empirical research.

Oxford (1994, p.514) suggested that major ideas arose when people were ready for them. Thanks to the contribution of social psychology, the 1990s were a period in which motivation language learning theories were growing and shifting, a period christened the 'storming phase' by Dörnyei.(1994b, p.522) Along with the abundant discussion and reflection, Gardner further expanded new constructs based on the socio-psychological theory to explain the different facets which had been evoked.

3.1.3 Gardner's revised construct

The initial attempt to revise the social educational model took place earlier than Gardner's response to the three articles described above. In 1992 and 1993a, Gardner and MacIntyre presented a model (**Fig. 3.2**, Gardner & MacIntyre, 1992, p.212) for integrating both cognitive and affective variables. In this revision, four major parts are the same as in the model of 1985: the Socio-Cultural Milieu, Individual Differences, Language Acquisition Context and Language Learning Outcomes. Regarding the 1985 model (**Fig. 3.1**, see section **3.2.1** in this thesis), the individual differences contained two parts, referring to cognitive and affective factors. This was different from the previous model, which included intelligence, language aptitude, motivation, situational anxiety, self-confidence, personality attributes and learning styles. Though it looked different from the 1985 model, the new model presented much more extensive components in comparison to the original model. The cognitive factors included intelligence, language aptitude and language learning strategies and the affective factors included attitude, motivation and language anxiety. In the language acquisition context, the original 'formal language training' and 'informal language experience' were replaced by a formal context with direct instruction and an informal context of a voluntary nature which meant that participation depends on the individual's will. A dynamic model with both affective and cognitive factors hence emerged. This reminded teachers that their experiences in the classroom could influence not only the language competence of learners but also their affective motivation (Gardner & MacIntyre, 1992, pp.212-213).

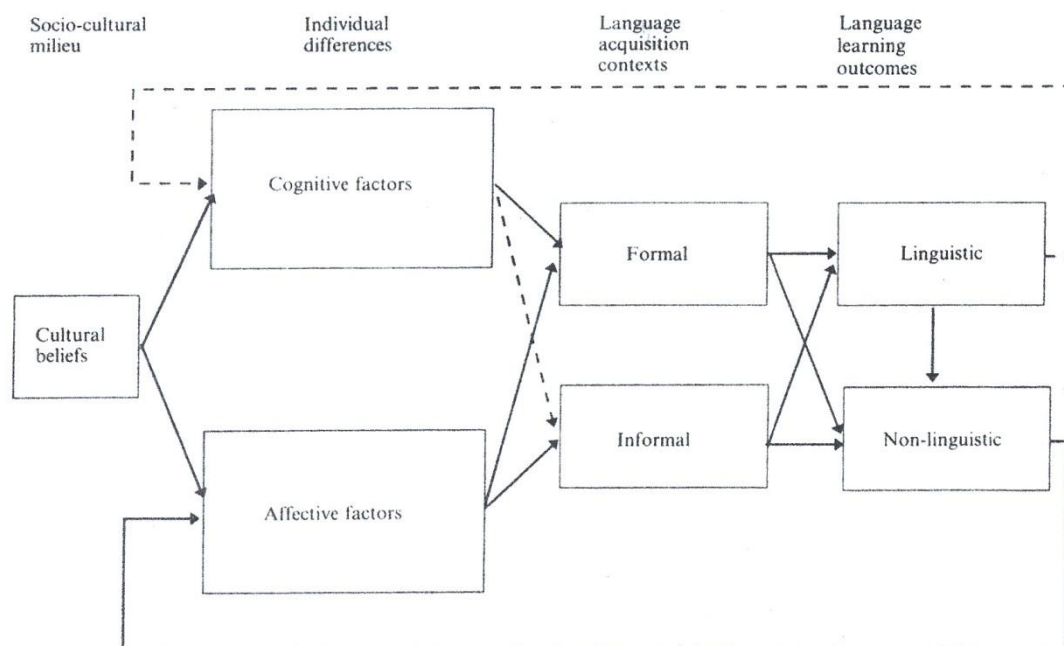


Figure 3.2 Second language learning: Part 1 (Gardner & MacIntyre, 1992, p.212)

In this model, intelligence was defined as how well and how quickly the learner could comprehend the teacher's instructions and learners with higher aptitude tend to devote more time to developing their skills. Language learning strategies referred to the attempts of learners to structure their learning behaviour toward effective results (1992, p.216). Regarding the affective section, attitude involved the affective reaction of learning with regard to the instructor, the class, the textbook and even the language laboratory. Motivation here covered the desire to achieve a goal, the effort extended in achieving a goal and the satisfaction with the task. Language anxiety referred to the learners' daunting experience of using a little-known language in a certain situation. (Gardner & MacIntyre, 1993a, pp.2-7). Through discussion of these dynamic individual differences, a theoretical integration emerged to reflect the major possible factors influencing learners' motivation toward language learning. A detailed figure was presented to demonstrate the broader picture in both cognitive and affective factors (**Fig. 3.3**, Gardner & MacIntyre, 1993a, p.8). To give empirical support to the model, including dynamic factors, Gardner and MacIntyre (1993b, p.157) looked into the

relationship between these factors and learners' achievement. They investigated 92 students of university-level French in Canada. Participants were tested in small groups within 2 hours session to complete the questionnaires that contained 46 measures. Through factor analysis and correlation coefficient tests, they found that instrumental orientation was shown as unrelated to the differences in proficiency. On the other hand, the affective variables had been taken as significant factors with regard to proficiency. This suggested that integrative orientation had a higher level than instrumental orientation in the relationship with achievement and also supported Gardner's previous arguments (1993b, p.191).

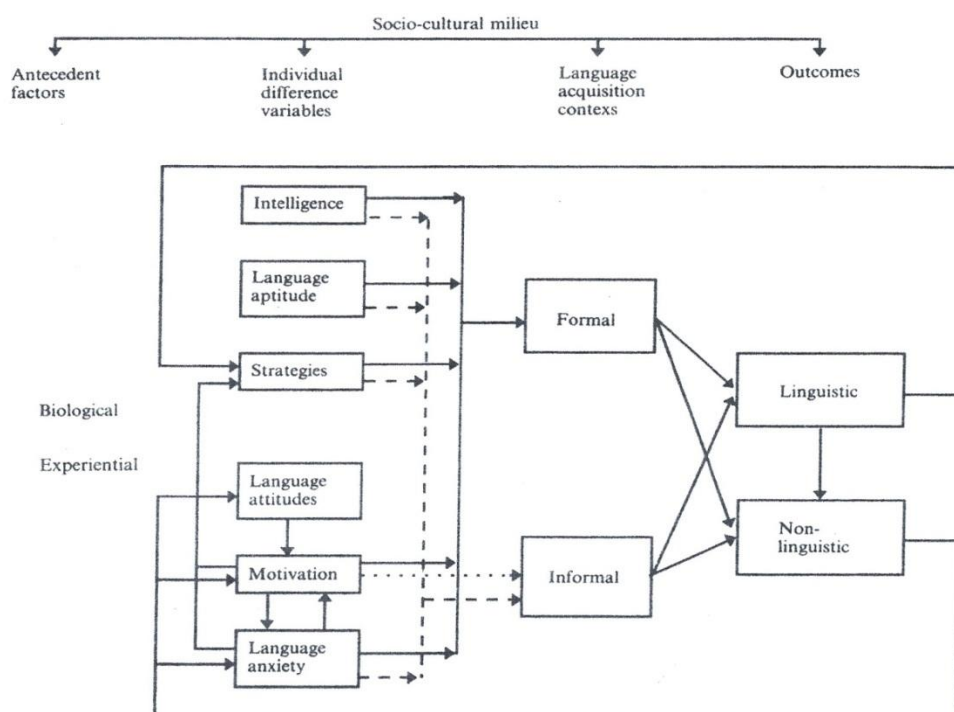


Figure 3.3 Second language learning: Part 2 (Gardner & MacIntyre, 1993a, p.8)

Following the suggestions and discussions by Crookes and Schmidt (1991), Dörnyei (1994a) and Oxford and Shearin (1994), Tremblay and Gardner (1995, pp.505-506) further proposed a revised language learning motivation model which considered other motivation constructs from other research areas. As they admitted, however, no single theory could include all factors associated with motivational behaviour. The revised model clarified the relationships between existing variables and extended them to form a wider vision of

motivation constructs. It was not the authors' intention to revise constructs to make them perfect. Instead, it was seen as a challenge to amend the insufficiency of the previous model and provide better understanding of language learning motivation. Furthermore, as they pointed out, the variables contained in the revised model should be able to provide new theoretical insights into mediators between language attitude and achievement. For example, better performance with increasingly difficult tasks could not alone explain the reason for the existence of better performance. Conversely, when the effort required for difficult tasks was used to explain better performance, this effort could be viewed as a mediator between difficult tasks and better performance. There should be an effort to connect better performance and more difficult tasks. Thus, the initial definition of motivation in the socio-educational model focused on the effort to achieve the goal, the desire to learn a language and the satisfaction with the learning tasks. In the new expanded model, a distinction between motivational behaviour and motivational antecedents was proposed. The former referred to the observable individual characteristics, such as effort, persistence and attention. The latter, on the other hand, meant that cognitive or affective characteristics such as intrinsic/extrinsic motivation, need for achievement, expectancy-value, learned helplessness and goal-oriented behaviour could not be directly observed. This suggested that the revised model embraced both social psychological constructs and the cognitive factors discussed previously.

Within the newly added factors in the new model (Tremblay and Gardner, 1995, pp. 506-509), expectancy meant the anticipation of achieving the outcome and higher expectancy led to higher motivation for performing the activity. If language learners believed the goal could be reached, they would devote more effort to it. Tremblay and Gardner (1995, pp.507) cited Bandura (1989) with regard to the idea of self-efficacy referred to a belief in one's competence to complete a specific task or performance. It was easy to confuse this with the concept of self-confidence, which was mainly concerned with anxiety. Self-confidence was

often associated with language proficiency in tests, whereas self-efficacy was related more to a learner's belief in their own level of performance. Valence was the subjective value that the learner related to the specific outcome and could also be defined as the desire for and attractiveness of the task. A low value placed on a performance could lead to lower motivation. Causal attribution derived from attribution theory sought the reason for an outcome. The assumption was that the interpretation of past events could predict future behaviour. Furthermore, the internal attribution (such as ability and effort) was usually considered to be an adaptive attribution whereby learners viewed success as being controllable, whereas external attribution (such as luck and task difficulty) was taken as a maladaptive attribution whereby learners perceived success as uncontrollable. Goal-setting theory presumed that specific goals could result in better performance. Learners with general and vague goals usually displayed less persistence.

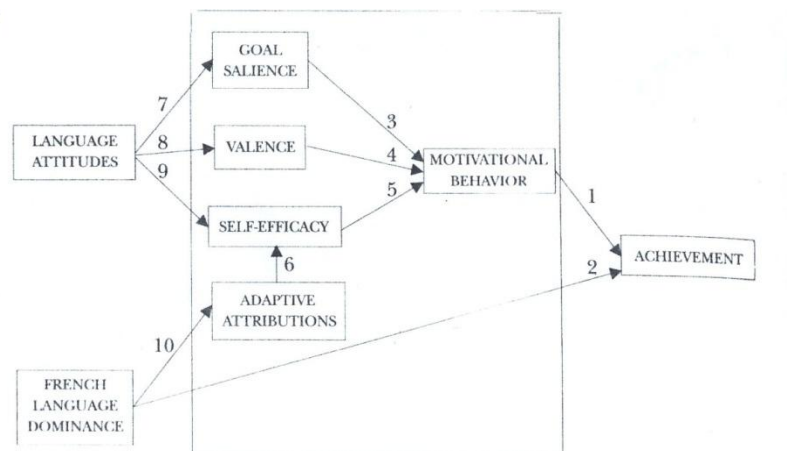


Figure 3.4 A proposed motivational model (Tremblay and Gardner, 1995, p.510)

Tremblay and Gardner (1995, p.510) conducted an empirical investigation on 75 students in a francophone secondary school in Canada. Participants completed motivational and attitudinal measures. A LISREL (linear structural relations) structural equation model was built which confirmed three new variables, goal salience, valence and self-efficacy. (Fig. 3.4, Tremblay and Gardner, 1995, p. 510) A positive language attitude determined a specific goal and the particular target promoted the learner's motivation. A high value placed on the

task and high ability attribution also resulted in better motivation. It was hence possible to improve motivation with practical strategies promoting the condition of variables. For example, teachers could help students recognize more specific goals in class or practice attribution retraining techniques. Given the limitations on the size of the sample, however, direction of causation and the incomplete nature of language learning motivation models, Tremblay and Gardner recommended more research into the relationship between motivational disposition, motivational aspects of classroom and motivational changes.

With regard to this necessity for empirical research, Gardner, Tremblay and Masgoret (1997, p.355-356) examined the individual differences in second language acquisition and attempted to arrive at a fuller model. The variables included language anxiety, language aptitude, attitude and motivation, field dependence/independence, language learning strategies and self-confidence. The relationships between these individual variables were assessed through causal modelling. The result suggested that the variables did not operate independently of one another in terms of L2 achievement. The model supported the proposition of the socio-educational model that motivation and language aptitude were responsible for achievement in L2. With reference to the limitations of this research, causal modelling could provide clarification of the relationships obtained but it did not prove that the existing model was correct. Consequently, as the authors concluded, this model was not self-fulfilling. In fact, it could provoke further and better research on the influences of individual difference variables.

To further explore the relationships among the variables in the language learning motivation model, Gardner (2000, p.10) discussed the factors of causation and correlation. He suggested that, in certain conditions, correlation may in fact imply causation. When the independent variable was randomly assigned to participants, the validity of the causal model would increase. This multifaceted approach provided greater confidence about determining

the association between variables, although correlation did not necessarily mean the same thing as causation. Consequently, the research direction changed from exploring more new variables to looking at the internal relationships between variables in the model.

Gardner (2001a, pp.4-9) considered the relationships between the various factors in the model and raised the issue of changes in motivation over time. He looked at motivation changes from the perspective of the learners' past, present and future. Their past referred to past individual experience, family and cultural background regarding the learned second language. The present indicated the influence of the learner's present learning situation, such as materials, teachers and curriculum. The future emphasized the usages of the target language which included achievement and willingness to communicate.

Gardner (2001a, p.10) also distinguished between reason, orientation and motivation. He saw reason as evoking psychological attention to language learning, while he saw orientation as a collection of reasons that reflected the expression of similar or common goals. Motivation not only required the appropriate initial psychological approach towards studying a language, but also extended persistence regarding the effort, desire and enjoyment of language learning. Gardner further defined language learning as not only comprehending the knowledge of the language but also including relatively fluent conversation. Thus, a distinction between learning a language and studying a language was made. *Studying* a language could refer to learning vocabulary, grammatical rules and passing a course whereas *learning* a language should establish genuine competence to communicate in the target language.

Gardner (2001b, p.1) also depicted his revised model from the perspective of students, teachers and researchers. In his previous work, the focus had been on the social educational model, which emphasized the influence of the social context on language learning. Depending on the different possible identifications of the target language, the affective

influence on language learning could affect the motivation of language learners in various ways. Nevertheless, the attitude toward a language within a particular social context might not be readily changeable. This could suggest the possibility of changing attitudes being reduced by personal efforts, in a short time within a language course. Thus, if a motivation model only consists of social factors, there is little chance of teachers conducting effective action to improve students' motivation. Consequently, no matter how thoroughly motivation models are built, teachers and students could not benefit from the researchers' work. If, however, the motivation models included factors that might not be stable over time, it may be possible for teachers to promote students' motivation. Gardner (2001b, p.4) discussed its possible implications for teachers and students in detail. Firstly, he identified the elements of his revised model and established their stability. Then he conducted empirical research to examine the hypothesis and concluded that some motivations did change over time. This provided teachers with ways to enhance students' motivation and fulfil the role of researchers with regard to practical impact. Gardner's social educational model had successfully turned the focus of language learning away from the traditional perspective (which considered language learning to be related to intelligence and verbal ability) towards a focus on affective variables such as social attitude toward the target language. The time-consuming nature of language learning made motivation one of the most important central elements in determining success in persisting with language acquisition. Although language learning is on the curriculum in school, it is very different from other subjects. A course of a term or even a year cannot guarantee success in learning a language. A teacher with sufficient language proficiency may not be enough to make students use the target language. With regard to such problems, Gardner revised his model again to attempt to ameliorate the previous widespread ignorance of teachers' roles in language learning. (Gardner, 2001b, pp.1-4).

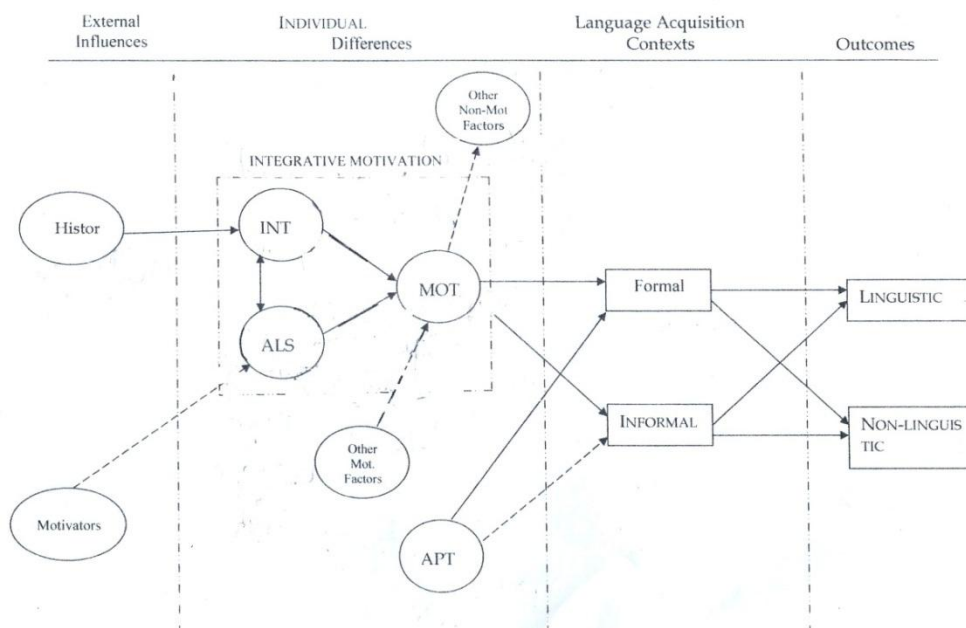


Figure 3.5 Revised Socio-educational Model (Gardner, 2001b, p.5)

(INT: Integrativeness; MOT: motivation; ALS: Attitude toward learning situation; APT: Language Aptitude)

According to Gardner's revised model (2001b, p.5) (**Figure 3.5**), the external influences included 'History' and 'Motivator'. 'History' referred to the socio-cultural milieu and family background which influenced the learner's belief about the value of learning a language. These past experiences of language were considered to involve certain personal conflicts which other school subjects like arithmetic or geography might not involve. This could be connected to the conception of integrativeness being related to one's 'self' and one's own 'willingness'. The term 'Motivator' referred to the actions that teachers could take during a language learning process. Integrativeness, attitudes toward learning situations and motivation were all elements of integrative motivation. There were also other motivation factors (such as instrumental orientation), other non-motivation factors (such as strategies) and language aptitude. In the language acquisition context, formal contexts (such as classroom settings) and informal contexts (such as radio and TV) were included. Further, there were linguistic outcomes like language phrases and non-linguistic outcomes like language anxiety and willingness to use. Among these factors and elements, integrativeness

was considered as more stable owing to the influence of a community and the fact that one's past cannot be changed. Nevertheless, attitudes toward learning situations were concerned with attitudes in the learning setting. This suggested a greater possibility of change in the various language learning contexts, with regard to the teacher, one's classmates, the course materials and even the extra-curricular activities associated with the course, etc. (2001b, p.8). Gardner, Masgoret, Tennant and Mihic (2004, pp.1-31) conducted a study to evaluate this hypothesis. They assessed the stability of these elements over a one-year intermediate-level university French course in United States. 197 university students were tested on six different occasions. In the first and last session, participants completed the AMTB test with 7 points Likert scale. For the other four sessions, participants spent 5 minutes to answer six questions dealing with state motivation and state anxiety. The collected data were further analysed through one-way repeated measures analysis of variance, one-way multivariate analysis of variance and two-way split-plot multivariate analysis of variance. They found that both integrative and instrumental orientations tended to be relatively stable and could be considered as historical factors because of their early establishment in students' lives. Attitudes toward learning situations and motivation varied, as expected, although they might change in certain predictable ways. The direction of such changes could vary depending on the student. Students with higher achievement tended to improve their motivation and reduce their language anxiety, whereas students with lower achievement ended up with the opposite result. Average students remained unchanged. Thus, teachers may develop different strategies to improve students' motivation based on researchers' hypothesis and investigations in order to improve the success of language learning. Criticism of Gardner's previous model can be explained by these revised constructs and ensured that the new model would have a practical impact on language learning motivation.

Following the confirmation of the importance of the teacher's role in language

learning, Bernaus and Gardner (2008, p.387) conducted research to investigate the relationship between teaching strategies, motivation and English achievement. Thirty-one Spanish teachers and their students were asked via independent questionnaires about their perception of teaching strategies in class. In order to link these strategies with motivation and English achievement, a mini-AMTB was used to monitor the motivation scales, while reading and listening tests were conducted to measure students' achievements in English. The teaching strategies applied in the study were divided between traditional and innovative strategies. The traditional strategies were considered to be more teacher-centred and the innovative strategies were more student-centred. The results showed that students and teachers have different perceptions of teaching strategies. The authors found that integrativeness, attitudes toward learning situations and instrumental orientation could predict motivation in learning English and that motivation was a predictor of English achievement. They also found that language anxiety and attitudes toward the learning situation gave negative predictions regarding English achievement. They then conducted a hierarchical linear modelling analysis and found that only the strategies reported by students had a positive effect on the predictability of motivation in English achievement. Only when the affective attitude toward the learning situation influenced motivation was there an impact on language achievement. Teachers who used specific teaching strategies could not promote students' motivation if students could not be made aware of how these strategies worked. Language achievement then could not be predicted, even if these strategies were applied.

By this point in time, the revised model of Gardner and his associates had been fully developed and explored. While Gardner was constructing his revised model, other researchers were also advancing their language motivation theories. The next section demonstrates some of their achievements.

3.2 Development of motivation theories in language learning

3.2.1 Expectancy-value theory in language learning motivation

Expectancy-value in general motivation theory focuses on learners' inborn curiosity and emphasises not *what* motivates learners but what directs and shapes their inherent motivation. According to expectancy theories, the two key factors in a successful performance are learners' expectancy of the success in a given job and the value that they attach to the success of that work. Nevertheless, no real language learning motivation model has been built to describe the 'expectance-value mode'. Instead, the components discussed in the general motivation of expectancy theories are included in L2 (second language) learning motivation. For this value, the intrinsic and extrinsic values were covered in Gardner's revised model as a 'valence' component. Intrinsic value was measured via the desire to learn L2 and attitudes towards learning L2. The extrinsic value was measured by the integrative and instrumental orientation scales (Dörnyei, 2001a, p. 55). Regarding the expectancy of success, in this section the main focus will be Clément's concept of self-confidence and attribution theory.

Self-confidence is generally defined as the belief that a person has the ability to produce results, accomplish goals or perform tasks competently. Clément and Kruidenier (1985, p.24) identified two subcategories within the concept of self-confidence. These were second language use anxiety and self-rating of proficiency. Both of these were highly correlated. Self-confidence was a more general perception of learners' potential and self-efficacy was a more specific form of perception of a concrete task. Moreover, self-efficacy was regarded as being related to cognitive factors, while self-confidence was a socially defined conception. However, it was noteworthy that self-confidence also had a cognitive component, the 'perceived L2 proficiency' (self-rating of proficiency).

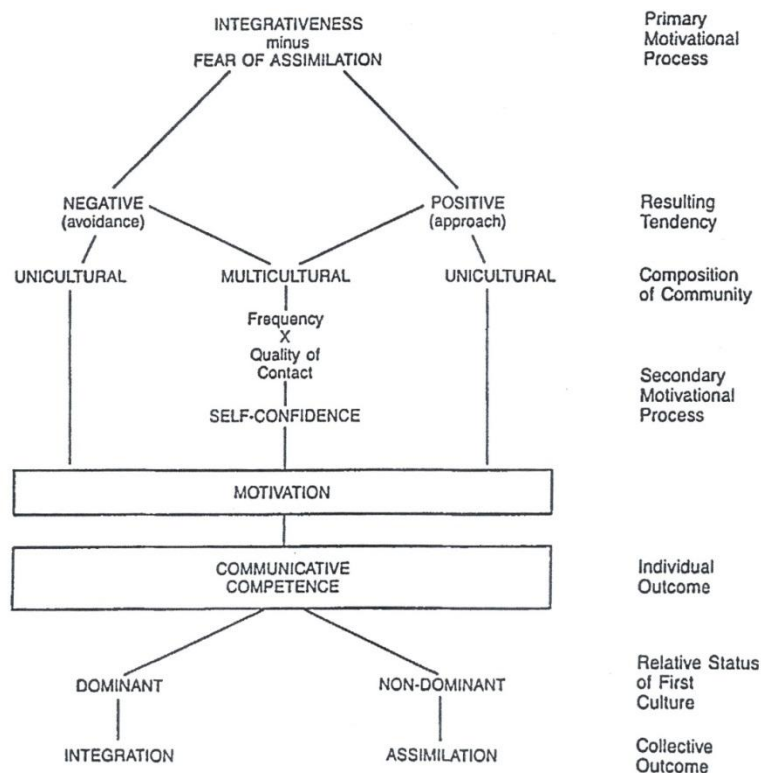


Figure 3.6 Clément's motivational model (Clément & Kruidenier, 1985, p.23)

Clément and Kruidenier (1985) conducted an empirical study to offer supporting evidence for the 'social context model that Clément proposed in 1980. 1180 francophone students enrolled in grade 7, 9 and 11 in Canada participated in the study. Data was collected via questionnaires in French which included Likert items followed analysis LISREL to examine structural equation models. Clément and Kruidenier first indicated that the social educational model of Gardner was unclear about an individual's psychological representation of the social milieu. Clément and Kruidenier therefore provided an alternative model of the individual mediational process (**Fig. 3.6**; Clément & Kruidenier, 1985, p. 23). This model concerned the social-motivational factors determining communicative competence in second language learning. In this model, communicative competence was concerned with both linguistic and non-linguistic aspects. Meanwhile, two processes were seen to influence communicative competence. The first was the primary motivational process, which involves integrativeness vs. fear of assimilation. Integrativeness was related to a positive affective predisposition

toward the second language. Fear of assimilation corresponded to the negative pole of the primary process. Integrativeness and fear of assimilation had opposite effects on the secondary motivational process. The results of motivation depended on the linguistic milieu. In a unicultural setting where little contact with the target language was available, the tendency resulting from the primary process directly determined the motivation. In multicultural settings where contact was possible, self-confidence with the second language and the resulting tendencies determined the secondary process. The frequent and pleasant contact would develop learners' self-confidence to use the second language and then achieve self-confidence in those settings. This then became a determinant motivation to learn the target language. Clément, Dörnyei and Noels (1994, p. 436) further conducted an empirical research concerned with acquisition of English in Hungary which was a unicultural setting. 301 Grade 11 students answered questionnaires assessing attitude, anxiety and motivation. The followed factor and correlational analysis confirmed that the significance of self-confidence on the language learning motivation could also be applied to the foreign language environment.

