CHAPTER II

REVIEW OF RELATED LITERATURE

There are some theories, which require careful and perceptive speaking, and attention to detail discussed in the review of related theories. This chapter discusses contains Emotional Quotient, definition of Speaking Ability, the purposes of Speaking Ability, component Speaking Ability, some priciples of designing speaking technique, the strategy in learning speaking, and previous study.

A. Emotional Quotient/ Intelligence

According to Daniel Goleman (1995) emotional intelligence or its casual shorthand EQ (Emotional Quotient) understanding one's own feeling, empathy, for the feelings of others and the regulation of emotion in a way that enhances living.

Emotional intelligence is defined as "a crosssection of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands." (Bar-On, 2006, p.3) The term of emotional intelligence is coined by Bar-On for the first time in 1988. He considered EQ as a counterpart to IQ, as a set of emotional and social abilities helping individuals cope with social life needs. Bar-On's idea of EQ is related to the ability to understand and manage emotions and the degree to which a person has efficiently social skills (Bar-On, 2000, cited in Motallebzade, 2009). In his perspective, EI addresses emotional and survival dimensions of intelligence

(Motallebzade, 2009). Mayer and Salovey another scholars who have made a full understanding of emotional intelligence and developed a complete model of EI defined it as:

The ability to recognize the meaning of emotions and their relationships, and to reason and problem-solve on the basis of them. Emotional intelligence is involved in the capacity to perceive emotions, assimilate emotion-related feelings, understand the information of those emotions, and manage them. (Mayer & Salovey, 1997, cited in Mayer, Caruso & Salovey 2000, p.272) But many people know the notion of EI by the name of Daniel Goalman.

Although he was not the first one who coined the term emotional intelligence, he has had a large amount of study on extensive development of EI. He borrowed this term from Bar-On, and expanded it into a broad concept and definition (Abdul Samad, 2014). Goleman defined emotional intelligence as the "abilities such as being able to motivate oneself and persist in the face of frustration, to control impulses and delay gratification; to regulate one's moods and keep distress from swapping the ability to think; to emphasize and to hope" (1995, p. 34). In his wellknown model, EI is classified into personal and social Personal competence includes selfawareness (composed of emotional self-assessment self-confidence), awareness, accurate and selfregulation (composed of self-control, trustworthiness, conscientiousness, adaptability and innovation), motivation (composed of achievement drive, commitment, initiative and optimism), empathy (composed of understanding others, developing others, service orientation, leveraging diversity and political awareness) and social competence (composed of influence, communication,

conflict management, leadership, change catalyst, building bonds, collaboration and cooperation and team capabilities) (Goalman, 2009).

There are several definitions of EQ made by the field experts. Goleman (1998: 317) defines EQ as the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships. Mayer and Salovey (1997) interpret it as a group of mental abilities which help you regornize and undrstand your feeling and other.

According to Thorndike (1920), it is the ability to act inwisely in human relations. Considering these definitions, it is clearly seen that all definitions take care about individuals emotional development and social interaction to which they have been exposed to.

Effective of Emotional Intelligence (EI) in EFL learners can be positive or negative; it does depend how the foreign learners build their skill to increase language learning. Many philosophers and scientist viewed human intelligence as being a single capacity that people were born with and that