Attribution theory in language motivation was initiated from a notable nature of L2 language learning. Mastering a second language usually requires a long time and many people face countless failures on the way. How people process these failures and successful past experiences can impact on how they respond in their future learning. The perception of learners of the causes of their success or failure could influence their future performance. There were seen to be four common causes: ability; task difficulty; effort; and luck. These could be categorised according to internal/external stability, and whether the learners could control it. Hence ability would be viewed as internal and stable while effort would be taken as internal, changeable and as being under the learner's control. Moreover, task difficulty referred to external and stable situations, while luck was related to things that were external,

changeable and not under the learner's control. Learners who believed the failure was the result of not trying hard enough would work harder in the future, while those who believed success or failure was out of their control might put less effort into their future tasks. (Dickinson, 1995, p. 171)

Dörnyei (2001a, p. 57) indicated that the number of attributional studies of language learning motivation was limited due by the traditionally quantitative nature of L2 motivation research. This was seen as a rather complex way of exploring the effects of causal attributions as learners have various types of attributions, attributional styles and biases. Despite the existence of positivist paradigms, Williams and Burden (1999) attempted to conduct a small-scale study via structured interviews to investigate learners' attributions for success and failure in learning French. Four school year groups were selected for the study, Year 6 (ages 10-11), Year 7 (ages 11-12), Year 9 (ages 13-14), and Year 10 (ages 14-15) in three schools where French was taught in Southwest of England. The data were content analysed with the principles of a grounded approach in three groups, (a) Year 6, (b) Year 7, and (c) Year 9 and 10. The findings suggested that the students in year 6 and 7 viewed the main reasons for success as listening and concentrating. The students in year 9 and 10 had a wider range of attributions which included ability, level of work, circumstances and the influence of others. The differences in retribution between different age groups could indicate that students may change their attribution through time movement. The developmental and maturational differences occurring in the language classroom suggested that attributions were socially constructed. Conceptions of what could be considered successes and failures came from the expectations and demands of the curriculum and from the interaction with significant others. In other words, if the emphasis was placed on achieving high marks, the students would judge getting high marks as a success rather than focusing on an internal sense of development. If there was an emphasis in the classroom on developing the ability to learn

effectively, using appropriate strategies intelligently, and developing autonomy and self-awareness, then students would develop internal attributions more effectively. Meanwhile, a teacher's action could be influenced by the school environment. If a school valued examination achievement, the learners would focus on the performance rather than learning. The environment and significant others played a much more significant role in influencing learners' attributions. The internal attributions were formed not only from learners' internal thoughts but also from the direct or indirect influence of their teachers or peer groups. More studies were suggested to investigate how individuals changed their attributions over time within different contexts.

3.2.2 Self-determination theory

Self-determination theory is focused on the distinction between intrinsic and extrinsic motivation. The former concerns behaviour conducted for experiencing pleasure and satisfaction. The latter refers to behaviour related to receiving extrinsic rewards and avoiding punishment. Self-determination is derived from the work of Deci and Ryan (1985), who regarded intrinsic motivation as self-determined motivation and extrinsic motivation as forms of controlled motivation.

Intrinsic orientation in L2 motivation has been defined as the reason for forms of L2 learning that came from learners' inherent pleasure and interest in activity which is being undertaken for spontaneous and associated satisfaction. (Noel, 2001, p. 45) According to Deci and Ryan (1985), these feelings of enjoyment come from developing a sense of competence over a voluntarily chosen activity. Three types of intrinsic orientation were distinguished. The first was intrinsic-knowledge that involved the pleasureable feeling that came from developing knowledge and satisfying the learner's curiosity about a topic area. The second was intrinsic-accomplishment, which referred to the enjoyable sensations that were

associated with surpassing oneself and mastering a difficult task. The process of achievement was emphasised rather than the final result. The third was intrinsic stimulation, which indicated the simple enjoyment of the aesthetics of the experience. Such types of intrinsic motivation were referred to by Csikszentmihalyi (1975) as 'flow'.

Extrinsic orientations were defined as reasons that were instrumental to some consequences and the range of extrinsic orientations could be listed as integrated regulation, identified regulation, introjected regulation and external regulation. (Noel, 2001, pp.46-49) External regulation was considered to be the least self-determined and learners learned L2 due to contingencies in the environment such as attaining rewards, course requirements or avoiding losing a job. Introjected regulation was seen as being more internalised than external regulation and learners were motivated to demonstrate their ability or avoid failure to regulate their self-worth perception. In other words, they performed the learning task because of an internally governed system of reward and punishment. Identified regulation was more self-determined than introjected regulation. Learners chose to be involved in the learning activity due to their recognition of its significant value for themselves. Integrated regulation was the most self-determined of extrinsic orientations. It meant that identified regulation had been evaluated and brought into congruence with learners' values and needs. Being regarded as an aspect of self-concept, it was unlike intrinsic motivation for the activities were not due to enjoyment. Meanwhile, integrated regulation should also be distinguished from Gardner's integrative orientation. The integrative orientation of Gardner referred to the desire to interact and identify with members of the L2 while integrative regulation was coherent with other aspects of the self.

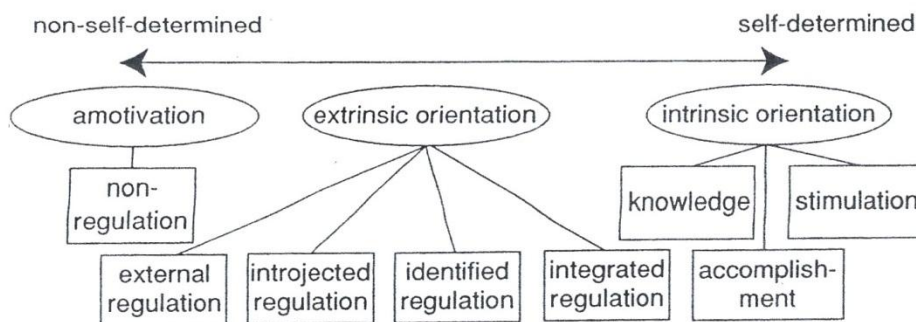


Figure 3.7 Orientation subtypes along the self-determination continuum (Adapted from Ryan & Deci, 2000 in Noels, 2001, p.49)

Besides the intrinsic and extrinsic orientations, there was a third category, 'amotivation'. This was the opposite of intrinsic orientation and learners could not relate their behaviour to a successful result. At one extreme, it was similar to 'learned helplessness' as learners did not expect a desired outcome. In a situation where learners were passively engaged in the necessary learning activities, they would quite likely quit once their compulsiveness was released. Additionally, if the situation was traumatic, extended anxiety might lead to depression. Revising these categories of motivation and their subtypes, all the components mentioned were organised to show their direction and differences. The structure adapted from Ryan and Deci (2000) is presented in **Fig. 3.7** (Noels, 2001, p. 49). Noels further indicated that intrinsic motivation was associated with lower anxiety and more positive attitudes towards language learning. She referred to Gardner's suggestions(1985) that both integrative and instrumental orientations were extrinsic for learners who were required to achieve goals in both conditions and were not learning for their personal pleasure. Nevertheless, from the perspective of attitude, both intrinsic and integrative orientation shared positive attitudes towards the activity and learning process.

In addition, certain psychological needs of learners need be fulfilled in order for them to behave in a self-motivated manner. Noels (2001, p. 54) listed three such psychological

needs as autonomy, a sense of competence and relatedness. *Autonomy* is the behaviour of learners representing themselves and they could feel self-determined when accomplishing them. *A sense of competence* means that learners were motivated to develop competence due to the feeling of being able to strengthen their control. *Relatedness* reflects the propensity to be securely connected to a larger social whole. These needs are critical in promoting learners' intrinsic motivation. To support these needs, various types of feedback can be given by relevant others. Concerning such relevant others in the L2 context, teachers, family members and members of the L2 community were seen as critical influences, although other related figures also played a part. Teachers were those who students directly contacted in the classroom and they hence played a significant role in influencing learners' motivation (Noel, 2001, p. 56).

Noels, Clément and Pelletier (1999, p. 30) further conducted an empirical study to explore the impact of teachers' communicative style of students' intrinsic and extrinsic motivation. Their findings suggested that intrinsic motivation was associated with teachers' particular communicative styles. Language teachers who were perceived as too controlling and as failing to provide constructive information reduced identified regulation and intrinsic motivation. On the other hand, teachers who were perceived as supporting autonomy and providing informative feedback enhanced learners' sense of self-determination and enjoyment. Nevertheless, when learning was pursued for extrinsic reasons, such distinctions were not significant and the teachers' style was not necessarily seen as being relevant to learners' motivation. Furthermore, it was also found that teachers could change the students' type of motivation and teachers could indirectly facilitate their learning outcome through promoting motivation. Using this interpretation, self-determination was able to assess teachers' teaching strategies (Noels et al., 1999, p. 31). Family members, as another type of relevant others in the L2 context, included not only parents but also spouses and romantic partners,

grandparents, siblings and other family members. As suggested by Gardner (1985), the active and passive attitude of parents toward L2 learning would not directly influence learners' achievement in L2 but was concerned with their willingness to persist in language study. The third factor regarding relevant others in the L2 context was members of the L2 community. The quality and frequency of contact with L2 groups would influence motivation and a positive and distinct group identity would affirm learners' self-esteem. Meanwhile, communication with the L2 community could also be linked to autonomy-supportiveness, informative feedback and relatedness-enhancing involvement (Noel, 2001, pp. 56–57). Thus, the more internalised the reason for L2 learning, the more comfortable and persevering learners would be.

3.2.3 Schumann's neurobiological model

The theoretical development of L2 language learning has long been concerned with social context, internal cognition and environment influences, a novel line for the research started with Schumann (1978) discussing the influence of 'affective' factors on second language learning. He connected the abstract theoretical construct to concrete biological mechanisms in the brain. He suggested that cognitive factors influenced second language acquisition only partly and that affective factors should work as an emotional drive for language learning (Dörnyei, 2001a, p. 62). With new developments in neuroscience, different new findings on the brain had brought cognitive research onto a new path. Language learning had been concerned with cognitive development and the results of these neuroscience researches could be applied. Schumann (1992, pp. 293–295) therefore called for some incorporation of the language acquisition process with neurobiological reality.

Schumann (2001a, p. 21) provided an analogy between foraging for food and learning a language. From a biological and evolutionary perspective, one process was usually adapted

to another purpose. Just as animals forage for food, people may forage for information, knowledge and skills. Foraging can be divided into searching, encountering and deciding. Organisms moved through the environment looking for potential food places. When they encountered stimuli predictive of reward, dopamine responses were activated. They then needed to take decisions to act to receive the reward. The significant criteria for making the decisions were concerned with whether the foraging effort could generate adequate energy in relation to energy use. This process also involved the forager's ability to perform the task effectively. Based on the judgement of learner's ability, he/she needed to decide to continue finishing the task or taking another alternative food source.

Such foraging processes were identical with humans' L2 language learning. A learner generated an incentive motive to acquire knowledge and search the environment to locate sources of relevant information. The L2 learners hence needed to look for adequate environments where L2 language was used, like language schools or language textbooks. When they encountered a possible place, they continued to collect information to see the potential of learning on L2 language. They then made the decisions and took the action to buy, for example, a self-learning L2 language textbook. As they started learning, they evaluated their effort and the possibility of mastering the L2. Once they found that it was not possible to achieve the goal, they would give up and perhaps choose another alternative way to learn L2, such as registering at a language course in a language school. Meanwhile, the food foragers needed to detect not only the potential of food resources. They also needed to assess the possible sources of toxicity or dangers from predators. Similarly, language learners needed to detect not only the possibility of learning the L2 language but also other distractions like films, friends or parties. Therefore, it was necessary for learners to consider all the strategies required to achieve their learning goals, just as foragers considered the competition between foraging time and the demands of other tasks (such as social obligation or recreation).

Accordingly, both learning and foraging involved the generation of an incentive motive or goal and the motivation needed to be transformed into motor and cognitive activity in order to achieve that goal. Thus, the neural mechanisms that occur in such similar processes may be largely identical (Schumann, 2001a, pp. 24–26).

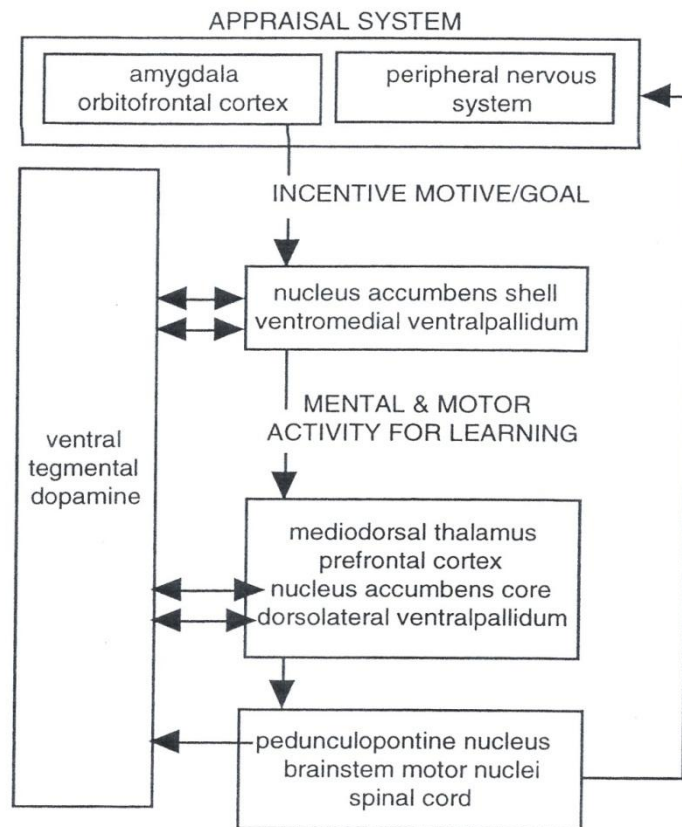


Figure 3.8 The neural system for transforming incentive motivation into mental and motor activity (Schumann, 2001a, p.22)

Schumann therefore proposed a model to depict the neural system involved in the transformation of motivation into action (see **Fig. 3.8**; Schumann, 2001a, p. 22). Based on the foraging theory, the first stage for foraging behaviour was the generation of an incentive motive or goal. This incentive motive/goal was initiated from the amygdala of the temporal lobes, the orbitofrontal cortex of the prefrontal area along with the peripheral nervous system. This forms the appraisal system for the incentive stimuli related to the forager's goal and

indicates that the brain could evaluate the environmental stimuli and respond accordingly to the emotion led by the stimuli. Schumann defined appraisal as the assessment of the emotional and motivational relevance of agents, events, and objects encountered by an individual in its environment (Schumann, 2001b, p. 23). Depending on the novelty, pleasantness, goal/need significance, coping potential and self/social image of the stimuli, the emerged stimuli were examined by the appraisal system. Schumann (1997, pp. 174–178) explained more about these types of stimulus. Firstly, novelty was the degree of unexpectedness or familiarity. Secondly, pleasantness represented the attractiveness of the stimulus. Thirdly, goal/need significance referred to the instrumental satisfying needs or achieving goals. Fourthly, coping potential showed the willingness of learners to cope with the event. Fifthly, self and social image was related to individuals' self-concept. It should be noted that only positive appraisal could lead to eventual proficiency. The negative appraisals may lead to abandonment of the learning activity and leave the process uncompleted.

After the incentive motive/goal had been generated, it would be maintained and strengthened by the nucleus accumbens shell and the ventromedial ventralpallidum. The working of the nucleus accumbens shell and ventromedial ventralpallidum would interact with the dopamine from the ventral tegmentum. Finally, the incentive motive or goal would be transformed into mental and motor behaviour. The message would then be sent from the ventromedial ventralpallidum to the mediodorsal thalamus and then to the prelimbic prefrontal cortex. Then, the message would turn back to the core segment of the nucleus accumbens and the dorsolateral ventralpallidum. At this stage, the dopamine from the ventral tegmental still supported the mental and motor behaviour. The message about the behaviour was directed to the pedunculopontine nucleus, the brainstem motor nuclei and the spinal cord, which interacted with dopamine from the ventral tegmental. This was the system that transformed the incentive motive into goal-directed and mental foraging activity. It can be

taken as a parallel with second language acquisition based on the similarity between foraging and language learning (Schumann, 2001a, p. 23). It is noteworthy that the foraging differences between wild and domestic animals can be pinned out. Unlike the situation with wild animals, the foraging decisions for cows and sheep are made by farmers and the herders. This is very similar to the situation in educational settings. Students in institutions also rely on teachers to access rich knowledge sources. Self-taught learners may make less optimal decisions, while teachers can provide more efficient advice about where to place learners' effort. If learners disagree or feel uncomfortable about a curriculum, they can choose to adopt a different foraging strategy or abandon the goal. In this case, self-taught learners may work like wildt animals, foraging in a way that is less safe but which involves more freedom of mind.

Schumann (1997) offered evidence for the idea that stimulus appraisal constituted the affective basis for motivation in second language acquisition. First, he showed that questionnaires in the motivation studies for the second language acquisition were on the basis of the learner's appraisal of the language learning. For example, the 10 items of the desire to learn the language scale in Gardner's AMTB (Gardner, 1985) had been viewed as the appealingness of an activity and elicited the learners' direct appraisals of the language learning activity. (Schumann, 1997, pp.67-70) Meanwhile, he also showed the stimulus appraisal perspective was compatible with alternative motivational frameworks to understand motivation in SLA. (Schumann, 1997, pp.82-102) He further examined introspective diary studies and autobiographies of second language learners to reveal the chronicles of the learners'. In the mid-1970s, Schumann and his colleagues conducted researches concerning affective aspects of second language acquisition by having learners keep intensive diaries of their reactions to teacher, method, text, target language, its speakers and cultural in which it is embedded. For example, Schumann (1997, p.104) summarized about a learner's reflection on

her coping mechanism vis-à-vis her housing and her language learning. Due to the difficult housing situation, the learner had negative learning experience while learning Arabic in Tunisia. On the other hand, the comfortable accommodation led into a pleasant learning experience for the same learner in Iran while learning Persian. Such diaries and autobiographies provided sources of data on stimulus appraisal. In the summer of 1994, he collected the autobiographies and self-analysis report based on the stimulus-appraisal framework from a group of students in the Department of Language Education at the University of British Columbia. The result demonstrated extremely well how an analysis of one's various language learning experiences from the perspective of stimulus appraisal could provide an explanation for variable success. (Schumann, 1997, pp.158-1589)

3.2.4 Other conceptions of language learning motivation

Various other concepts have emerged from motivation theories. Giles and Byrne (1982, p.17) proposed an intergroup learning model related to ethnic identity. Norton (1995, p.17) posited that investment in the target language also meant investment in learners' social identity. These conceptions provided both micro and macro perceptions to integrate the individual and social structural context. Though there are also other theories in the field of language motivation, this literature review has focused on presenting the theories that centre on the relevant research questions. We now slowly turn to the model adopted in this thesis.

3.3 Dörnyei's L2 motivation theory

Dörnyei has participated in the development of L2 motivation theories since the early 90s. He has challenged different aspects of L2 motivation research and has explored various L2 motivation constructs concerning various theoretical models. Consequently, certain ideas from his researches are discussed in this review to outline the ongoing exploration of L2

motivation.

3.3.1 Foreign language learning consideration

Since Gardner and Lambert (1972) started their discussion about second language learning from the perspective of social attitudes, some studies have examined the integrative-instrumental duality constructs and have achieved conflicting results, as discussed previously. This has triggered other studies to explore the influence of motivation components in different contexts. As Dörnyei (1990, p.48) suggests, based on those research findings, the nature of a learning environment might have an impact on the nature and effect of certain motivation components. The role of contextual factors should be considered when exploring language learning motivation. Many studies at the time were conducted in the second language environment, where the target language was partly integrated in the first language environment. On the other hand, the foreign language environment might have limited goals and have little chance of contacting the target language community to form attitudes towards the target language. Dörnyei hence placed his curiosity into the foreign language learning environment and conducted a study in Hungary. He found out that, in the foreign language learning environment, wherein L2 was taught as a subject in school, instrumental motives and need for achievement could promote learners to intermediate level. Nevertheless, when learners wanted to achieve higher levels, the integrative motives played a more significant role. In other words, in the context of foreign language learning, the importance of integrative/instrumental motivation was dependent on the level that learners wanted to achieve. Meanwhile, the attitude toward the target language had less importance than the value of the target language conveyed. Dörnyei (1990, p.69) posited that ‘integrative’ motivations in foreign language learning were multifaceted and contained: 1) an interest in target language cultures and people; 2.) a desire to broaden the individual’s world view; 3) a

desire for new stimuli and challenges; 4) a desire to integrate into a new community. Sometimes, integrating a foreign target language might imply an instrumental motivation, like immigration or working in a foreign country. However, not only was the influence of integrative/instrumental motives different from second language learning contexts, but the definition of integrativeness might also vary in a foreign language learning environment.

A later empirical study conducted in Hungary, by Clément, Dörnyei and Noels (1994, pp.429-433) examined the orientation conception of a social psychological approach. Despite the different settings in the foreign language classroom, there were few differences within the second language community environment in regard to integrative/instrumental orientations. However, the attitude towards the immediate language environment might be replaced by distant friendships and cultural interests. The pragmatic outcomes might be replaced by the language media usage. In conclusion, the content of instrumental and integrative orientation in a foreign language learning setting might not be the same as in the second language environment, where the conception of instrumental/integrative duality could be applied. Throughout their study, Clément, Dörnyei and Noels (1994, p.443) confirmed the relevance of a social psychological approach to the understanding of L2 motivation.

3.3.2 Expanding L2 motivational component

According to Dörnyei (1994a, p.273), Gardner's social psychological approach played a dominant role in early L2 motivation theories. An alternative concept was consequently expected to account for L2 motivation from a more practical perception in the mainstream educational psychological research. Meanwhile, Gardner's model was based on a more general social milieu and was not enough to account for the learning motivation in the foreign language learning environment. Furthermore, the cognitive aspects were absent from the social psychological model. Consequently, Dörnyei proposed his first model to expand the

components in the L2 motivation theory (see **Fig. 3.9**) (1994a, p.280). As he suggested, the nature of L2 motivation should depend on “*who learns what languages where*”. There were three levels in the model: **language level**, **learner level** and **learning situation level**. This three-level motivation model was based on the tricomponential approach, which contained integrative motivation, linguistic self-confidence and appraisal of classroom environment (Clément, Dörnyei, & Noels, 1994, p.441).

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	
<i>Course-Specific Motivational Components</i>	Interest Relevance Expectancy Satisfaction
<i>Teacher-Specific Motivational Components</i>	Affiliative Drive Authority Type Direct Socialization of Motivation * Modelling * Task Presentation * Feedback
<i>Group-Specific Motivational Components</i>	Goal-orientedness Norm & Reward System Group Cohesion Classroom Goal Structure

Figure 3.9 Dörnyei's framework of second language motivation (Dörnyei, 1994a, p.280)

Inside the structure of three-level motivation, the language level included integrative motivation and instrumental motivation. Although the conception of integrative/instrumental motivations was also initially included in Gardner's model, Dörnyei (1994a, pp.274-275) defined this in a slightly different way. Integrative motivation in Gardner's model involved a positive attitude toward the L2 group, and a desire to interact with the community, while instrumental motivation was connected to pragmatic gains in L2 proficiency like jobs or

salaries. However, as discussed in the 'foreign language consideration' section, Dörnyei viewed integrative motivation as overlapping with instrumental motivation in the foreign language learning context. Therefore, it should be noted that Dörnyei attempted to show their differences in corresponding with his previous critique about the lack of foreign language learning consideration.

The learner level included the need for achievement, self-confidence, language use anxiety, perceived L2 competence, causal attributions and self-efficacy. The cognitive components were added at this level. Cognitive theories of motivation attributed the result of action to one's thoughts rather than an instinctive need. Information and knowledge, it was suggested, should be understood by the learner and then transformed into their beliefs. Learners therefore need to act depending on their beliefs. Dörnyei (1994a, pp.276-277) gave some explanations about the components. The need for achievement was derived from achievement theory. Learners are seen as having a high need for achievement and the pursuit of excellence for its own sake. Self-confidence was seen as the belief that one was able to accomplish a goal and produce a result. This was a more general conception compared with self-efficacy. Self-efficacy focused on one's judgement of one's ability to perform a specific action. It emphasized being able to accomplish such a 'specific' task. Causal attributions were concerned with learners' past experiences and how they attributed their success or failure. If they attributed their success to effort, they would work harder. On the other hand, if they attributed their failure to ability, they might give up learning and this could even lead to a kind of 'learned helplessness', whereby learners would believe that there was no need to do anything since it was impossible to achieve success.

The learning situation level was centred on three motivational components: course-specific, teacher-specific and group-specific (Dörnyei, 1994a, pp.277-279). The course-specific motivational components were concerned with the syllabus, teaching materials,

teaching method and learning tasks. A framework which included interest, relevance and satisfaction was used to describe the course-specific motivational components. Interest referred to the intrinsic motivation to evoke learners' inner curiosity. Relevance meant the extent to which students felt they connected with the instructions, usually for personal needs, values or goals. Satisfaction referred to the outcome of activity, especially for extrinsic rewards. Teacher-specific motivational components focused on the teachers' personality, teaching style, and their ability to give feedback and create a positive relationship with students. A framework which included affiliative drive, authority type and direct socialization of motivation was also needed to meet the teacher-specific motivational requirements. Affiliative drive refers to the hard work needed in order to please a teacher whom students like. Authority type referred to the teacher's style, which could refer to supporting or controlling autonomy. Direct socialization of motivation indicated whether teachers actively enhanced students' motivation. Group-specific motivational components emphasized the dynamics of the learning group. Within the framework of these factors, goal orientation meant the direction of group goals which were set by majority members. A system of norms and rewards was concerned with the extrinsic motives for specific types of behaviour needed to achieve effective learning. Group cohesion was seen as the strength linking group members. Classroom goal structures referred to the style with which students worked, which could be competitive, cooperative or individualistic.

Dörnyei's purpose was to construct a three-level framework to build a comprehensive model offering more practical guidelines for the education environment. He also suggested motivation strategies based on the three-level motivation frameworks for instructional applications. Meanwhile, these strategies indicated that further studies in this area were needed, as will be discussed in the next section.

3.3.3 A process-oriented model

As Dörnyei (1994b, p.522) indicated, the 1990s was a turbulent phase, since various conflicting ideas developed and suggestions were made. Dörnyei quoted Gardner's words that L2 motivation needs "construct validation" and "empirical research". He continued to devote his efforts to facilitating the integration process and more empirical research. He also turned to the temporal dimension of L2 motivation and developed a process model. Dörnyei (1996, p.79) showed this conception initially as the motivational-learning outcome chain. He was able to make the generalized point that motivation could be generated first and then move towards learning behaviour, the cognitive learning process and finally towards learning outcomes. Although it was not yet sufficiently thorough at the time, the basic model could be outlined and extended for the future process-oriented model of motivation.

As Dörnyei (2000, p.520) posited, the purpose of motivation theories was to answer why people made a particular choice, how long they sustained action and how hard they wanted to devote themselves to that action, i.e. how motivation theories were intended to account for the choice, persistence and effort involved in human behaviour. Nevertheless, due to their perception of different angles, researchers proposed different motivation models to explain the observed phenomena. The focus of motivation had gradually shifted from the biologically-based drive perspective to a behaviour-mechanistic perspective and finally to a cognitive-constructivist perspective. Also, human behaviour usually involved different conditions and factors. It was rarely the case that one proposed motivation construct could be clearly distinguished from another proposed construct. Consequently, agreement about motivation constructs might not be easy work. Mostly, it might not be practical to set up only one action and give one account. An action often contained several phases from decision to completion. This led to one of the main key challenges of language learning motivation

which is dealing with the factor of time.

Dörnyei (2000:520-522) adopted Heckhausen's (1991) explanation to interpret the concept of motivation. People often mixed several ideas or impressions about motivation, such as wishes, decision-making and action. When one said "I want to learn English", for example, it could mean "I wish to learn English", "I will join an English course" or "I will join an English course and continue to learn it". Following these examples, it seemed that several sequences of events should be separated when we discussed motivation. This could involve the mental process of 'wishing', through to goal setting, 'action control theory' (Heckhausen & Kuhl, 1985) which included the predecisional phase and the postdecisional phase. The predecisional phase involved both planning and goal-setting processes. The postdecisional phase was related to goal pursuit and maintenance through overcoming various internal obstacles – thus, wanting to do something was one thing and the actual implementation and successful completion of it was another.

The importance of looking at motivation as a temporal dimension lay in the belief that it could facilitate the understanding of student motivation and could hence explain practical implications. When the factor of time was considered, for how long and with how much effort an action could involve might influence the result of the motivation. Dörnyei (2000, p. 522-524) attempted to evaluate the influence of motivation separately based on a task's level. When it came with a simple task that took no further difficulty or skill learning, it was the 'choice' for motivation to influence behaviour. In other words, at the moment learners decided to do the task, the action would be taken and would usually be completed. On the other hand, when learning comes across as a complex skill or process, goal accomplishment can be achieved slowly and individuals might change their motivation while continuing with the task. Their motivation would not be static. It would be changeable due to the influence of possible difficulties and failures. In other words, a process of choice was required for both

simple and complex tasks, but the complex task would be successfully accomplished only by maintaining goals and exercising control. Most school work concerns difficult or long-term goals and the process of choice is hence a necessary but also an insufficient condition for subject learning performance. In a school setting, teachers in the classroom may encounter the motivational fluctuation of students. Students could change their willingness to learn even within one class, and therefore the process of motivation was significant for teachers. Nevertheless, both parents and society would rather see motivation influence as a product. To meet the needs of both perceptions, it may be necessary to account the complete learning action. Dörnyei therefore proposed a process-oriented model of motivation to account for both generation and further development of motivation. He defined motivation as:

The dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritized, operationalized and (successfully or unsuccessfully) carried out. (Dörnyei, 2000, p.524)

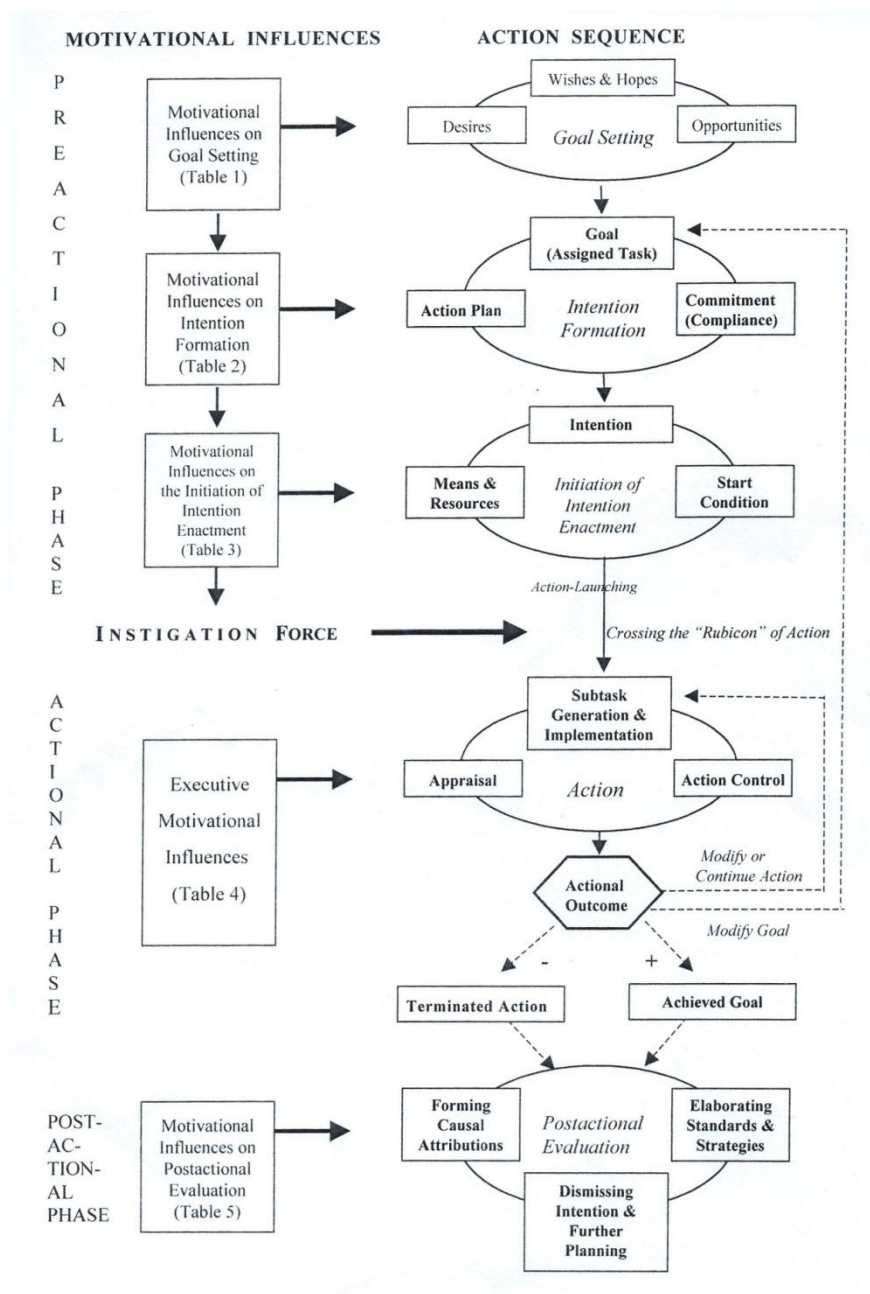


Figure 3.10 The process-oriented model of L2 motivation (Dörnyei & Ottó, 1998, p.48)

The initial model was built by Dörnyei and Ottó (1998, p.48) (**Fig. 3.10**). It was constructed to synthesize several influential existing conceptualizations, instead of building a novel conception into motivation theory. The essential reason for organizing those existing conceptualizations together was the long-lasting nature of mastering a foreign language. Therefore, action and motivation should be evaluated within a time dimension. This could be

seen from the schematic representation in **Fig. 3.10**. There were two dimensions in the framework. One was the motivational influence which provided energy sources to enhance or inhibit motivation. The motivation influences mentioned here refers to motivation factors such as cognitive affective and situational variables, conditions and processes. The other was an action sequence which indicated the different stages of the behaviour process. Three phases showed the different action sequences and the corresponding motivational influences.

In the preactional phase, the three subphases were goal setting, intention formation, and initiation enactment. To reach an actual goal, desires and opportunities should arise together. It was possible that many desires might occur in one's mind but these might not represent a goal with reference to specific opportunities. Even though both conditions were fulfilled and a goal had been set, this did not directly initiate action. Learners still needed a concrete intention – an intention formation involved with commitment making and an action plan. Commitment making can be related to personal responsibility and may also influence the foregoing of other possible goals. The action plan contained action schemata and a time frame. The former provided concrete guidelines such as subtasks to implement and follow up strategies. The latter was the regulation of the actual time to take action. Similarly, intention would not directly transform into action without the support of means and resources.

In the actional phase, learners moved from 'choice motivation' to 'executive motivation' and this was compared to crossing a metaphorical 'Rubicon' by Dörnyei (2000, p. 527). Three basic processes caused this to occur. Firstly, subtask generation and implementation, which refer to learning proper, were required. Secondly, there should be a complex ongoing appraisal process that continues to evaluate the learning environment and progress. The third process was the application of a variety of action control mechanisms that involved self-regulatory mechanisms to enhance, scaffold or protect learning. Finally, the ongoing action would lead to the actional outcome. The outcome would either be the

learner's goal or the complete termination of the learner's action. However, learners could still form a new wish or desire to start the process again. It was also possible that learners might fine-tune or modify the strategies to maintain the original intention. Meanwhile, if the reason to cease an action was temporary, action could continue later when the obstacles had disappeared.

In the postactional phase, the goal had been achieved or terminated. In this phase, it was essential to evaluate the outcome and possible inference for future actions. This evaluation was different from the appraisal in the actional phase. To leave the implementation-oriented mindset, it was possible to have a broader perspective on the entire behavior process. Through reflecting on the initial expectancies and the way to fulfil their goals, learners formed causal attributions which helped them to elaborate their internal standards and strategies. An individual learner could hence develop a stable identity as a successful learner. Before moving on to the next goal, the initial intention needed to be dismissed so that the way to the next intention would be clear. These processes hence continued and cycled again toward a more distant superordinate goal (Dörnyei, 2000, p.528).

Regarding motivation influences, Dörnyei (2003, p.19) attempted to give a more detailed illustration. In the preactional stage, it was 'choice motivation', which included various goal properties, values associated with the learning process itself along with outcomes, attitudes towards the L2 and its speakers, expectancy of success and perceived coping potential, learner beliefs and strategies and environmental support or hindrance. In the actional stage, it was 'executive motivation', which included quality of the learning experience, sense of autonomy, teachers' and parents' influence, classroom reward and goal structure, influence of the learner group and knowledge and use of self-regulatory strategies. In the postactional stage, it was 'motivational retrospection', which included attributional factors, self-concept beliefs and received feedback, praise and grades.

As for the strengths of the process-oriented model, Dörnyei (2000, pp.529-532) indicated that various methods had been provided to integrate the diverse motivational factors that affect learners' learning behaviour in a classroom setting. If 'time' was taken out of the analysis of learning motivation, the different types of learning behaviour in different sub-phases could confuse researchers and no one single theory could interpret them. The second strength in a process-oriented approach was the study of the motivational basis of learning tasks. Task motivation has been a rare research area in the past in motivational psychology. Most studies of motivation were focused on the macro-sense to emphasize general action tendencies rather than the specific motives that underlie the completion of particular tasks. Traditionally, task performance was viewed as the students' capability to exercise cognition rather than the selection, temperament or persistence of cognition. Thus, the researchers gave little consideration to the fact that students could choose to make an effort and interpret the failure of the task work only as a kind of incapability. However, the process-oriented approach emphasized the volitional/executive aspects of goal attainment and provided a micro-analysis of various factors, conditions, constraints and processes that determined learners' success in learning tasks. Through both macro and micro analysis, an interface for discussing cognitive and affective mechanisms in an integrated manner was offered.

Dörnyei (2000, p.530) also indicated the weaknesses of the process-oriented model of motivation. The first weakness was that the 'choice' phase of one actional step might occur simultaneously with the executive phase of another and cause interference. In the real learning context, the actional phase was not so well defined, so there was no interference from another ongoing activity. When different actions and learning behaviour mixed together, it was not easy to define the preactional/actional sub-phases. The second weakness was that learners might engage in different activities at the same time – namely, a new action might be initiated while the success of the previous action was still being evaluated. Meanwhile,

researchers did not really know how learners prioritized multiple action and goals along with changing their strategies and goal commitments. Also, Dörnyei further suggested that a purely cognitive approach would not be adequate for understanding how learners prioritized dealing with multiple goals. Within the classroom context, this unconscious relationship influenced learning behaviour. Meanwhile, mood states might influence how learners' attention was given to learning tasks and pure cognitive analysis might have difficulty in explaining it. Consequently, the cognitive paradigm should be extended to include various motivational influences that were not under the learner's direct control.

Dörnyei (2000, pp.532-535) also proposed practical implications which were based on the process-oriented conception of student motivation. Two areas were focused on. The first was motivational strategies, which instructors could apply to classroom teaching to generate or maintain learners' motivation. The second was self-motivating strategies, which enabled learners to control their personal affective conditions and experiences so that they could devote themselves to learning. With regard to motivational strategies, though teachers were willing to be skilful in motivating students and improve their teaching effectiveness, there were few systematic strategies in past studies. Therefore, teachers needed to rely on their personal experience to decide how to motivate their learners. Meanwhile, in a complex classroom setting, a detailed and eclectic construct would be a better choice to involve multiple perspectives. Therefore, a process-oriented framework could offer a solid theoretical background for motivational strategies. Through the initial intention to the completion and evaluation of motivation, this allowed researchers to integrate various motivation factors into the implementation of learning tasks. Dörnyei thereafter suggested a taxonomy of motivational strategies:

Creating the basic motivational conditions.

Generating initial motivation.

Maintaining and protecting motivation.

Rounding off the learning experience: encouraging positive self-evaluation.

Dörnyei (2000, p.533)

The second suggested category of motivation strategies was formulating action control/self-motivating strategies. By looking through the task motivating process, it was possible to make learners be aware of their learning behaviour and control their attention to the target learning task. Through these action control mechanisms, learners could self-motivate and benefit from effective learning. In academic situations, there are many interesting distractions everywhere and both easy and difficult intentions can be ignored by learners. An action control mechanism could help learners to maintain their priorities. Dörnyei (2000, p.534) took Corno and Kanfer's (1993, pp. 311-313) suggestions for four large classes of 'volitional control strategies':

Metacognitive control strategies.

Emotion control strategies.

Motivation control strategies.

Environmental control strategies.

Consequently, the process-oriented model of motivation did not provide a unified construct framework to explain motivation behaviour. Instead, it offered a potential research area on practical motivational controlling for both teachers and learners.

3.3.4 Empirical researches with the dimensions of “time” and “globalization”

As discussed in the foreign language learning consideration section, Clément, Dörnyei and Noels (1994, pp.429-433) conducted an empirical research in Hungary to explore the relationship between social psychological constructs and the acquisition of English in the unicultural Hungarian setting. 301 Grade 11 students answered questionnaires assessing attitude, anxiety and motivation. (See also 3.2.1) The focus of the study was on whether the social psychological approach could be applied to the understanding of L2 motivation. The result followed factor and correlational analysis confirmed that social motivation factors did have an impact on students' attitude and effort and classroom behaviour and achievement, even in the Hungarian context, in which contact with L2 speakers was limited.

After looking at the latent concepts of various motivational constructs, Csizér & Dörnyei (2005, pp.19-20) moved the interest to the internal structure of L2 motivation model. In order to manage multivariable relationships within L2 motivation, he applied a complex statistical procedure, structural equation modelling (SEM), to evaluate the interrelated factors. Referring to the definition he gave previously, motivation was a concept that explained why people behaved as they did rather than how successful their behaviour would be. Therefore, it is 'learning behaviour' which needs to be related to the various motivation factors instead of traditional "L2 proficiency or course achievement". An achievement outcome might not be directly linked to learning motivation. It is possible that enthusiastic students received inadequate instruction and this led to low levels of achievement. There were various dimensions in influencing the learning result and avoiding interference, and motivational behaviour was chosen as the criterion. In the same study, 8593 pupils aged 13 to 14 years old in Hungary involved in the survey via questionnaires. Meanwhile, they selected two criterion measures to link the attitudinal/motivational factors. One was the students' choice of future

L2 studies, which indicated the direction of motivation. The other was the amount of effort the students intended to give to learning an L2 language, which showed the magnitude of motivation. He chose seven motivational constituents and then defined them as follows. First, integrativeness reflected a positive outlook to the L2 and its culture and learners might want to integrate into this L2 culture. Second, instrumentality referred to the pragmatic benefits of L2 proficiency and the usefulness of L2 proficiency and other incentive values. Third, attitudes toward the L2 speakers/community referred to attitudes towards making direct contact with L2 speakers, including travelling to the L2 country. Fourth, cultural interest reflected the appreciation of cultural products associated with the particular L2 and conveyed by the media, such as films, videos, TV programmes, pop music, magazines and books. Fifth, the vitality of the L2 community was concerned with the perceived importance and wealth of L2 communities. Sixth, the milieu referred to the social influences of the immediate environment, such as parents, family and friends. Seventh, linguistic self-confidence reflected a confident, anxiety-free belief that the mastery of an L2 was well within the learner's means.

The results showed that the criterion measures were only directly affected by integrativeness. Since this was an essential motivational factor concerning motivation behaviour, Csizér and Dörnyei (2005, p.28) further explored the definition of integrativeness and compared it with the definition of Gardner. The traditional definition for integrativeness in Gardner's social psychological mode was centred around the desire for integration and emotional identification with another cultural group, whereas in this study, Csizér and Dörnyei (2005, pp.29-30) broadened the meaning of integrativeness into that of the Ideal L2 Self. In the foreign language learning context, this was usually isolated from the target L2 language and there was little chance to have any contact with L2 speakers and hence it would be difficult to form the desire to integrate inside the community. Therefore, the ideal of 'integrativeness' seemed not to be able to fit into the foreign language learning setting.

Nevertheless, the reason for learners to desire integration into the L2 community was to be able to be identified inside the L2 group. Similarly, L2 learners in a foreign language setting may also desire to be identified as an L2 speaker, though they may not be able to have any contact outside the classroom with the L2 language or group in their daily life. In other words, the conception of integrativeness could be comprehended as the L2 representing the learners' ideal self. If the learners' ideal self was associated with the mastery of an L2 and they wanted to be a proficient L2 speaker, the learner was with integrativeness motivation in foreign language context. Under the interpretation of the redefined integrativeness, the more positive learners' disposition toward L2 speakers, the more attractive the L2-self appeared to learners. Accordingly, Csizér and Dörnyei (2005, p.30) suggested that integrativeness be relabelled as the Ideal L2 Self. Nowadays, English has turned into the international language, and being able to use English may represent not only American or English culture, but also the identification of a global culture. In that case, the Ideal L2 Self will not be American or British. Instead, it will become an 'international person'. It should be noted that this Ideal L2 Self concept does not conflict with Gardner's traditional definition and that Dörnyei confirmed that integrativeness was a central factor in the L2 motivation construct, despite the traditional definition of Gardner and the broader definition of the Ideal L2 Self.

The globalization phenomenon in Hungary grabbed Dörnyei's attention with regard to when English gradually edged out other traditional Western languages, including the primary regional lingua franca, German. Dörnyei, Csizér, & Németh (2006, p.6) quoted Mohammadi's (1997) words and defined globalization as "the way in which, under contemporary conditions, especially, relations of power and communication are stretched across the globe, involving compressions of time and space and a recomposition of social relationships". In other words, cultures influence each other by exchanging information and ideas through trade and immigration. Though this conception was not new, the pace and

intensity over the past few decades has been faster than at any other time in history. In the new generation, few non-western young people have not been influenced by Western culture. On the other hand, the slow and restrictive environment that their grandparents grew up in may seem to them to be like a fairy tale. With the rapid development of technology, the world is becoming smaller and smaller because of communication and transportation. People living inside this global village obviously need a lingua franca to facilitate their communication. One hundred years ago, some other Western languages, like French and German, were still able to compete with English as a media language. Today, even in France, a country which is very protective toward its language, reality presses the demand to communicate with other people in the world and the necessity to speak English has hence increased. In fact, the conception of globalization has been discussed in applied linguistics for some time. There are two broad stances about the spread of English as a second language. The diffusion of English paradigm takes this phenomenon as a blessing. They view the use of language as a free market and the existence of a language should be down to natural selection and the survival of the fittest. However, the ecology of the language paradigm takes the spread of English as a threat. They view the diminished language diversity as a tragedy and an irrevocable loss.

Dörnyei, Csizér, & Németh (2006, pp.6-9) further indicated that the significance of globalization in motivation in language learning may concern the purpose of the language usage. If learners view English speakers as people in English-speaking countries, their attitude toward the language will be connected with their attitudes towards the people and culture there. However, if learners wish to use English as an 'international' language, the attitude toward English will not be purely about English culture or American culture. These differences will influence how to interpret traditional motivation factors like integrativeness. The more learners use English for international purposes, the more rapidly English may lose its national cultural base and become associated with a global culture. With this in mind, the

exploration of language learning motivation should not ignore the impact of globalization.

Dörnyei et al. (2006, p.49) implemented a study which involved 13,391 13-14-year-old Year 8 pupils in Hungary. These learners were in the final year of their primary school studies and were about to decide on their secondary education and to choose second languages for their future studies. The main study followed a repeated cross-sectional design, consisting of three national surveys conducted in the spring of 1993, towards the end of 1999 and in early 2004. Questionnaires with multi-item scales were distributed to students across three different time sessions. Data analysis involved a variety of statistical analyses, ranging from straightforward correlation analyses and t-tests to various multivariate statistics such as cluster analysis and structural equation modelling. The results indicated that there was a negative trend in intercultural attitudes, which meant the attitude toward the various foreign languages declined as time went on. When the results were looked at again in separate groups, he found that the world language (or World English) had maintained its high popularity while interest in other foreign languages declined. German, as a dominant lingua franca in central Europe along with the economic power of Germany, was expected to withstand the pressure of Global English. However, the reality was not as expected and German slipped into the 'other foreign language' category. These results supported the phenomenon of 'Englishization'. Looking into the two criterion measures in the study, these also supported the same hypothesis. Non-world language learning has declined while Global English learning still remains highly endorsed (Dörnyei et al., 2006, pp.53-54).

3.4 Studies of language motivation in Taiwan

Many studies of language-learning motivation in Taiwan have concentrated on primary and high school students. The investigation of learning motivation through

curriculum development is one of the shared topics in this phase. (Lin, 2000; Huang, 2005) Other topics such as strategy, anxiety, achievement, culture, and gender are also included (D'Ailly, 2004; Evans, Schweingruber & Stevenson, 2002).

Some studies of higher education have explored language-learning strategies in order to illustrate the specific actions or techniques that learners chose to improve their second-language learning (Yang, 2007; Wu & Lin, 2009; Tseng, Dörnyei, & Schmitt, 2006; Chen & Dörnyei, 2007). To study the goal of learning motivation, Tsai, Jheng, and Hong (2010) investigated college students from different majors and found that English majors tended to obtain more information from language learning, whereas non-English majors tended to fulfil their needs through the enjoyment of English-language music and movies. These two groups of students shared their frustrating experiences with complicated forms of grammar.

Sheu (2011) investigated the changes in language-learning strategies, attitudes, and achievement among college students. Her findings confirmed the enhancement of learning motivation towards a more favourable attitude. Wu & Marek's (2010) study examined the relationship among motivation, confidence, and achievement by means of live videoconference interaction. The results revealed that having confidence in interacting with native speakers could help to predict their perceived ability. Meanwhile, some attempts have been made to demonstrate language-learning motivation constructs in a Chinese cultural setting. A study was conducted to investigate the relationships between motivation orientation, expectation and self-evaluated skill in the framework of the process model. Chinese culture has been advised to reconsider the motivation constructs of Western cultural settings. (Chen, Warden, & Chang, 2005)

These studies demonstrate that motivation studies in Taiwan have various directions. Some focus on motivation strategies, some emphasise the learners' differences, and some concern themselves with cultural settings. Much effort has been spent on the required English

courses. However, only a few attempts have so far been made to investigate motivation changes in free or voluntary courses. The voluntary language course could provide a basis to reflect on the changes involved in deciding to follow a course to its completion. The initial intention to take a course and the decision to drop out would be based entirely on the learner's own decisions. Meanwhile, this study included the language courses offered free of charge that language learners could participate in voluntarily. Consequently, this study means to establish a basis for voluntary language courses and to provide a novel investigation of L2 motivation changes.

3.5 Research focus and theoretical framework

3.5.1 English language learning in a voluntary context

In dealing with the trend towards the globalization of the English language, the government of Taiwan has developed various policies to enhance students' English proficiency, as discussed in Chapter 2. In higher education, the Ministry of Education has granted an additional annual budget to the English Proficiency Promotion Project since 2003 in order to fund extra free English courses for students, provided by universities. Meanwhile, there is also a program having granted budget of free English courses for promoting teaching excellence of universities from 2005. Enrolment was entirely voluntary and, as these courses were not included within the credit system of students' major courses, the students would not be penalized if they chose not to participate or did not complete the course. The purpose of these courses was purely to offer students extra opportunities to improve their English. This was very different from students' previous experiences. The English courses from primary school to high school were all 'required' and students had to take them if they wanted to graduate. In higher education, English courses were also 'required', being credit bearing, and

students needed to gain enough credits to be awarded a degree. In other words, within the formal educational system, there were little opportunities for learners to decide whether they wanted to take an English class or not. Thus, external factors, such as studying for grades to pass the courses, were more likely to influence learners' language learning motivation than any intrinsic interest. However, the voluntary nature of the free courses offered an opportunity to explore students' L2 motivation in a less constrained environment.

The initial expectation of student participation was optimistic, due to the macro context of the English language globalization trend. Students were aware of the significance of learning English in both educational environment and social contexts. Nevertheless, the take-up of places on the courses varied. Some students chose to register for the course and also completed it, while others chose to register but did not complete it. Certainly, there were even more who chose not to register at all.

Based on these different responses to the offer of free language tuition, it was considered worthwhile to explore the changes in motivation of those students who registered for the course but later decided not to complete it, and also differences in motivation between those students who registered for the course and those who did not. The phenomenon of changes in motivation over time necessitates an investigation of students' motivation with a temporal dimension. Studying these changes in motivation and distributions is intended to enable suggestions to be made on how to improve students' L2 learning motivation.

3.5.2 The temporal dimension of L2 motivation

Language learning is a long process and motivation is not static. Instead it tends to fluctuate along with various decisions and actions. This could also be true within the entire period of a course. To interpret the phenomenon as outlined above, it is necessary to employ motivation models which embrace the factor of time. Williams and Burden (1997) proposed

three stages of the motivational process: 1). Reasons for doing something. 2). Deciding to do something. 3). Sustaining the effort, or persisting. They emphasized the importance of distinguishing between the first two stages which relate to *initiating motivation* and the third stage which relates to *sustaining motivation*.

An alternative framework was provided by Ushioda (1998) who undertook qualitative research to explore the dynamic nature of the motivational process. Through interviews, she constructed a framework to depict learners' motivation from the temporal perspective. She first distinguished those learners whose motivation derived from successful past experience and those whose motivation was directed towards future goals. She found that, for learners whose motivation was based on past experience, a future goal orientation might emerge later as these goals became more salient. Thus, those learners whose motivation was directed by future goals were at the stage that past-experience-oriented learners would evolve into. Accordingly, the same individual learners may present different types of motivation based on motivational development through time (Dörnyei & Ushioda, 2011, pp. 61–63).

Another model of motivation that considers change over time is Dörnyei and Ottó's (1998) process-oriented model of L2 motivation. As discussed in 3.4.4, these authors distinguished between three stages in behaviour: 1) the preactional phase, 2) the actional phase and 3) the postactional phase. The shift from the preactional phase to the actional phase has been described as 'crossing the Rubicon of action', illustrating the significant difference between intention and real action. As to the distinction between the actional phase and postactional phase, learners either achieve their goal or terminate action before engaging in a process of postactional evaluation.

From the perspective of this study, this involves variations in students' motivation and behaviour in terms of course choice and completion. While Williams and Burden's (1997) framework also involves multiple phases of motivation, the process model developed by

Dörnyei and Ottó (1998) presents a more elaborated framework of potential changes in motivation. As to Ushioda's (1998) past experience/future goal theory, the changes in students' motivation type may not be evident within a short period of time, such as a term or semester. Consequently, Dörnyei and Ottó's (1998) model was selected to be the basis of this research.

3.6 Research questions and motivational factors

Referring to the phenomenon observed in the voluntary courses in Taiwan, some students registered for the free English courses but some chose not to. Among those who registered, some chose to complete the course but some decided to drop out. From the perspective of teachers, only when students choose to participate in the course and decide to stay on it were there are possibilities of promoting students' motivation and further facilitating their language learning. Therefore, this study involves an exploration of the influential motivation of students and investigates ways of creating a more motivation-friendly learning environment for students. When a voluntary course is considered under the process-oriented model of L2 motivation, registering for a courses can be viewed as the 'crossing the Rubicon' of action. The motivation for registration could be viewed as motivation in its preactional phase. The motivation during taking the course can be referred to as the motivation in the actional phase. By looking at motivation in the preactional phase, teachers could discover what kind of motivation can influence students to register. They can then design the courses based on the influence of this motivation. For motivation in the actional phase, teachers should try to follow the changes of motivation. By being aware of the type of motivation that changes the most, teachers can develop motivational strategies to promote students' motivation and increase the possibility of them staying on the course.

On the basis of the discussion above, two questions were examined in this study to gain further understanding of students' motivation and changes in motivation:

1. Is there a difference in motivation before a voluntary but free English language course between students who stay on the course, leave the course and do not decide to take the course?
2. Is there a change in motivation during the course among students who make these different decisions whether to attend the course?

By answering these questions, the different influences of motivating factors could be drawn out and hence could be evaluated in order to encourage students to undertake further English study in addition to their required courses. The motivational factors to be investigated in this study are derived from the main language motivation theories discussed previously. Intrinsic and extrinsic motivations are two essential conceptions in self-determination theory. In Gardner's socio-educational model, integrative/instrumental orientations and attitudes toward language are the main elements to arouse the social factors in the language motivation. Meanwhile, language use anxiety is also an important determinant to the language learning motivation in both Gardner and Clément's model. The characteristics and paradigms of these motivational factors are discussed as follows.

Intrinsic motivation focuses on behaviours conducted in order to experience leisure and satisfaction. The feelings of enjoyment come from developing a sense of competence over a voluntary chosen activity. On the other hand, extrinsic motivation refers to the behaviour to receive reward and to avoid punishment. Though the contrasting conceptions are helpful to comprehend the characteristics of intrinsic and extrinsic motivation, these are two not undifferentiated dichotomies. According to Rigby et al. (1992, pp.165-174), intrinsic and extrinsic motivation have relative autonomy of motivated action. Intrinsic motivation is the most autonomous form of promoting high quality learning. Based on a developmental analysis of the process of internalization and integration, extrinsic motivation can be categorized into four types: integrated regulation, identified regulation, introjected regulation and external regulation. Intrinsic motivation and integrated regulation can be promoted under the social context that supports competence and autonomy. Namely, when learners are more fully engaged in learning, whether through intrinsic motivation or integrated self-regulation, they will more fully understand and be more flexible in utilizing the newly acquired

information. However, the more controlling forms of motivation like external and introjected regulations could be positively correlated with school dropout. Extrinsic motivation with few autonomous elements can play a negative role in language learning motivation.

Integrativeness was defined by Gardner (2001c, p5) as having a genuine interest in learning the second language in order to come closer to the other language community. Based on this definition, being genuinely interested and being willing to come close to the target language community would be the centre of integrative motivation. However, in the case of English, its language community could be broadened into the global community instead of the idea of being assimilated by native speakers. That is, learners may want to integrate with the global identity of being international community members rather than trying to become native speakers. Dörnyei et al. (2006, pp.9-17) hence proposed the ‘L2 motivational Self System’ as an alternative way to describe ‘integrativeness’. *Instrumental motivation*, on the other hand, was defined as a desire to obtain social recognition or economic advantage. It included not only the practical goals of finding a job or a place in higher education but also a range of other incentives such as travelling, making foreign friends and understanding the lyrics of English songs. Though Gardner and his associates may play down the importance of the instrumental dimension, a study conducted by Dörnyei (1990, p.70) found that the instrumental motivation could motivate learners till the intermediate level of language proficiency. Instead, integrative motivation was necessary to achieve higher level of target language proficiency. Dörnyei et al. (2006, p.13) suggested that the significance of the utilitarian dimension should be highlighted.

The conception of ‘attitudes toward the L2 speakers/community’ was initially proposed by Gardner as positive attitudes toward the linguistic cultural community of the target language. A positive attitude might represent reconciliation and hence play an essential role in achieving success in L2 learning. However, the background of Gardner’s original definition

came from the unique linguistic competition between Francophone and Anglophone communities in Canada. For both languages, the chance to directly contact L2 speakers and the L2 communities is possible. This has been labelled 'direct contact with L2 speakers' which refers to the attitudes toward meeting L2 speakers and travelling to the target language countries. However, in foreign language learning setting, contrasting with the second language learning environment, it may be difficult to build a contact-based attitude toward L2 speakers and the indirect media provided an opportunity to expose learners to L2 cultural influences. Dörnyei et al (2006, pp.10-13) extended the meaning of attitude toward the language community into 'cultural interest'. Cultural interest meant that through indirect contact with L2 product, learners became familiar with the L2 community, thus shaping their L2 attitudes. The context of Taiwan for English is a foreign language setting which provides limited direct contact with native English speakers. Therefore, the attitude toward language community would be referred to as cultural interest in this study.

As discussed in section 3.2.1, Clément and Kruidenier (1985, P.24) took self-confidence as the belief that learners were capable of producing results, accomplishing goals or performing tasks competently. Second language use anxiety was subsumed by the concept of self-confidence, which also includes the individual's self-evaluations of second language proficiency. However, in Gardner's revised model (Gardner and MacIntyre, 1993a), language anxiety was taken as one of the affective factors and was compared to the learners' daunting experience of using a little-known language in a certain situation. Gardner and MacIntyre (1993a, pp.5-7) suggested that the negative effects of language anxiety are established during second language acquisition. Meanwhile, the negative connection between language anxiety and learning performance develop through time. In the earlier stages of language learning, language learners may experience a form of anxiety with a transient apprehensive experience. In the later stages, learners gradually associate anxiety with performance in second language

learning. Once such association has been developed, language anxiety can have a pervasive impact on the performance of language students. Nevertheless, such negative effects of language anxiety can be expected to decrease with an increase of language proficiency. With more positive experiences accumulated, learners can reduce their anxiety and perform better in language learning.

Chapter 4 Research design and methodology

4.1 Different research approaches

4.1.1 Purpose of research

The purpose of research is to find answers to questions in a systematic way (Coolican, 2006, p.5). For research in the natural sciences, this systematic investigation into the study of materials is termed 'scientific research'. Scientific research attempts to establish facts and reach new conclusions through a series of critical investigations (Williman, 2006, p.14). The scientific method formularizes the procedure, via organized reasoning, for asking and answering questions about how the world works (Dunn, 2010, p.7). In the natural sciences, the scientific method has long been approved as an effective and reliable research method. However, when researchers endeavour to adopt this scientific method in social science, the issue of whether social science research is 'scientific' evokes debate and controversy in approaching the research. This study, which concerns motivation and learning behaviour, is located within the paradigm of social science. Therefore, it is necessary to explore the background to research approaches and examine the appropriateness of applying the scientific method in this study.

4.1.2 Theory background of research approaches

To determine whether social science is a 'scientific' research has long been a controversial issue, with tensions arising between research paradigms such as positivism and social constructionism, which involve various epistemological and ontological considerations (Bryman, 2004, pp. 11–19).

Epistemology and ontology are philosophical concepts about how human beings understand the world. Epistemology is concerned with what is regarded as valid knowledge and the ways of acquiring knowledge. Depending on how researchers understand knowledge, different theories denote diverse definitions of data collection. From the perspective of positivism, information which can fulfil the definition of valid knowledge should be able to evidence cause and effect. Under the assertion of positivism, the research methods of the natural sciences can be applied to the social sciences. Nevertheless, taking the point of view of interpretivism, the knowledge to be applied in the research should reveal the subjective meaning through interpretation. This is because interpretivism implies a view that social science is different from natural science and that it should reflect the nature of human behaviour. Another perspective from epistemology is the realism which proclaims that the information in the social sciences must be expressed in theoretical terms, as in the natural sciences (Bryman, 2004, pp.11–16; Williman, 2006, p.15).

Ontology, on the other hand, is related to the theory of social entities, which is concerned with the investigation of what exists. Two opposing attitudes have been identified towards the nature of social entities. One is objectivism, whereby it is believed that the meaning of social phenomena has an existence and is not dependent on social actors; that is, researchers can distinguish social behaviour apart from the individuals. Within this context, data that have been collected should be analysed independently. Another attitude within ontology is constructionism, which is associated with the belief that social phenomena are in constant change because they are totally reliant on social interaction as they take place. Constructionism interprets social behaviour from a subjective perspective and regards social knowledge as determined through interaction. These two different attitudes to ontology influence the decision about how to explain and make sense of the data collected in research (Williman, 2006, p.15).

Beside epistemology and ontology, another important background theory about research approaches concerns the two types of reasoning: inductive and deductive reasoning. Inductive reasoning generalizes from particular observations to reach a conclusion which represents a more general rule about a phenomenon. The prior experience of researchers provides the basis from which to generate a novel topic. Inductive reasoning could also be regarded as the empiricists' approach. A second way of reasoning is deductive; this involves the use of existing theory to create a specific hypothesis about an unexamined phenomenon. Deduction relies on many logical arguments and uses syllogism to propose the 'if-then' type of analysis ('If event A occurs, then B should follow'). Such logical arguments reject inconsistent hypotheses and exclude irrational theories. Deductive reasoning is hence regarded as the rationalist's approach. Depending on researchers' ways of reasoning, the procedures for data collection and analysis vary in diverse research (Dunn, 2010, pp.5–6; Williman, 2006, pp.16–18).

4.1.3 Types of approaches

Researchers in different disciplines adopt different methods which embrace various properties, based on the theoretical background to the research approaches. Bryman (2004, pp.19–21) distinguished these as the qualitative approach and the quantitative approach.

The quantitative approach is related to the natural science model and is regarded in epistemology as an orientation toward positivism. Moreover, objectivism takes a quantitative approach in relation to ontology, and the method of reasoning employed in relation to research is the deductive principle. Overall, the quantitative approach is similar to the scientific method of collecting and analysing data to answer research questions.

On the other hand, the qualitative approach is one of interpretivism when considering

epistemology and applied constructionism in the ontological orientation. Using inductive reasoning, the qualitative approach usually leads research toward the generation of theory. In sum, the qualitative approach involves data collection and analysis from the perspective of social behaviour.

4.1.4 Strengths and weakness of different approaches

Each of the three approaches has strengths and weaknesses (Dörnyei, 2007, pp. 29–47). Quantitative research is systematic, rigorous, focused and tightly controlled and precise measurement produces reliable and replicable data that can be generalized to another context. In addition, data analysis is helped by modern technology, in particular by the use of statistical computing software. The disadvantage of quantitative research is that the nature of the data does not reflect the subjective diversity of individuals. It is not sensitive in uncovering special observed behaviours and the dynamics underlying the examined situation.

The advantage of qualitative research is that it is an effective way to explore new and uncharted areas; it is also useful in making sense of highly complex situations. Furthermore, the flexible, emergent nature of qualitative research allows the researcher to conduct further research to achieve a fuller understanding. Qualitative methods are also suitable for broadening the possible interpretations of human experience and examining dynamic phenomena longitudinally. They are also sufficiently flexible to be adjusted during the course of the research to remedy weaknesses and provide richer material for the research report. The disadvantage of qualitative methods is that the idiosyncratic nature of the data only allows small participant samples to be investigated and the results can be influenced by the researcher's personal bias. Qualitative methods may potentially lack methodological rigour and there is a danger of building theories that are too narrow from individual cases. Finally, qualitative studies may be time-consuming and labour-intensive.

The advantages of mixed methods research are that it provides a multilevel analysis of

complex issues and improved validity. By using both qualitative and quantitative methods, it is possible to combine the strengths and avoid the weaknesses of each approach. Finally, the results of mixed methods research may potentially be accepted by a wider audience. The disadvantage of mixed methods is that the reasoning and logic behind its use may be unclear. Furthermore, it is possible that researchers may not be trained adequately in both methods and may deploy the methods without a principled mixing (Dörnyei, 2007, pp. 29–47).

4.1.5 Selection of approaches

Given the various strengths and weaknesses of these methods, Dörnyei and Ushioda (2011, pp. 201–202) have suggested that the criteria for selection may rest on the researcher's past experience and training. Depending on the academic discipline, researchers need to select the most suitable approach from the research paradigm. Furthermore, it is essential to consider the time and competence required for choosing the appropriate method to be applied to the data to be investigated.

As mentioned in 4.1.2, epistemology concerns with how researchers understand knowledge. Among the theories interpreting data collection, positivism claims that knowledge should be based on the evidence depicting cause and effect. The quantitative method in natural science accounts such basis and intends to find out the data objectively to support the suggestion of answers to the research questions. According to positivism, such quantitative method could also be applied in the social science research. On the other hand, interpretivism indicates that knowledge should be obtained through subjective interpretation when it comes to involve human behaviour. Under this definition, quantitative method which embroils individual subjects should be applied in the social science research in order to obtain a thorough answer.

For the ontology which concerns with the social entities, objectivism explores social phenomena without depending on individual social actor while constructionism asserts that

social phenomena could not be accounted apart from subjective perspectives through interaction. Namely, qualitative method here would be more clung to individual opinion and development. On the contrary, quantitative method is more closed to objectivism and illustrates social behavior apart from the individual social actors.

This study aims to investigate the general motivation changes of English learners. Individual changes could give an interesting exploration how the internal mind shifts from one stage to another. From the point view of interpretivism and constructionism, the qualitative method can also facilitate to give answers to the motivation changes of English learners as well. On the other hand, positivism and objectivism would suggest quantitative method to provide objective data and evidence to support the finding results on motivation changes. From both perspectives, there are ways that head to the answers and, there is no default position to avoid specific method. However as discussed at the beginning of this section, the criteria for choosing the type of research method is purely depending on the academic discipline, required time and competence as well as the future application of the study result.

This research takes place within motivation research in psychology. There have been pioneering researches which have adopted quantitative research approaches such as Gardner (1972, 1985), Dörnyei (1990, 1994), Clément and Noels (1992), and so on. The purpose of this study was to find the general motivation changes relating to the voluntary course, and the specific personal motivation changes were not the focus of this study. Hence, the qualitative method which is sensitive for exploring individual motivation was not deemed appropriate for examining such overall changes. In addition, the qualitative approach is suitable for a small participant sample and is not appropriate to the large sample size of this study. The scale of this study involved with a large number of students and the characteristics of the qualitative approach are not suitable for the research paradigm of this study. Therefore, the

inclusion of both qualitative and quantitative approaches together as mixed methods is unnecessary. Consequently, the quantitative approach was selected for the data collection and analysis in this investigation.

Among the techniques of the quantitative methods, it is Likert scale to be used in this study. For researches exploring on relationship between motivation and learning achievement, assessment tests may be considered as criteria that indicate the extent of motivation. However, such connection between motivation and observed succession should be treated with caution since a direct cause-effect link cannot be assumed. Therefore, the use of assessment test on referring the motivation should be careful. (Dörnyei, 2000, p.197) Moreover, the focus of this study is not the motivation-achievement relationship and it is the changes of motivation of learning. Accordingly, assessment results are not used within the method of collecting data in this study.

The characteristics of measuring motivation lies on the unobservable construct which requires inferences from observable indicator. The process of transformation from abstractive conception to testable items is considered as operationalization. Different concepts in psychology hence could be measured through a number of items and the tests consist of these various items are referred as psychometric tests. Likert scale is a type of psychometric tests that consist of a series of statements . Respondents are asked to state the degree of their agreement which may range from ‘strongly agree’ to ‘strongly disagree’. It is also a kind of ‘self-report’ measure that elicits the respondent’s own explanation in order to make inferences. (Dörnyei, 2000, pp.199-120)

Gardner (1985, pp.177-180) started to use Likert scale in building up the Attitude/Motivation Test Battery (AMTB) which operationalizes the main constituents of Gardner’s theory. There were adaptations of the test to be used in data-based studies of L2 motivation ever since. This includes the study of Clément et al. (1994), Dörnyei (1990) and

Gardner and MacIntyre (1993a) etc. The psychometric test of Likert scale turns into the tradition technique to be employed in motivation quantitative research. For the later researches, It continued to be the practice in the later researches.(Schmidt & Watanabe, 2001; Dörnyei, Csizér, & Németh, 2006; Taguchi, Magid & Papi, 2009) As a result, such tradition is also one of the consideration to use Likert scales in this study.

Though the method adopted in this study is quantitative method, there are still motivation researches used qualitative methods. Ushioda (1998) conducted a qualitative research by interviewing 16 Irish learners of French and illustrated the evolving dimension of language learning motivation. William & Burden (1999) also interviewed four school year groups of French learners in England to investigate the development of learners' attributions. Egbert (2003) employed mix method that included questionnaires, observation and interviews in Spanish class to depict the flow experience in the foreign language classroom. Traditionally, most of the motivational data in the L2 field depends on questionnaires via quantifiable rating scales without open-ended items. Nevertheless, Dörnyei, (2000, pp.192-194) commented that more qualitative researches could also provide a fruitful direction for the future motivation.

4.2 Operationalizing motivation

4.2.1 Concept of operational scheme

An operational definition is used to distinguish everyday meaning and technical meaning. It is a formula for building a construct in a way that other researchers can duplicate and in which the operations to be used for measuring the target variables should be clearly specified. This involves changing the conceptual elements from a research hypothesis into concrete testable terms that can be observed, understood, agreed upon and used by other researchers (Elmes et al., 1998, p.21).

4.2.2 The operationalizing of motivation in psychology

Motivation is a conception that cannot be directly observed. It is hence necessary to link the indirect variables (different types of motivation) with signs and indications that can be measured. Due to the indirect nature of the access to mental characteristics, many conceptions in psychology use psychometric tests to measure the internal mental characteristics of a person. A similar approach has been applied to motivation, which is an internal conception in psychology, to measure its various sub-classifications (Coolican, 2006, pp.19–22).

4.2.3 Psychometric tests

According to Hayes (2000, p.97), psychometric tests are tools used for gaining an insight into aspects of human psychology which are normally hidden, or not immediately apparent. They can provide information that the person may not previously have been aware of.

There are two types of psychometric test. The first is an idiographic test that is concerned with the details of a particular person and how that person sees their world. It allows the therapist or counsellor or researcherto gain an insight into a person's ideas and problems. Another type of psychometric test is nomothetic test that compares people with one another and measures each person on a common scale or set of scales. Nomothetic tests are commonly used in psychological research.

This study looked for specific examples from the more general results in foreign language educational settings, rather than into individual details. Therefore, the nomothetic test was applied in this study.

4.2.4 Instruments in language learning motivation

For the measurement of motivation, Gardner (1985) developed the Attitude/Motivation Test Battery (AMTB) to operationalize the main constructs of Gardner's theory and of language anxiety. Meanwhile, some other researchers have also developed psychometric measures to assess language learning motivation, such as Dörnyei(1990), and Schmidt, Boraie and Kassabgy (1996).

In this study the measures for the intrinsic and extrinsic motivation were taken from Schmidt, Boraie and Kassabgy (1996). The measures for instrumental, integrative, cultural interest and anxiety were taken from Dörnyei (1990). Although the AMTB is a well-constructed psychometric test for use in language learning motivation, the items within it relate to a second language context such as in Canada. However, the study of Dörnyei (1990) was conducted in Hungary and the study by Schmidt, Boraie and Kassabgy (1996) was undertaken in Egypt. Both studies were carried out in a foreign language context, which is similar to the context for this study. Because of the length of the extended questionnaires, some questions were removed to avoid the participants becoming bored. In addition, the order of the questions was randomized to reduce the possibility that participants might guess and follow the same answering routine. The randomized version of the questionnaire is presented in **Appendix I**.

4.3 Reliability and validity of the measurement

4.3.1 Definition

Reliability refers to the stability or consistency of a measure while validity deals with whether an instrument is measuring what it is supposed to measure (Dunn, 2010, pp.182–184). For validity, the concept of external validity should be distinguished from internal validity. External validity concerns sample selection and refers to the extension or

generalization of the findings (Breakwell et al., 2006, p.91). Internal validity is defined as the extent to which causal statements are supported by the study. The purpose of internal validity is to ensure that the values of data obtained genuinely reflect the influences of the controlled variables (Williman, 2006, p.208).

4.3.2 Types of reliability

There are several types of reliability such as test-retest reliability, intra-observer reliability, internal consistency and so on (Litwin, 2003, pp.5–29). The types of reliability that are related to this study include test-retest reliability, internal consistency reliability and split-half reliability.

Test-retest reliability refers to how well performance on a measure at one point in time reflects performance on the same measure at a subsequent point in time. For internal reliability, it demonstrates consistent correlation when multiple items are included with the same measure. Split-half reliability is one type of internal consistency reliability: it determines the reliability by correlating participants' total scores on the first half of a test with their scores on the second half of the test (Dunn, 2010, p.184).

The test of reliability to be applied in this study is the reliability coefficient called Cronbach's alpha. There are several constructs of motivation to be tested in this study. For each construct, there are several questions (items) for detecting the participants' motivation. All the items taken together form a psychometric test, which is a tool to gain an insight into aspects of human psychology which are normally hidden. For the multiple-item measure, items within the same construct should correlate with one another. Cronbach's alpha is a commonly used test of internal reliability by using the split-half method. A coefficient of Cronbach's alpha lower than .3 is considered to be a low value which measures something different from the scale as a whole. Values above .7 are considered to be acceptable.

Cronbach's alpha had been previously examined in relation to the original published questionnaires. In this study, due to the partial adaption of the questionnaires, the reliability coefficient was inspected again to ensure the reliability of the motivation constructs.

4.3.3 Types of validity

There are also a number of types of validity for ensuring that there are minimal confounding variables for a research study, and several types of validity are related to this study. First, face validity is the casual review of how good an item or group of items appear at 'face value'. Second, content validity relates to the formal expert review of how good an item or series of items appear. Then, construct validity is to measure how well the item or scale correlates with gold-standard measures for the same variables.

In this study, validity was ensured for the psychometric instrument. Five teachers reviewed the questions in the pilot testing to ensure the face validity of each of the motivational constructs in the questionnaire. Concerning construct and content validity, the motivational constructs such as intrinsic and extrinsic motivation were already explored in theoretical discussions. The adapted questionnaires from published articles were also built on the basis of theoretical background. Moreover, Dörnyei (2010, p.94) indicated that the intuitive notion of validity exists if several items seem to measure the same construct. Cronbach's alpha was conducted to confirm the correlation of items within the same motivational constructs as discussed previously. Such correlations could also facilitate the validity of the instrument used in this study.

4.4 Sampling

4.4.1 Definition

It should be possible to make accurate judgements about a population as a whole from a representative sample different from the population used to describe the total quantity of cases in a study (Williman, 2006, p.75–80) However, sample error might occur when samples are selected. Sample error is the measured difference between the mean value of a sample and that of the population as a whole, and an improper sample could lead to bias in the research results. Although most research means to reduce the sample error, there is no sample that will be precisely representative of a population; however, proper selection of samples can result in more trustworthy inferential data.

4.4.2 Random sampling and non-random sampling

There are various sampling methods in the research literature. A major difference among the diverse methods relates to random selection. Random sampling involves the non-biased selection of participants and the selection is based entirely on chance without any subjective factors intervening. The significance of a random sample concerns the possibility of generalizing the study results beyond the study population. With random selection, a researcher can have confidence that the sample used in the research is generally similar to the population as a whole. The possibility of generalizing the study result beyond the selected sample brings in the concept of external validity that has been briefly discussed in the validity section of the present study (see 4.3.3; Beins, 2004, p.134).

This study was concerned with language motivation in higher education in Taiwan. Ideally, a random selection of samples taken equally from different universities and different majors would have been preferred for this study. However, the setting of this study is the examination of different registration statuses for a specific non-compulsory course. The non-

compulsory and registration characteristics are necessary for the conception of the ‘pre-actional’ and ‘actional’ phases of motivation in Dornyei’s process model of motivation. Therefore, the possibility for the participants to attend the designed compulsory courses was essential. Other universities that provide these non-compulsory courses could have been considered, but the author works in the participating university which provides accessibility for the research project. Hence, the selection of the institution is purposeful for theoretical sampling. In theory-based sampling, a theoretical construct must be operationally defined and the sample needs to match the definition of the construct operation (Mertens, 2010, pp.320–322). Purposeful sampling belongs to the category of non-random sampling and the selection of the institution for this study may be referred to as limited generalization. Nevertheless, this study attempted to involve all students in their first year and all students had the chance to participate in the investigation. This would minimize possible bias and enable the research results to be generalized.

4.4.3 Sample size

A question raised in relation to the sample is: The bigger, the better? The answer is positive. Usually a large sample is more convincing than a small one. However, a researcher needs to consider cost, time and effort when deciding how large a sample should be in a study. There are two criteria for deciding the sample size. First, if the population is homogeneous and the study is not detailed, a small size could be representative enough. Second, if the population is more diverse, a larger sample is preferred (Walliman, 2006, pp.79–80). In this study, the higher education majors in different subjects and the different backgrounds could have had an effect on student their motivation. A larger sample would better support the collection of data on the number of different language course registration statuses in this study. Therefore, a larger sample was the preferred for this research.

4.5 Pilot testing

Pilot testing is a practical trial given to a questionnaire, interview schedule or other research tool in order to identify and iron out problems while it is still at the design stage (Hayes, 2000, p.373). The purpose of pilot testing is to ensure that participants respond as instructed, and to uncover any unanticipated problems and decide how to handle them. It also gives researchers the chance to check the clarity of items, instructions and layout, as well as length of the questionnaire and the time allowed for completing it. Furthermore, redundant questions may be identified and the coding system for the data analysis can be trialled (Cone & Foster, 2006, p.228). As to the procedures for pilot testing a questionnaire, essential pilot testing is an item analysis which it can be applied later to a much larger sample. When there are more than 50 participants in pilot testing it is possible to run the item analysis to ensure reliability and validity. Missing responses and internal consistency could be valued at this stage. However, if there are fewer than 10 participants, the item analysis should not be run due to the small sample size.

Another important issue concerning questionnaires in the pilot testing is translation. In many cases, the published questionnaires are adapted and applied in a different language context. Translation becomes significant in conveying the meaning of the original questionnaire. A practice in the European Social Survey is the adoption of a process which involves translation, review, adjudication, pretesting and documentation (TRAPD). In practice, this involves two translators having a reconciliation meeting about ambiguous wording and an adjudicator who signs off the final agreed version. Afterwards, the translated items are translated back to the original language to check the similarity of the words' meanings. This method involves group work : one group consists of specialists who have mastery of both languages and translate the questions; the other group consists of participants

who are similar to the target population who adjust the naturalness of the translation (Dörnyei, 2010, pp.48–51).

In this study, for the item analysis, only five students were involved in piloting the questionnaires due to the summer vacation. Their main mission was to ensure the clarity of the wording and instructions. There was no statistical analysis in the piloting stage. The internal consistency was checked later in the data analysis of main study. The group working on the translation took the opinion of both the specialists and participants. Therefore, this study adopted the group working method to translate the existing items for the questionnaire on motivation. The researcher first translated the questions from English to Chinese and five other colleagues who had mastered both English and Chinese conducted the back translation. The ambiguous parts were discussed and adjusted. Then, five students from the target population completed the questionnaire and identified the possibly confusing parts. Finally, the wording was fixed after considering these suggestions. The final completed translation of the questionnaire is shown in **Appendix II**.

4.6 Data Analysis

4.6.1 Quantitative data analysis

As discussed in the approach section, the method applied in this study is a quantitative approach and the data collected in this study was related to the statistical analysis. Nowadays, the statistical calculation is largely reliant on computer programs. First, the large volume of raw data collected is transferred into numerical values for processing. Then, the input data needs to be checked for incorrectly entered values and the internal consistency of the psychometric testing should be examined before further processing (Dörnyei, 2010, pp.83–85).

There are many statistical techniques for calculating research results. For descriptive data,

the main purpose is to present clear and unambiguous evidence. For inferential statistics, the research attempts to identify the likely effects of extrapolating from the sample to the wider population. In order to distinguish whether the data shows a 'real effect' or just 'pure chance', a test of significance is applied to look at the probability of the result occurring incidentally (Coolican, 2006, pp.135–138).

4.6.2 Criteria for selecting a suitable statistical test

There are many statistical tests of significance based on different theories and sampling conditions. The criteria for selecting a suitable test depend on the relationship to be explored, the level of measurement and the group status in the study. The first task is to clarify whether the purpose of the study is to establish the correlation or the difference between target variables. Secondly, depending on the level of measurement and whether the groups are related or unrelated, different tests of significance will be indicated (Coolican, 2006, p.151).

If the purpose of the study is to look for relationship, correlation and regression tests should be selected. If the target of the study is to explore the differences, the *t*-test or ANOVA should be examined. The level of measurement includes nominal, ordinal and interval scales. The nominal level of measurement usually relates to the frequency of each category, the ordinal level indicates the relative position in a ranking and the interval is a measurement of the difference between values. Furthermore, interval scales are discrete and cannot be divided between whole numbers. As to the status of the groups, if the number of variables and conditions are more than two, the ANOVA test should be applied instead of *t*-test to examine the differences. Depending on whether the groups are related or independent, the significance test via repeated measures or independent measures should be selected (Howitt & Cramer, 2008, p.181).

4.6.3 Research questions in this study toward statistic selection

The first research question was: Is there a difference in motivation before a voluntary but free English language course between students who stay on the course, leave the course and do not decide to take the course? This concerns looking for motivation comparisons between different action groups: the non-registered group, the group who registered but dropped out, and the registered and completed group. The instrument in this study used Likert scales which were interval scales to measure the motivation constructs. The independent variable here referred to different registered groups, and the dependent variable related to the motivation scores. According to Pallant (2001, p.187), a one-way between-groups analysis of variance is used with one independent variable with three or more levels and one dependent continuous variable. Therefore, a one-way ANOVA was used for the data analysis for Question 1.

The second research question was: Is there a change in motivation during the course among students who make these different decisions whether to attend the course? This concerns comparisons of motivation at different points in time and between different groups. Likert scales were used as interval scales. The independent variables in 'time' were Time 1 and Time 2, and in 'different actions' were the different action groups. Time 1 and Time 2 tests took place within the same groups, while the different action tests took place between groups independently. Furthermore, the dependent variable for this question was the motivation scores. According to Howitt & Cramer (2008, pp.254–255), the mixed between-within design relates to a situation in which there is a mixture of related and unrelated variables. Namely, within one study, there was one independent variable for between-subjects and another independent variable for within-subjects; there was a single dependent variable. Therefore, a mixed between-within groups ANOVA should be used here for the data analysis in Question 2.

4.7 Ethical issues

The purpose of ethical regulations is to prevent harm to the participants (Milgram, 1963; Zimbardo, 1973). There are guidelines on ethical issues such as the American Psychological Association's (APA) Code of Conduct. In the UK, there are the British Psychological Society (BPS) Ethical Guidelines. In addition, the Institutional Review Board (IRB) is a committee that reviews research projects to ensure that projects are compliant with accepted ethical guidelines. Researchers usually follow these general standards of ethical behavior (Beins, 2004, pp.28–34). There are some essential ethical issues to consider while conducting research. First, informed consent is necessary to inform research participants what they are agreeing to in consenting to participate in a study. It includes the right for participants to withdraw from a study (Dunn, 2010, pp.156–167). Also, it is possible that researchers may include a deception to mislead participants about the true purpose of the research. In the debriefing, the investigators should explain the general purpose of the research and completely describe any manipulations so that any questions or misunderstandings may be removed. This action is to prevent harm to participants. Finally, confidentiality means that what a participant does in an experiment should be confidential unless otherwise agreed. As Elmes et al. (1998, p.140) noted, there is no completely clear view of what is ethical, therefore, the responsibility for choosing ethical procedures in research should lie with researchers, review boards and journal editors. In this study, the researcher provided consent cover for participants. The consent cover indicated that the participants would have freedom to withdraw from the study, the results of the research would not be shown to teachers and only researchers could access the results to the questionnaires. Since there was no deception in this study, there was no need to debrief the research. Therefore, the implementation of the questionnaire in this study was based on voluntary participation with informed consent, which fulfills the relevant ethical issues.

Chapter 5 Data collection

There were two stages to this study: the pilot study and the main study. Both of these stages were questionnaire-based.

5.1 Pilot study

The purpose of pilot testing in this study was to ensure that the translated instrument conveyed the same meaning as the English questionnaires. The questionnaires used for this study were adopted from Dornyei (1990) and Schmidt, Boraie and Kassabgy (1996), as discussed in the Research Method section. (See 4.2.4)

In this study, the author translated the adopted questions into Chinese to produce a first draft. Then, five teachers who have mastered both English and Chinese participated in the revision. The five teachers met together to read the Chinese version first, then they checked the clarity of the translation with the English version. Changes to ambiguous parts were proposed and discussed. When all the parts were agreed, a final set of translations in Chinese was generated. After that, ten undergraduate students attended the pilot testing procedure; the students sat together to complete the questionnaires. While they completed the items, the researcher sat beside them and explained any question that was confusing. The confusing parts were then corrected. After the completion of the questionnaires, these corrections were then demonstrated to the students to ensure that the confusion was resolved.

With regard to ethical issues, all the teachers and students invited by the researcher were informed they could leave at any time they wanted during the piloting stage. Moreover, they knew the researcher was conducting a research study about motivation and no deception technique would be used in the piloting stage. The final version of the questionnaire is presented in **Appendix II**.

The idea situation is the questionnaires could be tested prior the main study. Through the initial analysis, the reliability of the constructs could be measured and the unrelated items could be eliminated before applying to the next stage and more questions could be added to ensure the reliable Cronbach's alpha. Nevertheless, the main study needed to started at the very beginning of the semester and the pilot study needed to be finished in the summer vacation. Due to the holiday, there was no enough sample students could be found for the reliability analysis. Rather, the researcher managed to find ten students to involve in the translation testing. English wording in question 5 is 'studying English is important to me because it offers a new challenge in my life, which has otherwise become a bit monotonous.' The original translation is more based on word by word as '學習英文對我是重要的，因為它在我的生活中提供新挑戰，否則人生變得很單調'. Although the teachers recognized it as 'correct' translation, the students reflected that the Chinese translation took them more time to realize what the question asked. The Chinese translation was hence later modified as '學習英文對我是一件重要的事，因為它替我的單調人生提供了新的挑戰'.

5.2 Main study

5.2.1 Participants

The total number of students participating in this study was 1707, and there were 882 students involved in the second stage. The participants were first-year students from Chia-nan University, all of whom had the opportunity to participate in this study as the questionnaires were delivered to all students taking the required English courses. There are two main tracks for the higher education in Taiwan. One track is the traditional academic universities which focus on the academic achievement and students are awarded bachelor degrees and above. The other track of the higher education is the polytechnic universities and the students are also awarded bachelor degrees now. Like the polytechnic universities in UK in the past, the

polytechnic universities in Taiwan awarded sub-degrees previously. After middle of 90s, more and more polytechnic universities were upgraded in Taiwan and gained the power to award bachelor degrees, master degrees and even PhD degrees. It now focuses on both academic learning and vocational development. The sample university in this study represented the vocational higher education in the binary higher education tracks in Taiwan.

Students filled in the questions during their required English courses. The data gathered in this way was later analysed with reference to the status of students' registration for the voluntary courses. The students were categorized in three ways:

1. Non-registered Group: students who did not register for voluntary courses.
2. Registered but dropped out group: students who registered for the voluntary courses but who dropped out of the courses.
3. Completed groups: students who registered for the voluntary courses and completed the courses.

5.2.2 Procedure for data collection

The data in this study was collected from questionnaires distributed at Chia-nan University in Taiwan, where all first year students take a required English course. Besides the required English course, there were also voluntary courses that were not included in the graduate credits but for which students who wanted to improve their English could register. Two different courses were the independent curriculum. The voluntary courses contained 10 reading courses and 10 listening courses of General English Proficiency Test (GEPT). The courses were based on the same material that analysed the questions in the English proficiency tests. All the teachers were required to comment the knowledge and skills about passing the tests. Due to the pressure from the Ministry of Education, it was the goal for the university to enhance the number of students passing the English proficiency test. All the

courses used the same teaching material and the focus of these courses was 'test centred'. The discrimination due to the course content and teachers could be eliminated. Moreover, the research questions in this study were based on the assumption of Dörnyei's process model of language learning motivation and this model emphasized on the changes of learners' motivation along a sequence of discrete actional events within the chain of initiating and enacting motivated behaviour. The process model intended to synthesise different proposals to account the fluctuated motivation. Therefore, it is not the researcher's attempt to ignore the influence of variation among different course contents and teachers. Rather, these differences were predicted and expected within the framework of the research design. The focus in this study is to see if motivation fluctuated in different stages in general rather than detecting the various factors for a specific course. If what Dörnyei' suggested was supported, the motivation changes should happened in different stages regardless the course contents and teachers. The administration of the questionnaires for this study took place in two stages: the first stage was held at the beginning of the semester and was delivered in its first week; the second stage took place during the last week of the same semester.

Though the aim of this study was to include all the students at both stages, it transpired that, in fact, some students took both the first test and second test, while others took only one. This was because, in the second stage, the students had been allocated to different classes from those of their first week. After the first proficiency test was given at the beginning of the semester, students in the required English course were redistributed according to their scores in the proficiency test. This increased the difficulties of identifying the original student participants. In addition, some classes failed to return the questionnaires. Therefore, some students could not be traced at the second stage and the overall number of participants decreased to 882 as a result. For students who didn't register the extra courses and who dropped out from the extra courses, the researcher could contact with them to take the post-

test through their compulsory English classes. All the first year students needed to take two hours English compulsory courses and the student numbers on the cover page of the first set of questionnaires facilitated the researcher to track their records. Through the student number, all the students who took pre-test should have chance to participate the post-test. However, some teachers of the compulsory courses fail to distribute the post-test and hence some of the students who didn't registered the course or continue the courses cannot participate the post-test. This is the main reason causing the decrease number in the post-test.

5.2.3 Administration and ethics

The questionnaires for this study were administered to the students in their class units. All the questionnaires were given to students by the teachers of the required English course. The teachers explained the purpose and the meaning of the questionnaire beforehand. Therefore, the meaning of various items could be clarified by the teachers so that the respondents could understand them clearly.

Though the questionnaires were presented to the students by the teachers in class, the students were informed that completing them was not compulsory. If they wished, they could leave the questions unanswered and, to avoid any embarrassment, they did not need to leave the classroom. They still handed in the questionnaires along with the other students, who would not be aware they had not completed the questionnaires. Their right to refuse to do the questionnaires was therefore ensured. The signature on the cover page of the questionnaires is not a directly expressed consent signature. However, since the information on the cover page indicated that students could choose not to fill in the questionnaires, the fact that they put their name and other information in the questionnaires could be viewed as an implied consent.

Furthermore, on the first page of the consent page, students were informed that the results of the tests would have no influence on their marks. In other words, they were not forced to finish the tests in order to secure their scores. Both the Chinese and English

versions of the consent cover page are provided in **Appendix I and II**. In addition, although students were required to write their student numbers so that their department could be identified and their results across the two tests could be compared, they were assured that only the researcher would have access to the statistical results and that their teachers would not be able to read their responses. This further assured privacy and confidentiality.

Participants were told that the survey for this study could lead to the further improvement of the voluntary courses. Although they may have been aware that the researcher wished to understand their motivation for learning English, it was clear that they were being asked about this for the purposes of course improvement rather than with regard to issues of motivation research. Therefore, the implementation of the questionnaires in this study was based on voluntary participation with informed consent, which fulfils the relevant ethical requirements.

Chapter 6 Results

The analysis was carried out in several stages. During the first stage, reliability analyses for all items within the various constructs were conducted to establish which items should be carried forward to the main analysis. During the second stage, statistical tests based on the established items were carried out to establish the results of the research.

6.1 Reliability

Cronbach's alpha was used to assess the reliability of the items within the constructs. The initial results were: intrinsic, .16 (5 items); extrinsic, .78 (14 items); cultural interest, .64 (7 items); instrumental, .48 (4 items); integrative, .72 (4 items); and, anxiety, .13 (4 items). Because of the low reliability of some of the constructs, the possible cause of depletion of one or more items was examined by row correlations. The item correlations are shown in **Tables 6.1–6.10**; these tables are set out in turn accompanied by a detailed explanation of the results and implications in each case. The final results for all the constructs are then shown in **Table 6.11**.

For the intrinsic construct, **Table 6.1** reveals that Q27 and Q29 have a negative correlation with Q1, Q12 and Q21. As the original questionnaire suggested, these were reversed items (Schmidt, Boraie and Kassabgy, 1996, p.65). Therefore, they were both recoded, so that their potential reliability could be examined again. Consequently, Cronbach's alpha after recoding was raised to .74, which made the intrinsic construct reliable. In the new correlation of the recoded items, the recoded Q29 still seemed to have a very low correlation with other items (see **Table 6.2**) Hence, the recoded Q29 was removed and this formed a new reliability with the four items, which was .80. Therefore, the 4-item construct with $\alpha = .80$ was applied at the next stage.

Table 6.1

*Correlation Table for the Construct 'Intrinsic Motivation'**(n = 1675, 5 items, $\alpha = .16$; n = 1683, 3 items $\alpha = .80$)*

	Q1	Q12	Q21	Q27	Q29
Q1	-----	.55**	.56**	-.25**	-.08**
Q12	.55**	-----	.69**	-.30**	-.10**
Q21	.56**	.69**	-----	-.34**	-.09**
Q27	-.25**	-.30**	-.34**	-----	.14**
Q29	-.08**	-.10**	-.09**	.14**	-----

Note. **Correlation is significant at the .01 level (2-tailed).

Q 1. Intrinsic: I enjoy learning English very much.

Q12. Intrinsic: Learning English is a challenge that I enjoy.

Q21. Intrinsic: Learning English is a hobby for me.

Q27. Intrinsic: I don't enjoy learning English, but I know that learning English is important for me.

Q29. Intrinsic: I wish I could learn English in an easier way, without going to classes.

Table 6.2

*Correlation Table for the Construct 'Intrinsic Motivation' – Item Recoded**(n = 1675, 4 items, $\alpha = .80$; n = 1674, 5 items $\alpha = .74$)*

	Q1	Q12	Q21	Q27	Q29
Q1	-----	.55**	.56**	.36**	.08**
Q12	.55**	-----	.69**	.41**	.10**
Q21	.56**	.69**	-----	.50**	.09**
Q27(recoded)	.36**	.41**	.50**	-----	.24**
Q29(recoded)	.08**	.10**	.09**	.24**	-----

Note. **Correlation is significant at the .01 level (2-tailed).

Q 1. Intrinsic: I enjoy learning English very much.

Q12. Intrinsic: Learning English is a challenge that I enjoy.

Q21. Intrinsic: Learning English is a hobby for me.

Q27. Intrinsic: I don't enjoy learning English, but I know that learning English is important for me.

Q29. Intrinsic: I wish I could learn English in an easier way, without going to classes.

Although the overall Cronbach's alpha ($\alpha = .78$) was over .70 in the extrinsic motivation, the data in **Table 6.3** suggests that some items did not perform particularly well within the construct. For example, there was a negative correlation of Q31 and Q18 and a low correlation of Q22 with all other items. It was decided to eliminate these three items from the subscale set. Following the removal of these items, the Cronbach's alpha increased to .84. As a result, the items were applied at the next stage to an 11-item construct, rather than the original 14-item construct for the extrinsic subscale.

Table 6.3
Correlation Table for the Construct 'Extrinsic Motivation'
 (n = 1588, 14 items, $\alpha = .78$; n = 1595, 11 items, $\alpha = .84$)

	Q2	Q3	Q4	Q13	Q14	Q18	Q22	Q25	Q26	Q28	Q30	Q31	Q37	Q38
Q2	-----	.35**	.42**	.30**	.32**	-.11**	.24**	.31**	.20**	.17**	.24**	-.19**	.46**	.31**
Q3	.35**	-----	.28**	.30**	.31**	-.08**	.23**	.24**	.46**	.38**	.48**	-.14**	.20**	.34**
Q4	.42**	.28**	-----	.35**	.40**	-.15**	.15**	.29**	.13**	.16**	.27**	-.15**	.30	.31**
Q13	.30**	.30**	.35**	-----	.56**	-.03	.25**	.29**	.29**	.35**	.36**	-.10**	.28**	.31**
Q14	.32**	.31**	.40**	.56**	-----	-.06*	.18**	.32**	.26**	.40**	.44**	-.12**	.32**	.36**
Q18	-.11**	-.08**	-.15**	-.03	-.06*	-----	-.06*	.04	.11**	.13**	-.05*	.39**	-.01	-.11**
Q22	.24**	.23**	.15**	.25**	.18**	-.06*	-----	.20**	.19**	.16**	.22**	-.09**	.15**	.18**
Q25	.31**	.24**	.29**	.29**	.32**	.04	.20**	-----	.26**	.28**	.28**	-.06*	.32**	.31**
Q26	.20**	.46**	.13**	.29**	.26**	.10**	.19**	.26**	-----	.54**	.46**	.04	.18**	.26**
Q28	.17**	.38**	.16**	.35**	.40**	.13**	.16**	.28**	.54**	-----	.54**	.04	.21**	.29**
Q30	.24**	.48**	.27**	.36**	.44**	-.05*	.22**	.28**	.46**	.54**	-----	-.08**	.20**	.35**
Q31	-.19**	-.14**	-.15**	-.10**	-.12**	.40**	-.09**	-.06*	.04	.04	-.08**	-----	-.08**	-.18**
Q37	.46**	.20**	.30**	.28**	.32**	-.01	.15**	.32**	.18**	.21**	.20**	-.08**	-----	.42**
Q38	.31**	.34**	.31**	.31**	.36**	-.11**	.18**	.31**	.26**	.29**	.35**	-.18**	.42**	-----

Note. **Correlation is significant at the .01 level (2-tailed); *correlation is significant at the .05 level (2-tailed).

Q2. Extrinsic: I am learning English because I want to spend a period of time in an English-speaking country.

Q3. Extrinsic: If I learn English better, I will be able to get a better job.

Q4. Extrinsic: One reason I learn English is that I can meet new people and make friends in my English class.

Q13. Extrinsic: I want to do well in this class because it is important to show my ability to my family and friends.

Q14. Extrinsic: I am learning English to become more educated.

Q18. Extrinsic: The main reason I need to learn English is to pass examinations.

Q22. Extrinsic: I want to learn English because it is useful when travelling in many countries.

Q25. Extrinsic: I need to be able to read textbooks in English.

Q26. Extrinsic: Increasing my English proficiency will have financial benefits for me.

Q28. Extrinsic: Being able to speak English will add to my social status.

Q30. Extrinsic: If I can speak English, I will have a marvellous life.

Q31. Extrinsic: The main reason I am learning English is that my parents want me to improve my English.

Q37. Extrinsic: I want to learn English because I would like to emigrate.

Q38. Extrinsic: Everybody in Taiwan should be able to speak English.

After careful examination of **Table 6.4** for the cultural interest subscale, it was concluded that Q35 had a smaller correlation than the other items. The removal of Q35 raised the reliability to .70. Although Q7 had also been suspected of having a lower correlation, the Cronbach's alpha was reduced (.69) if this was eliminated. Consequently, a 6-item construct, rather than the original 7-item construct, was used for the cultural interest subscale.

Table 6.4

Correlation Table for the Construct 'Cultural Interest'
($n = 1677$, 7 items, $\alpha = .64$; $n = 1682$, 6 items, $\alpha = .70$)

	Q6	Q7	Q16	Q19	Q23	Q34	Q35
Q6	-----	.22**	.30**	.59**	.34**	.25**	.09**
Q7	.22**	-----	.26**	.22**	.20**	.16**	.10**
Q16	.30**	.27**	-----	.35**	.29**	.23**	.19**
Q19	.60**	.22**	.35**	-----	.41**	.27**	.12**
Q23	.34**	.20**	.29**	.42**	-----	.25**	.12**
Q34	.25**	.16**	.23**	.27**	.25**	-----	.15**
Q35	.10**	.10**	.19**	.12**	.12**	.15**	-----

Note. **Correlation is significant at the .01 level (2-tailed).

Q6: Cultural interest: English proficiency is important to me because it allows me to learn about the current intellectual trends of the world, and thus to broaden my view.

Q7: Cultural interest: The English are a conservative people who cherish customs and traditions.

Q16: Cultural interest: British culture has contributed a lot to the world.

Q19: Cultural interest: English proficiency is important to me because it allows me to get to know various cultures and peoples.

Q23: Cultural interest: English proficiency is a part of the general culture.

Q34: Cultural interest: Most of my favorite actors and musicians are either British or American.

Q35: Cultural interest: Americans are very friendly people.

Table 6.5 shows the item correlation for items relating to instrumental motivation.

The results suggest that not all items have a very high correlation. Firstly, Q11 was removed due to its low and negative correlation with other items. Nevertheless, the elimination of this item only improved the reliability to .56, which is still not high enough for a sound and acceptable Cronbach's alpha. Furthermore, if more items were to be deleted from this construct, the Cronbach's alpha dropped to even lower values, as shown in **Table 6.6**. Following further examination with the recoded Q11, which had a more negative and low item correlation, the Cronbach's alpha decreased to .33 (see **Table 6.7**). The subscale with low reliability could not be improved through recoding or removing items; this resulted in

unreliable data that could not be included in the analysis and interpretation. Consequently, due to the low reliability of this instrumental subscale, the results could not be applied at the next stage for further analysis and interpretation.

Table 6.5

Correlation Table for the Construct 'Instrumental Motivation' (n = 1676, 4-items, $\alpha = .48$)

	Q10	Q11	Q24	Q36
Q10	-----	.23**	.43**	.27**
Q11	.23**	-----	.07**	-.02
Q24	.43**	.07**	-----	.26**
Q36	.27**	-.02	.26**	-----

Note. **Correlation is significant at the .01 level (2-tailed).

Q10: Instrumental: If I spoke English, I could do a more interesting job.

Q11: Instrumental: Taking the English language exam does not play an important role in my learning English.

Q24: Instrumental: If I spoke English, I could travel more for official purposes.

Q36: Instrumental: I would like to take a language exam like GEPT, ILETS, TOEIC or TOEFL.

Table 6.6

Cronbach's Alpha if Item Eliminated in Construct 'Instrumental Motivation'

Q10	.26
Q11	.56
Q24	.32
Q36	.47

Table 6.7

Correlation Table for the Construct 'Instrumental Motivation' – Item Recoded (n = 1676, 4 items, $\alpha = .33$)

	Q10	Q11 (recoded)	Q24	Q36
Q10	-----	-.23**	.43**	.27**
Q11(recoded)	-.23**	-----	-.08**	.02
Q24	.43**	-.07**	-----	.26**
Q36	.27**	.02	.26**	-----

Note. **Correlation is significant at the .01 level (2-tailed).

Q10: Instrumental: If I spoke English, I could do a more interesting job.

Q11: Instrumental: Taking the English language exam does not play an important role in my learning English.

Q24: Instrumental: If I spoke English, I could travel more for official purposes.

Q36: Instrumental: I would like to take a language exam like GEPT, ILETS, TOEIC or TOEFL.

Table 6.8 shows the item correlation for items relating to integrative motivation. It was found that no specific item could be readily be eliminated to improve the reliability of the construct of integrative motivation. However, it was considered that the Cronbach's alpha (.72) would be strong enough to account for this study's reliability. As a result, the items in the integrative motivation construct would remain as the original 4-item subscale for the analysis at the next stage.

There might be concerns about the low reliability of some items in instrumental motivation and anxiety. First, low reliability suggests no further inference should base on instrumental motivation and this low reliability of the instrumental motivation hence led the absence of this factor in the latter ANOVA analysis. Second, the Cronbach's alpha (.67) is very closed with .7 in the items of anxiety. Pallant (2001, p.85) indicates that it is common that low Cronbach values could be found with short scales and an optimal range for the inter-item correlation is recommended as .2-.4. The inter-item correlation for Q8 and Q17 is .51 which is higher than the recommendation.

Table 6.8
Correlation Table for the Construct 'Integrative Motivation'
($n = 1676$, 4 items, $\alpha = .72$)

	Q5	Q15	Q32	Q33
Q5	-----	.45**	.35**	.47**
Q15	.45**	-----	.27**	.35**
Q32	.35**	.27**	-----	.55**
Q33	.47**	.35**	.55**	-----

Note. **Correlation is significant at the .01 level (2-tailed).

Q5: Integrative: Studying English is important to me because it offers a new challenge in my life, which has otherwise become a bit monotonous.

Q15: Integrative: I believe that I will be able to learn English to an extent that satisfies me.

Q32: Integrative: There would be a serious gap in my life if I couldn't learn English.

Q33: Integrative: At present, learning English is one of the most important things to me.

Because of the negative result with the other items of the anxiety construct shown in **Table 6.9**, Q20 was recoded and as a result the Cronbach's alpha for anxiety increased

from .13 to .56 (**Table 6.10**). As the value for the Cronbach's alpha was still low, Q9 (which had a low correlation) was taken out and the reliability increased to .66. To attain higher reliability, the recoded Q20 was finally removed and the Cronbach's alpha improved to .67 with a 2-item subscale. Consequently, the 2-item subscale was applied in the anxiety subscale at the next stage.

Table 6.9
Correlation Table for the Construct 'Anxiety'
($n = 1669$, 4 items, $\alpha = .13$)

	Q8	Q9	Q17	Q20
Q8	-----	.19**	.51**	-.28**
Q9	.19**	-----	.12**	-.07**
Q17	.51**	.12**	-----	-.39**
Q20	-.28**	-.07**	-.39**	-----

Note. **Correlation is significant at the .01 level (2-tailed).

Q8: Anxiety: I have had some bad experiences with learning languages.

Q9: Anxiety: I think I belong to the class of learners who can completely lose their interest in learning if they have a bad teacher.

Q17: Anxiety: I think language learning is more difficult for me than for the average learner.

Q20: Anxiety: I think I have a good sense for languages.

Table 6.10
Correlation Table for the Construct 'Anxiety': Recoded
($n = 1669$, 4 items, $\alpha = .559$; $n = 1678$, 3 items, $\alpha = .661$; $n = 1696$, 2 items, $\alpha = .67$)

	Q8	Q9	Q17	Q20 (recoded)
Q8	-----	.19**	.51**	.28**
Q9	.19**	-----	.12**	.07**
Q17	.51**	.12**	-----	.39**
Q20 recoded	.28**	.07**	.39**	-----

Note. **Correlation is significant at the .01 level (2-tailed).

Q8: Anxiety: I have had some bad experiences with learning languages.

Q9: Anxiety: I think I belong to the class of learners who can completely lose their interest in learning if they have a bad teacher.

Q17: Anxiety: I think language learning is more difficult for me than for the average learner.

Q20: Anxiety: I think I have a good sense for languages.

Table 6.11 summarizes the initial and final reliability values. This table shows the Cronbach's alpha result for each construct when different items were either deleted or

recoded. The reliability of each construct was as follows: intrinsic motivation, .80 (4 items), extrinsic motivation, .84 (11 items), cultural interest, .70 (6 items), instrumental motivation, .56 (3 items), integrative motivation, .72 (4 items) and anxiety, .67 (2 items).

These final constructs were taken through to the next stage of the analysis.

Table 6.11

Summary Table Detailing the Reliability Analyses Carried out for each Construct

	Initial Cronbach's alpha	Items	Final Cronbach's alpha	Items taken forward to the final analysis
Intrinsic Motivation	$\alpha = .16$	Q1, 12, 21, 27, 29	$\alpha = .80$	Q1, 12, 21, 27 (recoded)
	$\alpha = .80$	Q1, 12, 21		
	$\alpha = .74$	Q1, 12, 21, 27 (recoded), 29(recoded)		
Extrinsic Motivation	$\alpha = .78$	Q2, 3, 4, 13, 14, 18, 22, 25, 26, 28, 30, 31, 37, 38	$\alpha = .84$	Q2, 3, 4, 13, 14, 25, 26, 28, 30, 37, 38
Cultural Interest	$\alpha = .64$	Q6, 7, 16, 19, 23, 34, 35	$\alpha = .70$	Q6, 7, 16, 19, 23, 34
Instrumental Motivation (Not applied at the next stage)	$\alpha = .48$	Q10, 11, 24, 36	Deleted ($\alpha = .56$)	Deleted (Q10, 24, 36)
	$\alpha = .26$	Q11, 24, 36		
	$\alpha = .56$	Q10, 24, 36		
	$\alpha = .32$	Q10, 11, 36		
	$\alpha = .47$	Q10, 11, 24,		
Integrative Motivation	$\alpha = .33$	Q10, 11 (recoded), 24, 36	$\alpha = .72$	Q5, 15, 32, 33
	$\alpha = .72$	Q5, 15, 32, 33		
Anxiety	$\alpha = .13$	Q8, 9, 17, 20	$\alpha = .67$	Q8, 17
	$\alpha = .56$	Q8, 9, 17, 20 (recoded)		

6.2 Results of research questions

Having established the items that would make up the various constructs, the next stage of the analysis was to address the research questions related to these constructs. For each construct, the mean ratings represented the average rating among the items for that construct.

6.2.1 Initial differences among different registered groups

The first research question was: “Is there a difference in motivation before a voluntary but free English language course between students who stay on the course, leave the course and do not decide to take the course?”

In order to identify and measure any significant differences among students who took different actions, a one-way between-groups ANOVA was conducted to discern the nature of the different motivation constructs existing among the different registered groups. Subjects were divided into three groups (Group 1: non-registered; Group 2: registered but dropped out; Group 3: completed the registered course). The testing in these groups was based on each of the individual constructs, as listed in Chapter 5. The results are shown below.

Table 6.12 (Figure 6.1) reveals that there are significant differences among the three registered status groups in terms of intrinsic motivation, $F(2,882) = 4.072$, $p < .05$, with a small effect size (eta squared = .009). Further post hoc comparisons using the Tukey HSD method revealed that Group 2 ($M = 3.32$, $SD = .95$) did not differ significantly from either Group 1 or Group 3. Nevertheless, Group 3 had a significantly higher mean ($M = 3.55$, $SD = 1.08$) than Group 1 ($M = 3.24$, $SD = 1.09$), which indicates that the students who finished the course had a higher intrinsic motivation than those who did not register.

Table 6.12
One-way ANOVA Results for Different Registered Groups

	Non-registered Group 1 (<i>n</i> = 724)	Registered but dropped out Group 2 (<i>n</i> = 43)	Registered and completed Group 3 (<i>n</i> = 115)	<i>F</i> (<i>df</i> = 2,882)	η^2
Intrinsic Motivation	3.24 _a (1.09)	3.32 _{ab} (0.95)	3.55 _b (1.08)	4.072*	.009
Extrinsic Motivation	4.06 _a (0.69)	4.13 _{ab} (0.66)	4.28 _b (0.61)	5.139**	.011
Cultural Interest	4.22 (0.73)	4.23 (.59)	4.36 (0.70)	1.748	.004
Integrative Motivation	4.16 _a (0.90)	4.20 _{ab} (0.81)	4.45 _b (0.88)	5.423**	.012
Anxiety	4.28 _a (1.11)	4.55 _a (1.03)	3.92 _b (1.11)	6.948**	.015

Note: This table shows the mean ratings for the 4-item intrinsic subscale (out of 5), the 11-item extrinsic subscale (out of 14), the 6-item cultural interest subscale (out of 7), the 4-item integrative subscale (out of 4) and the 2-item anxiety subscale (out of 4). Standard deviations are in parentheses below the means. Means not sharing common subscripts are significantly different from each other based on the post hoc comparisons using the Tukey HSD.

^a. Means sharing the same subscript letter are not significantly different; e.g. *a*, *a*, *ab*, *b* means that *a* and *a* are the same as/not significantly different from *ab* (because they share the *a* subscript) but significantly different from *c*; *ab* and *b* are the same as/not significantly different (because they share the *b* subscript).

* = $P < .05$; ** = $P < .01$

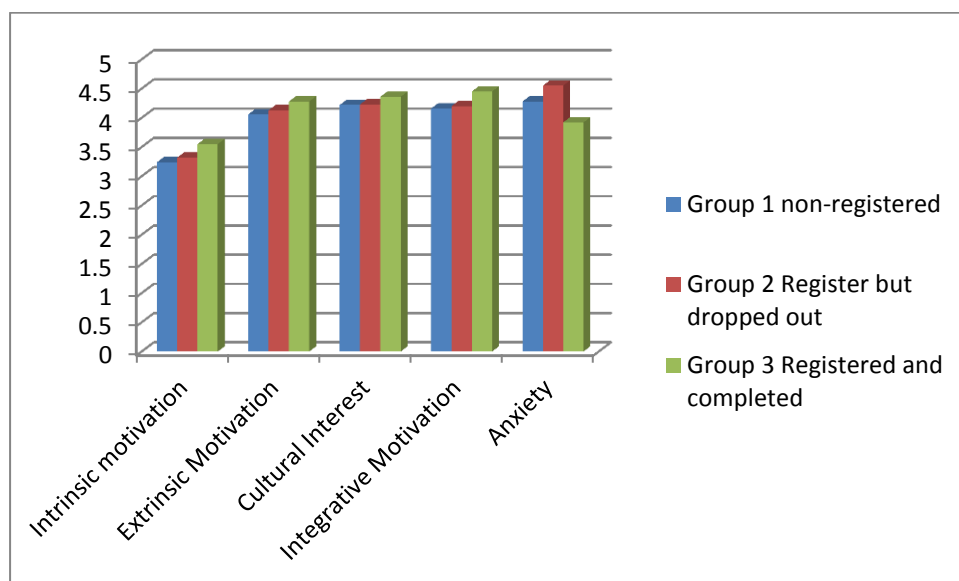


Figure 6.1 One-way ANOVA Results for Different Registered Groups

With regard to extrinsic motivation, a statistically significant effect was found: $F(2,882) = 5.139, p < .01$. However, the effect size was quite small, since the eta squared was only .011. Post hoc comparisons were carried out using the Tukey HSD method revealed that while the mean for Group 3 ($M = 4.28, SD = 0.61$) appeared to be significantly higher than that for Group 1 ($M = 4.06, SD = 0.69$), although it was not significantly different from that for Group 2 ($M = 4.13, SD = 0.66$). Accordingly, students who finished the course had higher extrinsic motivation than those who did not register.

While the results from the cultural interest subscale, $F(2,882) = 1.748, p = .175$, suggested that there were no significant differences among these three groups, the result for integrative motivation, $F(2,882) = 5.423, p < .01$, eta squared = .012, indicated that there was a statistically significant difference between the three groups. A multiple comparisons test using Tukey HSD was then applied, which found that Group 3 had a higher mean ($M = 4.45, SD = 0.88$) than Group 1 ($M = 4.16, SD = 0.90$). On the other hand, Group 2 ($M = 4.20, SD = .81$) did not differ from Groups 1 or 3. This suggests a similar result to the previous intrinsic and extrinsic motivation subscale, in that students who finished the course could be shown to have higher integrative motivation than those who did not register.

Within the anxiety subscale the result, $F(2,882) = 6.948, p < .01$, eta squared = .015, showed that there was a statistically significant difference between the different status groups. Post hoc comparisons using the Tukey HSD method revealed that Group 2 had a greater mean ($M = 4.55, SD = 1.03$) than Group 3 ($M = 3.92, SD = 1.11$) but did not significantly differ from Group 1 ($M = 4.28, SD = 1.11$). It was noted that students who registered and finished the course had a lower score for anxiety than students who did not register, or those who registered and dropped out.

From the results obtained here, students who registered and finished the voluntary

courses had significantly higher means in intrinsic, extrinsic and integrative motivation ratings than those in the group that did not take the course. However, on the anxiety subscale, students who registered for the voluntary courses but dropped out had higher mean ratings than those who registered for and finished the courses.

Due to the large sample size, it is possible that a significant difference could have originated from small differences among the sample participants. The eta squared results (intrinsic, $\eta^2 = .009$; extrinsic, $\eta^2 = .011$; integrative, $\eta^2 = .012$; and confidence, $\eta^2 = .015$) suggest a small effect size (Cohen, 1988, cited in Pallant, 2001, p.175). The small effect size suggests the results should be interpreted cautiously, otherwise Type 1 errors could occur.

6.2.2 Changes within different registered groups after one semester

The second research question was “Is there a change in motivation during the course among students who make these different decisions whether to attend the course?”

The central objective of this research question was to examine whether students' ratings across the different measures of motivation changed from Time 1 (the beginning of the semester) to Time 2 (the end of the semester). This analysis required a mixed between-within groups ANOVA, where time was the key within-groups factor (with two levels: Time 1 and Time 2) and where status in terms of registered for courses and completed was the common factor (with three levels: Group 1: non-registered; Group 2: registered and dropped out; Group 3: completed the registered courses). Where the main effects were significant, post hoc comparisons were conducted using the Tukey HSD method to reveal how the groups were different. The results are shown in **Table 6.13** to **Table 6.18** and, again, these are explained in the text accompanying each of the tables.

Table 6.13

Mixed Between-within Groups ANOVA

	Time (within group)		Registry status (between groups)		Time* Registry	
	<i>F</i> (df = 1)	η^2	<i>F</i> (df = 2)	η^2	<i>F</i> (df = 2)	η^2
Intrinsic Motivation (<i>N</i> = 877)	21.50***	.024	6.67**	.015	.999	.002
Extrinsic Motivation (<i>N</i> = 876)	.229	.000	7.03*	.016	2.43	.006
Cultural Interest (<i>N</i> = 876)	2.39	.003	4.22*	.010	2.48	.006
Integrative Motivation (<i>N</i> = 876)	3.15	.004	8.06***	.018	2.73	.006
Anxiety (<i>N</i> = 876)	9.72*	.011	5.53*	.013	1.80	.004

* = $p < .05$; ** = $p < .01$; *** = $p < .001$

Tables 6.14–6.18 show the mean ratings for the 4-item intrinsic subscale (out of 5), the 11-item extrinsic subscale (out of 14), the 6-item cultural interest subscale (out of 7), the 4-item integrative subscale (out of 4) and the 2-item anxiety subscale (out of 4). Standard deviations are in parentheses. Means not sharing common subscripts are significantly different from each other.

On the intrinsic motivation subscale, there was a statistically significant main effect for time within groups, $F(1,877) = 21.50$, $p < .001$. However, the size of the effect was small (eta squared = .024; see **Table 6.13**). At the end of the semester, students' intrinsic motivation ($M = 3.46$, $SD = 0.95$) was significantly higher than at the beginning ($M = 3.28$, $SD = 1.09$). The main effect of the course registered and completion status factor, $F(2,877) = 6.67$, $p < .01$, achieved some statistical significance, even though the effect size was small (eta squared = .015). Post hoc comparisons using the Tukey HSD test indicated that Group 3 ($M = 3.66$) had a significantly higher intrinsic motivation mean than the Group 1 ($M = 3.32$). Group 2 ($M = 3.49$) did not differ from Groups 1 or 3. Even though there was an increase for all three

groups for intrinsic motivation over time, the interaction effect, $F(2,877) = 0.999$, $p = .369$, did not reach the level of statistical significance. **Table 6.14 (Figure 6.2)** shows the means for the three groups.

Table 6.14
Mean Ratings (out of 4) for Intrinsic Motivation

	Non-registered Group 1 <i>n</i> = 721	Registered but dropped out Group 2 <i>n</i> = 43	Registered and finished Group 3 <i>n</i> = 113	Total <i>N</i> = 877
Time 1	3.24 (1.09)	3.32 (0.95)	3.56 (1.08)	3.28 (1.09)
Time 2	3.40 (0.94)	3.66 (1.05)	3.75 (0.98)	3.46 (0.95)
Total	3.32_a	3.49_{ab}	3.66_b	

Note. Standard deviations are in parentheses below means. Means sharing the same subscript letter are not significantly different; e.g. *a*, *a*, *ab*, *b* means that *a* and *a* are the same as/not significantly different from *ab* (because they share the *a* subscript) but significantly different from *c*; *ab* and *b* are the same as/not significantly different (because they share the *b* subscript).

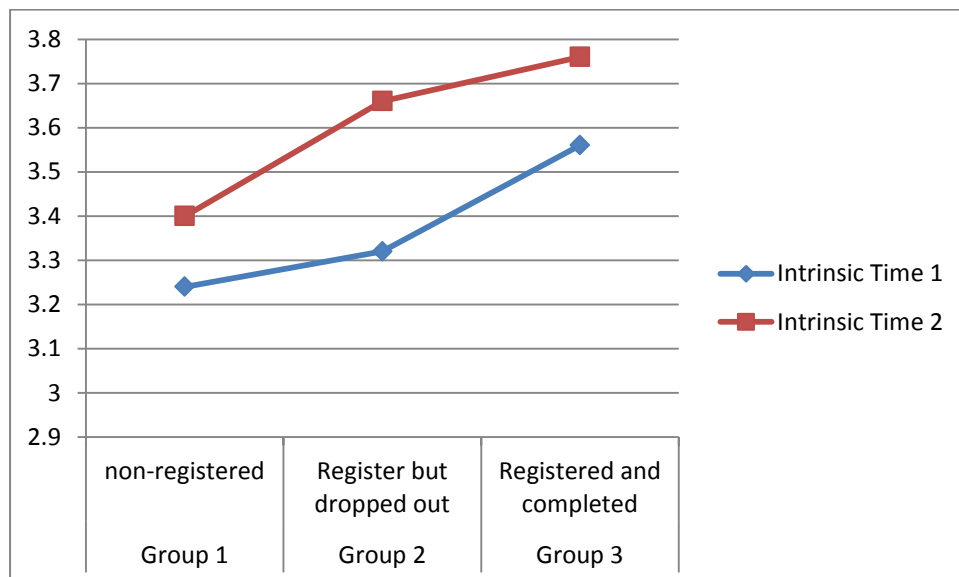


Figure 6.2 Mixed Between-within Groups ANOVA- Intrinsic Motivation

As for the extrinsic motivation subscale, neither the main effect of time, $F(1,876) = 0.229$, $p = .632$, nor the interaction effect, $F(2,876) = 2.43$, $p = .089$, achieved the level of significance (see **Table 6.13**). However, the main effect for the registered and completion status factor, $F(2,876) = 7.03$, $p < .05$, was significant with a small effect size (eta squared = .016). In a further Tukey HSD test, Group 3 ($M = 4.26$) had a significantly higher mean than Group 1 ($M = 4.04$). Group 2 ($M = 4.20$) did not differ from Groups 1 or 3. The means and standard deviations are presented in **Table 6.15** (**Figure 6.3**).

Table 6.15
Mean Ratings (out of 11) for Extrinsic Motivation

	Non-registered Group 1 <i>n</i> = 720	Registered but dropped out Group 2 <i>n</i> = 43	Registered and finished Group 3 <i>n</i> = 113	Total <i>N</i> = 876
Time 1	4.06 (0.69)	4.13 (0.66)	4.29 (0.62)	4.10 (0.68)
Time 2	4.02 (0.70)	4.28 (0.59)	4.23 (0.67)	4.06 (0.69)
Total	4.04_a	4.20_{ab}	4.26_b	

Note. Standard deviations are in parentheses below means. Means sharing the same subscript letter are not significantly different; e.g. *a*, *a*, *ab*, *b* means that *a* and *a* are the same as/not significantly different from *ab* (because they share the *a* subscript) but significantly different from *c*; *ab* and *b* are the same as/not significantly different (because they share the *b* subscript).

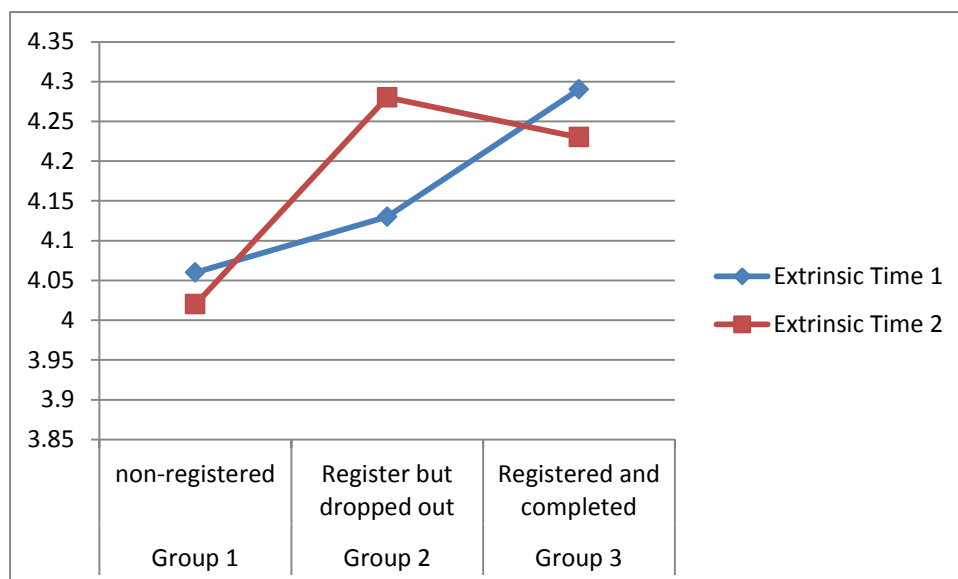


Figure 6.3 Mixed Between-within Groups ANOVA- Extrinsic Motivation

On the cultural interest subscale, there was no significant main effect of time, $F(1,876) = 2.39$, $p = .12$, but the main effect for the registered and completion status factor, $F(2,876) = 4.22$, $p < .05$, was significant with a low eta squared = .010 (see **Table 6.13**). Post hoc comparisons using the Tukey HSD test showed that the group which registered and finished the course ($M = 4.32$) had significantly higher cultural interest than the group which did not take the course ($M = 4.14$). However, Group 2 ($M = 4.26$) did not differ from Groups 1 or 3. Meanwhile, the interaction effect, $F(2,876) = 2.48$, $p = .084$, between time and status was not statistically significant. The means and standard deviations are presented in **Table 6.16**(**Figure 6.4**).

Table 6.16
Mean Ratings (out of 6) for Cultural Interest

	Non-registered Group 1 $n = 720$	Registered but dropped out Group 2 $n = 43$	Registered and finished Group 3 $n = 113$	Total $N = 876$
Time 1	4.22 (0.73)	4.23 (0.59)	4.36 (0.62)	4.24 (0.73)
Time 2	4.06 (0.72)	4.29 (0.59)	4.27 (0.67)	4.10 (0.71)
Total	4.14a	4.26ab	4.32b	

Note. Standard deviations are in parentheses below means. Means sharing the same subscript letter are not significantly different; e.g. *a*, *a*, *ab*, *b* means that *a* and *a* are the same as/not significantly different from *ab* (because they share the *a* subscript) but significantly different from *c*; *ab* and *b* are the same as/not significantly different (because they share the *b* subscript).

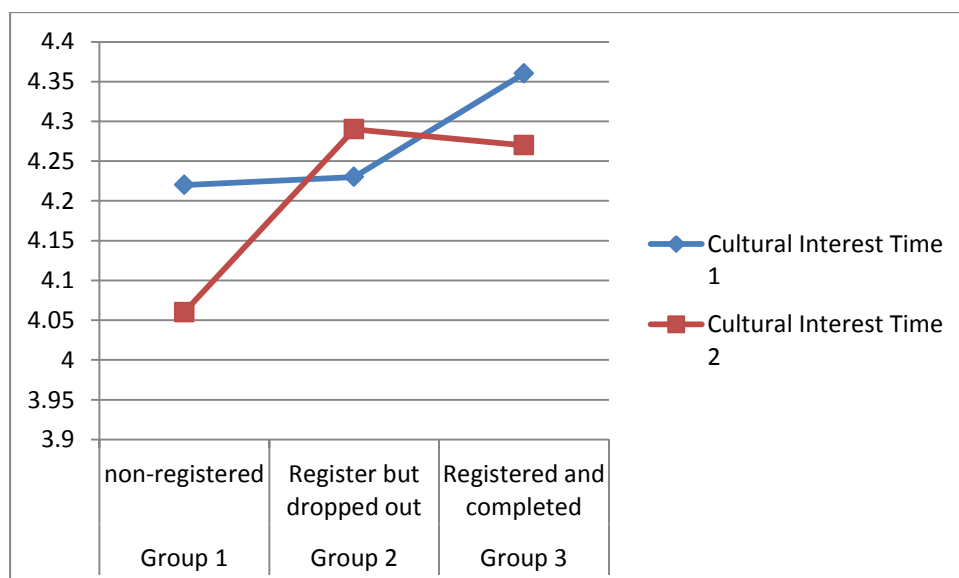


Figure 6.4 Mixed Between-within Groups ANOVA- Cultural Interest

The integrative motivation subscale had a significant effect on the course completion status factor, $F(2,876) = 8.06, p < .001$, with a small effect size (eta squared = .018; see **Table 6.13**). Post hoc comparisons using the Tukey HSD test indicated that the group which registered and finished the course had a higher mean ($M = 4.46$) than the group which did not take the course ($M = 4.16$). This result was similar to those of the previous subscales where Group 2 ($M = 4.34$) was no different from Groups 1 or 3. There was no significant main effect for the time factor, $F(1,876) = 3.15, p = .076$, and the interaction between time and status, $F(2,876) = 2.73, p = .066$, was not statistically significant. **Table 6.17 (Figure 6.5)** shows the means and standard deviations for the different times and courses with regard to completion status on the integrative motivation subscale.

Table 6.17
Mean Ratings (out of 4) for Integrative Motivation

	Non-registered Group 1 <i>n</i> = 720	Registered but dropped out Group 2 <i>n</i> = 43	Registered and finished Group 3 <i>n</i> = 113	Total <i>N</i> = 876
Time 1	4.16 (0.90)	4.20 (0.81)	4.47 (0.88)	4.20 (0.89)
Time 2	4.16 (0.83)	4.48 (0.81)	4.45 (0.85)	4.21 (0.84)
Total	4.16a	4.34ab	4.46b	

Note. Standard deviations are in parentheses below means. Means sharing the same subscript letter are not significantly different; e.g. *a, a, ab, b* means that *a* and *a* are the same as/not significantly different from *ab* (because they share the *a* subscript) but significantly different from *c*; *ab* and *b* are the same as/not significantly different (because they share the *b* subscript).

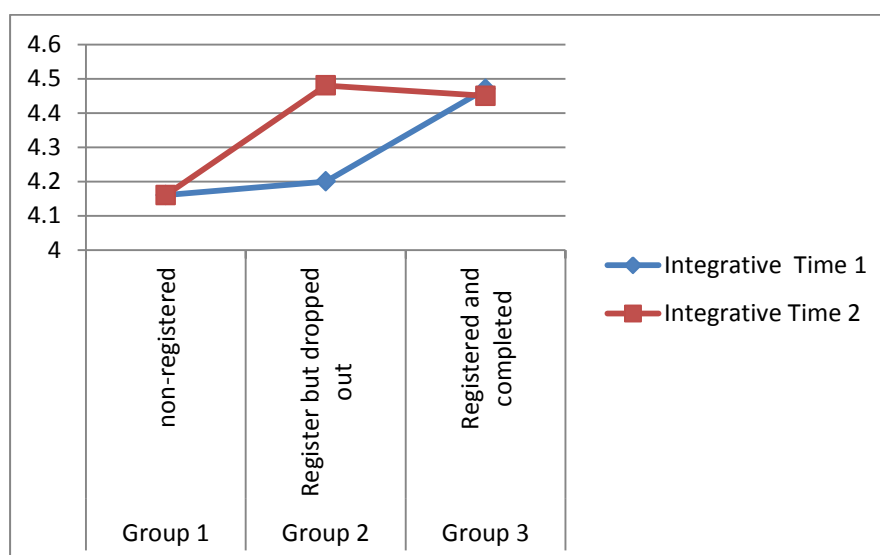


Figure 6.5 Mixed Between-within Groups ANOVA- Integrative Motivation

On the anxiety subscale, there was a statistically significant main effect for the time factor, $F(1,876) = 9.72, p < .05$. Nevertheless, the effect size was rather small (eta squared = .011; see **Table 6.13**). The mean anxiety score at Time 2 ($M = 4.05, SD = 1.06$) decreased in comparison to Time 1 ($M = 4.25, SD = 1.12$). This was also true for students with a lower mean anxiety rating at the end of the semester. The main effect on the completion status factor was significant, $F(2,876) = 5.53, p < .05$. With post hoc comparisons using the Tukey HSD test, Group 2 had a significantly higher mean ($M = 4.43$) than Group 3 ($M = 3.9$) but there was no significant difference between Group 1 ($M = 4.18$) and Group 2. There was no statistical significance for the interaction effect for time and status, $F(2,876) = 1.80, p = .164$.

The means and standard deviations are presented in **Table 6.18 (Figure 6.6)**

Table 6.18
Mean Ratings (out of 2) for Anxiety

	Non-registered Group 1 <i>n</i> = 720	Registered but dropped out Group 2 <i>n</i> = 43	Registered and finished Group 3 <i>n</i> = 113	Total <i>N</i> = 876
Time 1	4.28 (1.11)	4.55 (1.03)	3.92 (1.11)	4.25 (1.12)
Time 2	4.07 (1.08)	4.31 (.93)	3.88(.99)	4.05 (1.06)
Total	4.18a	4.43a	3.9b	

Note. Standard deviations are in parentheses below means. Means sharing the same subscript letter are not significantly different; e.g. *a, a, ab, b* means that *a* and *a* are the same as/not significantly different from *ab* (because they share the *a* subscript) but significantly different from *c*; *ab* and *b* are the same as/not significantly different (because they share the *b* subscript).

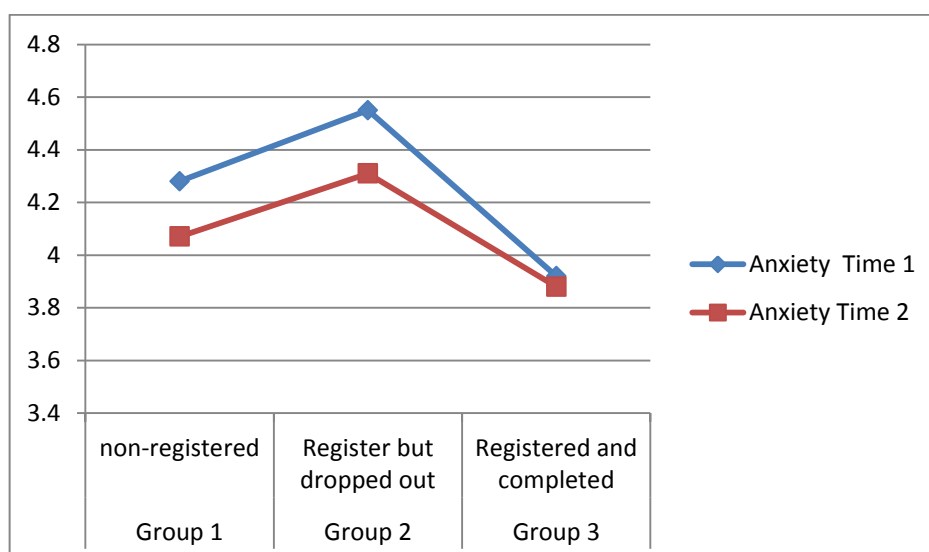


Figure 6.6 Mixed Between-within Groups ANOVA- Anxiety

At this stage, the main effect of the time factor on intrinsic motivation revealed significantly increasing mean scores throughout the semester. However, on the anxiety subscale, a statistically significant main effect for time suggests a decreasing mean score. The main effect for the course registered and completion status factors were the significant results for all the subscales. The group that registered and finished the course had higher means of intrinsic motivation, extrinsic motivation and cultural interest. However, the group which had registered but dropped out of the course had a higher mean score on the anxiety scale, which was different from the results for the other subscales. Furthermore, the interaction effect was not statistically significant with regard to all the subscales. As discussed in the previous section, it is necessary to consider the very small effect size before making any further interpretation.

6.2.3 Motivation difference on genders and majors

While analysing the obtained data, the researcher found that there was a difference in motivation among students in different genders and departments. Though this may not be expected within the research questions, the data showed some extra information concerning language motivation across different genders and departments. Therefore, review of the literature is beyond the scope of the thesis and it is still worth to list students' ratings across the various different measures of motivation from male to female in different departments as an extra reference. A two-way analysis of variance between groups was conducted to explore the impact of gender and department on motivation. Subjects were divided into three different groups according to their departments (Group 1: Social science; Group 2: Science; Group 3: Healthy and pharmacy). As regards gender, each subject contained two categories, male and female. Where the main effects were significant, post-hoc comparisons were conducted using Tukey HSD methods to reveal how the groups were different. The results of the two way

ANOVA are presented in **Tables 6.19**.

Table 6.19

Two way ANOVA of Gender and Majors (Gender and department)

	Gender		Majors		Gender*Majors	
	F(df=1)	η^2	F(df=2)	η^2	F(df=2)	η^2
Intrinsic Motivation (n=1707)	6.38*	.004	8.99**	.010	3.95*	.005
Extrinsic Motivation (n=1707)	17.67*	.010	6.89**	.008	1.41	.002
Cultural Interest (n= 1707)	34.60**	.020	1.77	.002	.010	.000
Integrative Motivation (n=1707)	10.84**	.006	8.35***	.010	2.65	.003
Anxiety (n=1707)	5.49*	.003	3.88*	.005	2.69	.003

*= $p<.05$; **= $p<.01$; ***= $p<.001$

In terms of intrinsic motivation, the main effect on gender was statistically significant, $F(1,1707)=6.38$, $p<.05$, with a small effect size (eta squared=.004) (See **Table 6.19**). The females ($M=3.36$, $SD=1.06$) achieved a significantly higher mean score than the males ($M=3.18$, $SD=1.03$). A significant main effect [$F(2,1707)=8.99$, $p<.01$] also suggested that there were differences between departments with a low effect size (eta squared =.010). Based on post-hoc comparisons using the Tukey HSD test, the Health and Pharmacy Department ($M=3.43$, $SD=1.14$) obtained a higher mean score than the Science Department ($M=3.18$, $SD=.94$). Social Science ($M=3.30$, $SD=1.05$) did not have significant differences from either the Science or Health and Pharmacy Departments. Meanwhile, the interaction effect between gender and department also achieved a significant level, $F(2,1707)=3.95$, $p<.05$, with a small effect size (eta squared=.005). The result suggested that females had a higher intrinsic motivation in both Social Science ($M=3.38$, $SD=1.05$) and Science Departments ($M=3.27$, $SD=.96$), while males had a higher mean in the Health and Pharmacy Department (Male:

$M=3.50$, $SD=1.11$ > Female: $M=3.41$, $SD=1.16$). This interaction effect can also be examined though the graph. **Table 6.20** (**Figure 6.7**) shows the cell means for the department and gender means, with standard deviations.

Table 6.20-6.24 shows the mean ratings for the 4-item intrinsic subscale (out of 5), the 11-item extrinsic subscale (out of 14), the 6-item cultural Interest subscale (out of 7), the 4-item integrative subscale (out of 4) and the 2-item anxiety subscale (out of 4). Standard deviations are in parentheses. Means not sharing common subscripts were significantly different from each other.

Table 6.20

Mean ratings (out of 5) for the Intrinsic Motivation (Gender and department)

	Social Science Group 1 N= 792	Science Group 2 N=413	Health and Pharmacy Group 3 N= 502	Total N=1707
Male n=492	3.09(1.04)	3.03(.89)	3.50(1.11)	3.18(1.03)
Female n=1215	3.38(1.05)	3.27(.96)	3.41(1.16)	3.36(1.06)
Total	3.30(1.05)ab	3.18(.94)a	3.43(1.14)b	

Note. Standard deviations are in parentheses below means. Means sharing the same subscript letter are not significantly different; e.g., a, a, ab, b means that a and a are the same as/not significantly different from ab (because they share the a subscript) but significantly different from c. ab and b which are the same/not significantly different (because they share the b subscript).

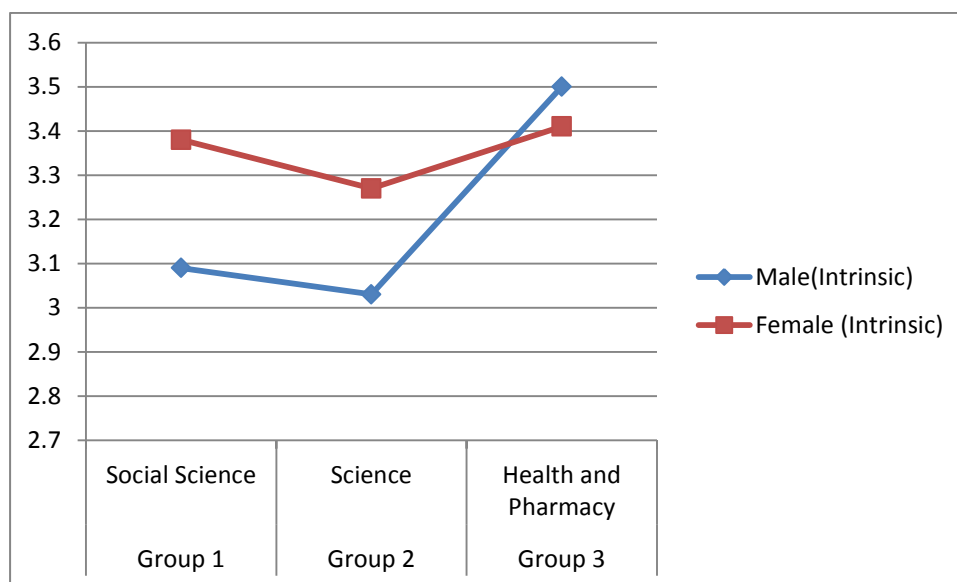


Figure 6.7 Two-way ANOVA-Intrinsic Motivation (Gender and department)

In terms of extrinsic motivation, the main effect on the gender factor was significant, $F(1,1707)=17.67$, $p<.05$, eta squared=.010 (See **Table 6.19**). Females ($M=4.15$, $SD=.67$)

were seen to have higher extrinsic motivation than males ($M=3.97$, $SD=.79$). There was also a significant main effect on the department factor, $F(2,1707)=6.89$, $p<.01$, $\eta^2=.008$. Taking the Tukey HSD test of the post-hoc comparisons into account, the extrinsic motivation ratings in the Health and Pharmacy Department ($M=4.19$, $SD=.66$) was higher than in the Social science Department ($M=4.05$, $SD=.76$). The Science Department ($M=4.08$, $SD=.66$) was not significantly different from Groups 1 or 3. No significant interaction effects between department and gender were found here [$F(2,1707)=1.41$, $p=.245$, $\eta^2=.002$]. The means and standard deviations are presented in **Table 6.21 (Figure 6.8)**.

Table 6.21

Mean ratings (out of 11) for the Extrinsic Motivation(Gender and department)

	Social Science Group 1 N= 792	Science Group 2 N=413	Health and Pharmacy Group 3 N= 502	Total N=1707
Male n=492	3.88(.88)	3.97(.71)	4.12(.72)	3.97(.79)
Female n=1215	4.11(.70)	4.14(.61)	4.21(.64)	4.15(.67)
Total	4.05(.76)a	4.08(.66)ab	4.19(.66)b	

Note. Standard deviations are in parentheses below means. Means sharing the same subscript letter are not significantly different; e.g., a, a, ab, b means that a and a are the same as/not significantly different from ab (because they share the a subscript) but significantly different from c. ab and b which are the same/not significantly different (because they share the b subscript).

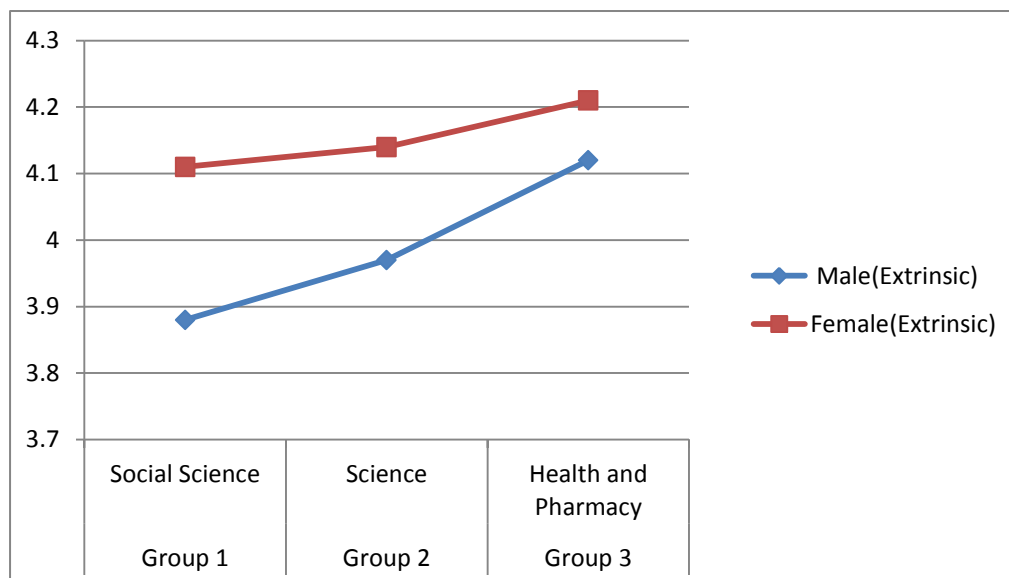


Figure 6.8 Two-way ANOVA-Extrinsic Motivation(Gender and department)

On the cultural interest subscale, the main effect on the gender factor was significant: $F(1,1707)=34.60, p<.01$, eta squared=.020 (See Table 6.19). Females ($M=4.30, SD=.68$) had a significant higher level of cultural interest than males ($M=4.07, SD=.78$). There was no significant difference in both main effects on the department [$F(2,1707)=1.77, p=.171$] and the interaction effect [$F(2,1707)=.010, p=.99$]. Table 6.22 (Figure 6.9) shows the cell means for the department and the gender means with standard deviations.

Table 6.22

Mean ratings (out of 6) for the Cultural Interest(Gender and department)

	Social Science Group 1 N= 792	Science Group 2 N=413	Health and Pharmacy Group 3 N= 502	Total N=1707
Male n=492	4.04(.90)	4.06(.70)	4.13(.67)	4.07(.78)
Female n=1215	4.28(.73)	4.29(.61)	4.36(.65)	4.30(.68)
Total	4.21(.78)	4.21(.65)	4.30(.66)	

Note. Standard deviations are in parentheses below means. Means sharing the same subscript letter are not significantly different; e.g., a, a, ab, b means that a and a are the same as/not significantly different from ab (because they share the a subscript) but significantly different from c. ab and b which are the same/not significantly different (because they share the b subscript).

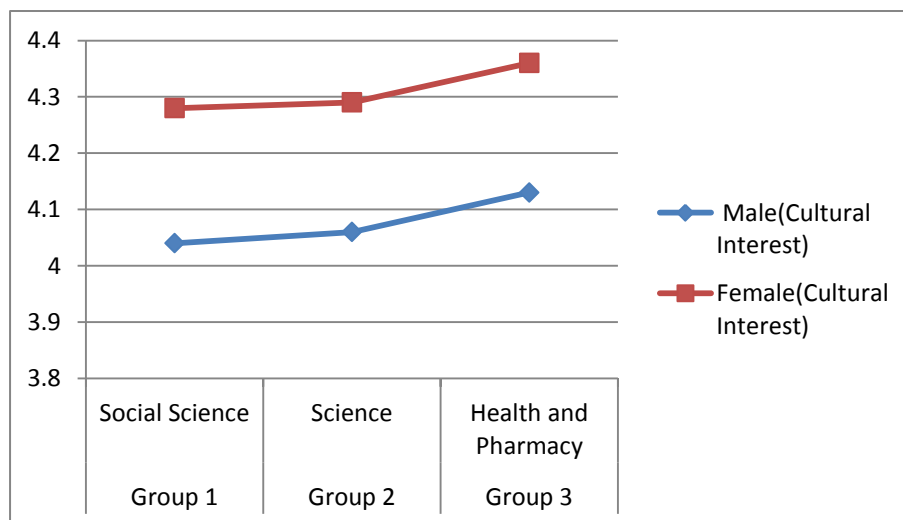


Figure 6.9 Two-way ANOVA-Cultural Interest(Gender and department)

On the Integrative motivation subscale, the main effect on the gender factor reached a

significant difference, $F(1,1707)=10.84$, $p<.01$, with small effect size (eta squared=.006). (See Table 6.19) There were more integrative motivation rating means for females ($M=4.29$, $SD=.91$) than males ($M=4.10$, $SD=.98$) There was also a significant main effect on the department factor, $F(2,1707)=8.35$, $p<.001$, with a small effect size (eta squared=.010). The results of the Tukey HSD test of the post-hoc comparisons suggested that the Health and Pharmacy Department ($M=4.36$, $SD=.85$) had a higher rating for integrative motivation than the Social Science ($M=4.18$, $SD=.94$) and Science ($M=4.18$, $SD=1.01$) Departments. However, the Social Science and Science Departments were not significantly different from each other. There was no significant difference in interaction effects between department and gender: $F(2,1707)=2.65$, $p=.07$. The means and standard deviations are presented in Table 6.23 (Figure 6.10).

Table 6.23

Mean ratings (out of 4) for the Integrative Motivation(Gender and department)

	Social Science Group 1 N= 792	Science Group 2 N=413	Health and Pharmacy Group 3 N= 502	Total N=1707
Male n=492	3.95(1.08)	4.08(.89)	4.33(.88)	4.10(.98)
Female n=1215	4.26(.88)	4.24(1.08)	4.37(.84)	4.29(.91)
Total	4.18(.94)a	4.18(1.01)a	4.36(.85)b	

Note. Standard deviations are in parentheses below means. Means sharing the same subscript letter are not significantly different; e.g., a, a, ab, b means that a and a are the same as/not significantly different from ab (because they share the a subscript) but significantly different from c. ab and b which are the same/not significantly different (because they share the b subscript).

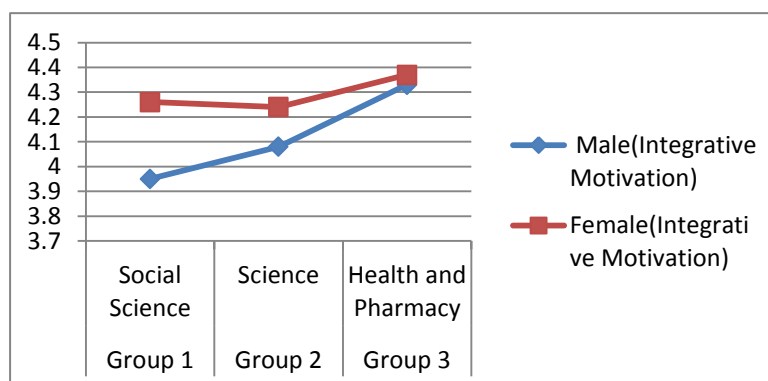


Figure 6.10 Two-way ANOVA-Integrative Motivation(Gender and department)

On the subscale of anxiety, the main effect of the gender factor [$F(1,1707)=5.49$,

$p < .05$, eta squared = .003] had a significant difference. (See Table 6.19) In this subset, males ($M = 4.37$, $SD = 1.17$) had higher mean anxiety ratings than females ($M = 4.19$, $SD = 1.11$). Meanwhile, the significant main effect on the department factor [$F(2, 1707) = 3.88$, $p < .05$, eta squared = .005] with a further Tukey HSD test, also revealed a different result from the previous subsets. The Health and Pharmacy Department ($M = 4.14$, $SD = 1.13$) no longer had the highest ratings here. Instead, the Science department ($M = 4.32$, $SD = 1.12$) had higher mean score. The results from the Social Science Department ($M = 4.26$, $SD = 1.14$) were not significantly different from those of the other two groups. There was no interaction effect between gender and department in this subset. Table 6.24 (Figure 6.11) shows the cell means for the department and gender means with standard deviations.

Table 6.24

Mean ratings (out of 2) for the Anxiety (Gender and department)

	Social Science Group 1 N= 792	Science Group 2 N=413	Health and Pharmacy Group 3 N= 502	Total N=1707
Male n=492	4.51(1.13)	4.36(1.20)	4.17(1.17)	4.37(1.17)
Female n=1215	4.18(1.13)	4.29(1.07)	4.13(1.12)	4.19(1.11)
Total	4.26(1.14)ab	4.32(1.12)a	4.14(1.13)b	

Note. Standard deviations are in parentheses below means. Means sharing the same subscript letter are not significantly different; e.g., a, a, ab, b means that a and a are the same as/not significantly different from ab (because they share the a subscript) but significantly different from c. ab and b which are the same/not significantly different (because they share the b subscript).

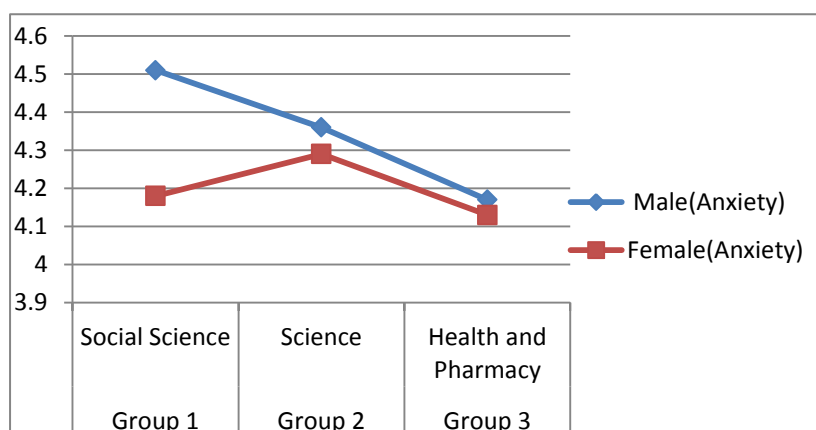


Figure 6.11 Two-way ANOVA-Anxiety (Gender and department)

In all, females had almost overwhelming higher mean scores in most subsets, except in the anxiety subscale, and in the intrinsic motivation of the Health and Pharmacy Department. With higher interest in other motivation ratings, females had been getting little negative experience to develop language ability and had less anxiety. Similarly, students in the Health and Pharmacy Department had higher ratings in intrinsic, extrinsic, integrative motivation and cultural interest, and lower levels of anxiety in language learning. As illustrated in the previous sections, the small effect size obtained in the data should also be carefully considered for further interpretation.

Chapter 7 Discussion

7.1 Question 1

1. The completed course group had higher motivation than the other two groups in both intrinsic and extrinsic motivation.

The first question that might arise from the finding that both the intrinsic and extrinsic motivation of the completed course group is higher than the other two groups is about whether it possible for two opposite conceptions to exist together. Traditionally, intrinsic and extrinsic motivations are recognised as two opposite conceptions. However, Rigby et al. (1992, p.165) claimed that intrinsic and extrinsic motivation are not two dichotomous ideas. Rather, based on their relative autonomy, motivated actions can be differentiated as intrinsic motivation, integrated regulation, identified regulation, introjected regulation and external regulation. A misunderstanding can easily arise that these differentiated motivations can have only one influence and that one regulation would exclude the other regulation. However, these motivations could exist at the same time through different levels of influence. For instance, one could study English to obtain a certificate as a means of finding a good job, but the personal challenge in the process of learning can also be enjoyed. The essential idea is to distinguish which of the motivations have a greater influence on the learning behaviours. Therefore, both extrinsic and intrinsic motivation might be higher in the completed course group, while at the same time intrinsic motivation is lower than extrinsic motivation within that group in the initial stage.

2. The absolute rating scores for intrinsic motivation were much lower than extrinsic motivation for all three groups.

According to the self-determination theory, intrinsic motivation is regarded as the most autonomous motivation and is related to a positive influence on learning. However, the

results for Time 1 revealed that all three groups had higher extrinsic motivation, which indicates that extrinsic motivation had a greater impact than intrinsic motivation in the initial stage. Therefore, in the pre-actional phase, intrinsic motivation plays a less influential role in initiating an action. However, higher extrinsic motivation within the group could not guarantee the continuation of the learning action. The intensity of both extrinsic and intrinsic motivation should be considered when it comes to the completion of the course as later discussed in the results of Question 2.

3. The absolute rating scores of the drop out group for anxiety were the highest. Also, the completed course group had significantly lower anxiety than the drop out group and the non-registered group.

This result reveals that anxiety plays an important role in distinguishing the drop out students from the completed students. Students with less anxiety were more likely to complete the course. However, the students who had the highest level of anxiety more often took action to register on the course, whereas the students who had an intermediate level of anxiety chose not to register on the course. Although the results for anxiety in Time 1 had not yet been related to the voluntary courses, students' previous language learning experiences had already influenced how they perceived future language courses, and this led to different actions in language learning. The completed group with lower anxiety still registered for the course. The reason might be that their motivation according to other measures was much higher and already enough to make learners take action to participate in the course. On the other hand, in the non-registered group there were neither high rating scores for intrinsic, extrinsic and integrative motivation, nor a high rating score for anxiety to support the impulse to register on the voluntary courses.

4. Within the completed course group, the highest rating score was for integrative motivation.

This result indicates that integrative motivation is also an important factor in the completion of the course. The positive attitude toward being closer to the target language community could have facilitated students' continuation on a course. However, integrative motivation in this study could not be distinguished from the other measures of motivation for students in the non-registered and drop out group.

5. The group that did not register for the course was significantly different from the group that completed the course on measures of intrinsic, extrinsic, integrative motivation and anxiety.

This result shows that lower average motivation ratings and higher anxiety levels could lead to lower participation in language learning. The intensity of motivation could result in different language learning behaviours. The influence of motivational intensity on this result supports the assumption of Dörnyei (2000, p.529) that the relevant motivational influences have a cumulative effect and an action is only launched when there are sufficient cumulative energy sources. The intensity of the initial motivation could determine when the boundary for action is crossed.

To sum up, in the pre-actional phase, higher extrinsic motivation and higher anxiety can, in some cases, make students participate in the course. Nevertheless, if teachers then want to retain students, their persistence on the language learning courses could be improved by lower anxiety levels and higher integrative motivation. Furthermore, such results demonstrate the significance of motivation in the pre-actional phase. Motivation at the initial stage is important when it comes to the initial decision to take a course, and for staying continuously on a course. This is unlike Dörnyei's (2000, p. 523) suggestion that the choice aspect of students' motivation was limited because students only have a restricted right to

decide their curriculum. According to him, the choice process of motivation is a necessary but insufficient condition for enhancing learning and performance in many school assignments and work endeavours. However, the results of this study show that even at the initial choice stage, if the intensity of motivation is strong enough, such initial motivation could support the learning behaviour which enables the course to be completed.

7.2 Question 2

1. The effect of 'time' only occurs for intrinsic motivation and anxiety.

The changes in intrinsic motivation and anxiety confirmed the fluctuating changes of motivation in the process-oriented model, though not every measure changed within as short a time period as a semester. Extrinsic motivation, cultural interest and integrative motivation did not change within a semester in this study. Extrinsic motivation such as learning English for a better future, cultural interest as reflected by attitudes toward the L2 community, and integrativeness that represents a genuine interest in coming closer to the L2 community – all involve more context-based reasons. These social contexts and extrinsic reasons do not usually change very readily within a short time period. Gardner (2001b, 1) also supported this point and indicated that social factors had little chance for teachers to promote learners' motivation.

2. Intrinsic motivation increased and the anxiety decreased for all three groups.

The increase in intrinsic motivation observed in this study is similar to the increased intrinsic motivation in the study of Koga (2010, pp.173–182). In Koga's study, Japanese junior and senior high school learners experienced decreasing intrinsic motivation due to the difficult entrance exam, but university learners experienced increasing intrinsic motivation due to their exemption from the entrance examination. The entrance exam context in Taiwan

is very similar to that of the Japanese education system. Most students have studied extremely hard and intensively in high school in preparing for the entrance exam. Moreover, English education in both Japan and Taiwan focuses on paper-based tests which require tedious drills for practising grammar. The participants in this study were first-year students who had just taken the entrance examination for universities. Therefore, the students could still retain the extrinsic purpose for studying for English exams, and the anxiety was hence attached to the exam purpose. However, English education at university becomes less stressful when there is no life or death up-front exam. The curriculums in higher education are more flexible and teachers can arrange the course according to the language levels of the students. As they progress on the language courses at university, the students gradually find relief from the anxious state and they experience an increase in intrinsic motivation.

3. Integrative motivation did not change during the tested time although it affected the completion of the voluntary course, as indicated in Section 7.1.

As discussed in the previous section, in the pre-actional phase integrative motivation had higher rating scores than intrinsic motivation. However, in the actional phase, the changes in intrinsic motivation demonstrated the possibility of an improvement or deterioration in intrinsic influences, while the scores also showed that there was little chance for teachers to moderate integrative motivation. Gardner (2001b, p.8) also posited that integrativeness was more stable owing to the influence of a community and the fact that one's past cannot be changed. Comparing with the changes in intrinsic motivation, although both intrinsic motivation and integrative motivation refer to positive attitudes toward the learning situation and the learning process, Bonney et al. (2008, p.2) indicated that intrinsic motivation does not address attitude toward the L2 community, and they further cited Noels' (2001) study in asserting that integrative and intrinsic motivation are independent predictors of effort and persistence, although they are not necessary equivalent. The results of this study

have confirmed such an assertion. Both intrinsic and integrative motivation can facilitate learners in staying on the course, but only intrinsic motivation changes during the lifetime of the course. That is to say, as Bonney et al. (2008, p. 8) have concluded, there is no interaction between integrative and intrinsic motivation.

4. There is no interaction between the factors for 'time' and registered groups.

The variable 'time' did not interact with the variable for registered groups. Therefore, time and registered groups functioned as two independent factors with regard to learners' motivation. The lack of interaction between time and registered groups indicates that changes in motivation can happen in all three groups. This gives teachers the potential to improve learners' motivation regardless of learners' prior motivation. Therefore, it could be meaningful for teachers to alter the curriculum so that learners' motivation can be promoted in a positive way.

To sum up, although the results in Q1 suggest integrative motivation could help to keep learners on the course, there was no significant result for changes of integrative motivation. That is to say, integrative motivation could be essential for making students continue on a course, but it could not readily be changed during a course by language teachers. During a course teachers can change intrinsic motivation and anxiety. By reducing anxiety and increasing intrinsic motivation, the intensity of learners' motivation may be increased so that the possibility of completing the course is promoted.

7.3 Pedagogical implications

Based on the outcome of this study and with reference to the related studies, some pedagogical suggestions are proposed for facilitating the promotion by teachers of learners' language learning motivation.

7.3.1 In the pre-actional phase

In the pre-actional phase, teachers could not yet teach the students and influence their motivation. Therefore, for this stage, the action that teachers could take is to design courses that match the motivation status of learners. The purpose is to focus on the issues that may provoke the accumulated desire and wish to participate in the course. Therefore, according to the findings in 7.1, extrinsic motivation and anxiety could function as the activator for making learners participate in the course, even though these factors are traditionally viewed as factors that harm true learning. This study is not suggesting exaggerating the function of extrinsic motivation and anxiety. Rather, it is the intention to remind teachers and learners of the reality that extrinsic motivation and anxiety do exist even before the language course, and these can function in a positive way to form the initial motivation for language learning. When anxiety is considered in designing the course, it is not the purpose to provoke learners' anxiety in order to make them take a course. Rather, teachers should consider the possible solutions to language learning anxiety so that learners feel that if they take part in the courses the anxiety would be resolved, at least partially.

Brophy (2004, p.154) suggests that extrinsic motivation could be promoted by increasing the value that students place on the task itself. That is, teachers remind students that successful completion courses or tasks are the way leading to accomplishment of some valued goal. However, there are some opponents of extrinsic motivation. It is assumed that learners may decrease their intrinsic motivation if the rewards are given on those behaviours

that learner original do for their own reasons. For this point, Brophy (2004, pp.156-165) argues that the effects of rewards depend on what rewards are used and how they are presented. Rewards may decrease the performance quality or the intrinsic motivation when they are given in three conditions: 1. High salience: the rewards are very attractive or are presented in ways that call attention to them. 2. Noncontingency: the rewards are given for mere participation in the activity rather than being contingent on achieving specific goals. 3. Unnatural: the rewards are artificially tied to behaviour as a control device rather than being natural outcome of the behaviour. Meanwhile, teachers should not encourage learners to conclude that they participate in activities only to earn rewards. When learners are aware that they are bribed, they would infer such bribing is necessary. What undermines intrinsic motivation is not the use of rewards but offering rewards in advance as incentives and following through that students believe they work only for the rewards. The delivery of rewards should be in ways that provide students with informative feedback and encourage them to appreciate their developing knowledge and skills, not just think about rewards.

7.3.2 In the actional phase

1. Increase intrinsic motivation

In the actional phase, intrinsic motivation should be promoted for learners. According to the self-determination theory, there are certain suggestions about how to improve intrinsic motivation. According to Wu (2003), teachers should involve students in the choice of task on which they will work, allow students to have the freedom to choose content and methods that foster ownership of the learning process, and make students more responsible for their learning. Reeve (1996) suggested removing strict rules concerning controlling students' behaviour to support their autonomy. Vallerand and Reid(1984) further recommended that

teachers should provide students with verbal feedback to inform them about the competence of their performance. Dörnyei (2001b) advised teachers to provide multiple opportunities for success in the classroom and adjust the difficulty level of the task to the students' ability. All these suggestions could provide teachers with a basis for strengthening intrinsic motivation, which they could take into account in planning the courses being provided for students. (Carreira, 2012, p.197)

As discussed in session 3.2.1 (page 42) and 3.5.2 (page 74), language learning concerns with a lengthy process and often leads to unavoidable frustration. Learners usually experience various challenges that interfere their progress and further lead to resistance on continuing practicing. This is similar to the situation in sports where athletes also need to overcome drilled practice and stressful frustration in order to achieve success. In both situations, language learners and athletes need to interpret their developmental patterns. In the example of Kelly Holmes, the Olympic gold medallist, she attributed her success by breaking the training into small steps. This solution for a long and tedious training process could also be applied in language learning. Language teachers could separate the target language learning into different tasks based on learners' ability and provide learners choices and opportunities for success with teachers' frequent verbal feedback to inform the competence. By these steps, learners' intrinsic motivation could be further promoted and the final target to master the target language could be achievable.

Brophy (2004, pp.182-201) further recommend three strategies to enhance learners' intrinsic motivation: 1. Use classroom management and teaching styles that address learners' needs for autonomy competence and relatedness. 2. Plan learning activities that learners are likely to find enjoyable or intrinsically rewarding. 3. Modify the design of other learning activities to include features that will enhance the activities' appeal. Teachers could hence encourage students to function as autonomous learners and allow them to make choices.

Meanwhile, teachers could also provide activities that offer opportunities to make active response and get immediate feedback. The cooperative learning formats could be emphasized for learners' relatedness needs.

2. Reduce anxiety

A. Language anxiety

When anxiety is related to negative experience (pre-actional), the curriculum should reduce the activities that may strongly remind or create even more anxiety. For example, oral speaking practice can evoke more anxiety than reading activities. For students with very high anxiety, such oral activities should be introduced gradually in training in small groups before formal practising them in front of whole class. Moreover, the level of anxiety can vary according to instructional context. Language anxiety is a unique form of anxiety specific to L2 learning situations (Horwitz, 2001). Therefore, prior exposure to different language learning classroom contexts could lower anxiety levels. Teachers should incorporate group work into instruction and rehearse activities in groups to reduce the students' anxiety about public performance and improvisation (Kim, 2009).

B. Connecting with the L2 motivational self-system

Dörnyei (2010, p.107–108) considered the compatibility of both the 'L2 self-motivational system' and 'the process-oriented model'. In the context of globalization, the 'ideal self and ought-to self' can be broadened into 'global identity'. The target of language learning would hence transfer from 'native-like English' to 'communicative English'. When students' ideal and ought-to self is for native-like speech, students will feel anxious that they

cannot actually reach the native-like level, especially in speaking. However, when their ideal and ought-to self is to pursue ‘communicative English’ in order to make contact with members in the global community, they should feel less anxious about their accent.

Dörnyei & Ushioda (2011, pp.131-132) suggest the strategies for L2 self-system. Learners need to be given realistic expectations in order to sustain the ideal self-image. Meanwhile, teachers should help learners to develop action plans toward concrete path way to operationalize the vision. Learners should consider failure for counterbalance the vision and be free from fear of failure. If learners could think of their desirable self and remind themselves the initial purpose of implementing the action, the fear could be counterbalanced by the vision.

7.3.3 Suggested strategies

In order to improve the voluntary courses and use the government funding more effectively, motivational strategies based on the discussion are suggested.

- 1. Set up more gradable courses and mark the equivalent level of the English proficiency tests.*

The marking of equivalent level of English proficiency test reminds the learners of the final goal of their extrinsic motivation, passing the English proficiency test. This extrinsic motivation could not only encourage them to participate in the course but also provide a long term goal for their language learning. Language learning is a kind of long process as discussed previously. It is not easy to progress from one level to another level within a short course time, for example, from beginning to intermediate in two months courses. It is not easy for learners to see the ‘ending’ or ‘result’ from a single class. Students could hence easily feel frustrated and choose to give up learning. Therefore, if course organizers can distribute the contents within the same level into different courses, this could provide achievable steps for learners to follow. For each level, courses could

be separated into sublevels of different linguistic areas such as vocabularies, listening, reading, writing and grammar. When students participate one course, they shall not expect that they are able to pass the final proficiency test just after a few months' training. Instead, they can view the completion of the courses as the accumulation of language competence and learning skills.

2. *Arrange regular assessments which emphasize the effort as frequent feedback for learners.*

If the assessments of the course only rest on the final proficiency tests, many students may not pass the exam despite of their effort in these short term courses. In most cases, the proficiency level could not progress easily within a short time. This can easily lead learners to attribute the failure to their low ability since they have worked so hard. Consequently, the assessments that focus on the contents of each course could help students to attribute their success to their effort.

3. *Course materials should include series of activities for students to overcome.*

Once the courses have been designed based on the gradable contents, the course organizers can include series of activities for the course materials. On one hand, such activities could provide challenges for learners to overcome and build up their confidence. On the other hand, students could follow similar track of learning and reduce the difference that caused by different instructors.

4. *Set non-native level for the goal of students.*

As discussed in the session of reducing anxiety, learners could perceive higher anxiety if they are required to produce the native-like English. Instead, if students could set the target of learning from native-like English to communicative English, they could accept the mistakes that they make and reduce anxiety in the learning process.

5. *Do not provide score or presents as the reward for the classroom activities.*

Although rewarding might be effective as an extrinsic motivation to attract students to

participate course activities, the use of rewards should be cautious and it is better not to make students believe that they work only for the rewards. The preferred extrinsic motivation should concern more with the future achievement or the benefit that the activity could bring in the future. The prompt gift or score may easily connect learning behaviours with rewarding and could lead a negative effect in a long term. Therefore, the extrinsic motivation would be considered and valued to attract students to participate the course but it should not be the main tool to make students remain in the course.

7.4 Limitation of the study

The limitation of this study is the relatively small effect size. Not all the significant tests obtain a meaningful effect and the effect may vary due to the sample size. A big sample size may easily take a non-significant result to be significant and a small sample size could lead to a non-significant result while it is nevertheless significant. The number of participants in this study was at the start 1675 students and the sample size could have been larger. With large samples, a small difference between groups could become statistically significant. Therefore, care should be taken about the Type 1 error when interpreting significant test results. The solution for the Type 1 error is to check the effect size. An effect size is an objective and standardized measure of the magnitude of the observed effect. It tells us the strength of association by indicating the relative magnitude of the differences between means. The effect size in this study tends to be small according to Cohen's criteria. Consequently, it may be reserved for generalizing and accounting for the result (Field, 2005, pp.32–33; Pallant, 2001, pp.172–176).

7.5 Suggestions for future researches

Even though this investigation was carried out in Taiwan, some other countries may have similar historical backgrounds with regard to gender issues, and the pragmatic characteristics of certain types of motivation may be seen in any other culture. Therefore, more studies related to similar topics could be undertaken in other countries to see whether these factors lead to similar results or to establish if they are dependent on cultural backgrounds.

In this study, the motivation in the pre-actional phase and actional phase were examined and the changes to them were also explored. However, the motivational influences on post-actional evaluation at the post-actional phase were not included. In order to analyse the changes in learners' motivation within the framework of temporal development, there should be further studies to test the aspects of motivation that influence learners' interpretations of their learning behaviour. These interpretations would have an impact on learners' follow-up actions concerning giving up or continuing with language learning.

7.6 Conclusion

With the increasing significance of globalization, English learning is seen as essential nowadays in Taiwan. The ability to use English plays an essential role in students' future job prospects and their motivation should be enhanced by the free English courses. Nevertheless, the lack of student registration and the failure to complete the voluntary courses illustrates that the emphasis on external drive is insufficient. Therefore, this study has explored the possible distribution of motivation so that teachers can search for solutions and suggestions to improve students' motivation.

Based on the process-oriented model, motivations across difference measures were examined at two time points: Time 1 inspected the motivation of learners before a voluntary course took place; Time 2 collected the motivation changes after the course had taken place. Learners were categorized into three groups according to the status of their participation on the voluntary course. The results at the initial stage suggested that higher extrinsic motivation and anxiety contribute to course registration, while less anxiety and higher integrative motivation help facilitate the completion of the voluntary course. Moreover, the results in the second stage demonstrated that intrinsic motivation and anxiety fluctuated over the period of a semester, which suggests that there is the possibility for teachers to improve learners' motivation in the actional phase. Hence, the extrinsic motivation and anxiety needs of learners should be addressed through the design of courses, though traditionally such extrinsic factors and higher anxiety have been taken to be notoriously harmful factors in learning. Furthermore, when the courses start, teachers' attention should shift into promoting learners' intrinsic motivation and reducing their language learning anxiety.

Consequently, teachers should devote themselves in both the pre-actional and actional phases to enhancing students' motivation. With more careful consideration of curriculum

design and its implementation, teaching based on motivation itself could motivate students' participation and create a dynamic virtuous circle.

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Appendix I

English Version of Questionnaires

Please share your opinion with us.

This investigation is to understand students' opinion about English language learning. Except the researcher, no one could see the result of the investigation. Therefore, your teacher would not be able to know your personal opinions. Meanwhile, this investigation is not related with your course score. If you are not willing to complete it, you could choose not to answer it. However, with your participation, it could help us to know your valuable opinion. Thank you very much!

Student No:_____ **Gender:**_____ **Department:**_____

	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
	+					-
	+	+			-	-
	+	+	+	-	-	-
1. I enjoy learning English very much.	6	5	4	3	2	1
2. I am learning English because I want to spend a period of time in an English-speaking country.	6	5	4	3	2	1
3. If I learn English better, I will be able to get a better job.	6	5	4	3	2	1
4. One reason I learn English is that I can meet new people and make friends in my English class.	6	5	4	3	2	1
5. Studying English is important to me because it offers a new challenge in my life, which has otherwise become a bit monotonous.	6	5	4	3	2	1
6. English proficiency is important to me because it allows me to learn about the current intellectual trends of the world, and thus to broaden my view.	6	5	4	3	2	1
7. The English are conservative people who cherish customs and traditions.	6	5	4	3	2	1
8. I have had some bad experiences with learning languages.	6	5	4	3	2	1
9. I think I belong to the class of learners who can completely lose their interest in learning if they have a bad teacher.	6	5	4	3	2	1
10. If I spoke English, I could do a more interesting job.	6	5	4	3	2	1

11. Taking the English language exam does not play an important role in my learning English.	6	5	4	3	2	1
12. Learning English is a challenge that I enjoy.。	6	5	4	3	2	1
13. I want to do well in this class because it is important to show my ability to my family and friends.。	6	5	4	3	2	1
14. I am learning English to become more educated.	6	5	4	3	2	1
15. I believe that I will be able to learn English to an extent that satisfies me.	6	5	4	3	2	1
16. British culture has contributed a lot to the world.	6	5	4	3	2	1
17. I think language learning is more difficult for me than for the average learner.。	6	5	4	3	2	1
18. The main reason I need to learn English is to pass examinations.	6	5	4	3	2	1
19. English proficiency is important to me because it allows me to get to know various cultures and peoples.	6	5	4	3	2	1
20. I think I have a good sense for languages.	6	5	4	3	2	1
21. Learning English is a hobby for me.	6	5	4	3	2	1
22. I want to learn English because it is useful when travelling in many countries.	6	5	4	3	2	1
23. English proficiency is a part of the general cultural.	6	5	4	3	2	1
24. If I spoke English, I could travel more for official purposes.	6	5	4	3	2	1
25. I need to be able to read textbooks in English.	6	5	4	3	2	1
26. Extrinsic: Increasing my English proficiency will have financial benefits for me.	6	5	4	3	2	1
27. Intrinsic: I don't enjoy learning English, but I know that learning English is important for me.	6	5	4	3	2	1
28. Extrinsic: Being able to speak English will add to my social status.	6	5	4	3	2	1
29. Intrinsic: I wish I could learn English in an easier way, without going to class.	6	5	4	3	2	1
30. Extrinsic: If I can speak English, I will have a marvellous life.	6	5	4	3	2	1
31. Extrinsic: The main reason I am learning English is that my parents want me to improve my English.	6	5	4	3	2	1
32. Integrative: There would be a serious gap in my life if I couldn't learn English.	6	5	4	3	2	1
33. Integrative: At present, learning English is one of the most important things to me.	6	5	4	3	2	1
34. Cultural interest: Most of my favorite actors and musicians are either British or American.	6	5	4	3	2	1

35. Cultural interest: Americans are very friendly people.	6	5	4	3	2	1
36. Instrumental: I would like to take the language exam like GEPT, ILETS, TOEIC or TOEFL.	6	5	4	3	2	1
37. Extrinsic: I want to learn English because I would like to emigrate.	6	5	4	3	2	1
38. Extrinsic: Everybody in Taiwan should be able to speak English.	6	5	4	3	2	1

Appendix II

Chinese Version of the questionnaires

請和我們分享您的意見：

這項調查是想了解學生對於英語學習的看法，除了研究者之外，其他人將無法看到調查結果。所以，您的老師不會知道您個人的意見。同時，這項調查也不會影響您的成績。所以，如果您不想填答本問卷，您可以選擇不填答。然而，若有您的參與，將幫助我們了解您寶貴的意見。謝謝您的幫忙！

學號:_____ 性別:_____ 系別:_____

	非常 同意	同 意	稍 微 同 意	稍 微 不 同 意	不 同 意	非 常 不 同 意
	+					-
	+	+			-	-
	+	+	+	-	-	-
1.我非常喜愛及樂於學習英文。	6	5	4	3	2	1
2.我學英文是為了要能在英語系國家待上一陣子。	6	5	4	3	2	1
3.如果我把英文學好一點，我將會有一個較好的工作。	6	5	4	3	2	1
4.我想學英文是因為在課堂上能交到不同的新朋友並遇見不同的人。	6	5	4	3	2	1
5.學習英文對我是一件重要的事，因為它替我的單調人生提供了新的挑戰。	6	5	4	3	2	1
6.英語的流利度對我而言是重要的，因為它讓我去學習世界中流行的知識潮流，擴大我的眼界。	6	5	4	3	2	1
7.英國人是保守且珍惜習俗與傳統的民族。	6	5	4	3	2	1
8.我對學習語言曾有不好的經驗。	6	5	4	3	2	1
9.如果遇到不好的老師將使我對學習完全失去興趣。	6	5	4	3	2	1
10.如果我會說英語，我可以做更有趣的工作。	6	5	4	3	2	1

11.我學英語的重要考量不是參加英語語言測驗。	6	5	4	3	2	1
12.我喜歡接受學習英文的挑戰。	6	5	4	3	2	1
13.我想在英文課程上表現良好，以便展現我的能力給父母，同學或朋友看。	6	5	4	3	2	1
14.我想學英文是想成為更有教養的人。	6	5	4	3	2	1
15.我相信我會一直學英文直到我能滿意為止。	6	5	4	3	2	1
16.英國文化對世界的貢獻很大。	6	5	4	3	2	1
17.跟其它他同學比起來，我學英文有較多的困難。	6	5	4	3	2	1
18.我學英文的最主要原因，是為了要通過考試。	6	5	4	3	2	1
19.英語的流利度對我而言是重要的，因為它讓我知到不同的文化及民族。	6	5	4	3	2	1
20.我認為我對語言有很好的直覺。	6	5	4	3	2	1
21.學習英文對我而言，是一種興趣。	6	5	4	3	2	1
22.我想學英文是因為在英語系國家旅行時，英文非常有用。	6	5	4	3	2	1
23.英語要好才能了解英語系國家文化。	6	5	4	3	2	1
24.如果我會說英語，我可以到國外出差。	6	5	4	3	2	1
25.我想學英文是因為我需要閱讀英文教科書。	6	5	4	3	2	1
26.流利的英語，可以替我賺錢。	6	5	4	3	2	1
27.我不喜歡學英文，但我知道學英文是重要的。	6	5	4	3	2	1
28.能說英文，會提高我的社會地位	6	5	4	3	2	1
29.我希望可以不用上課，也能輕鬆學英文。	6	5	4	3	2	1
30.如果我會說英文，我將有一個很棒的人生。	6	5	4	3	2	1
31.我會想學英文，因為父母和老師叫我學的。	6	5	4	3	2	1
32.不學英語，將會對我的人生造成一個嚴重的阻礙。	6	5	4	3	2	1
33.就現在而言，學英文對我是最重要的一件事。	6	5	4	3	2	1
34.大部份我所喜愛的演員或音樂家，不是英國人就是美國人。	6	5	4	3	2	1

35.美國人是非常友善的人。	6	5	4	3	2	1
36.我會參加一些語言考試，例如，GEPT, ILETS, TOEIC 或 TOEFL 等等。	6	5	4	3	2	1
37.我想學英文是因為將來想要移民。	6	5	4	3	2	1
38.我認為在台灣，每個人都要會說英文	6	5	4	3	2	1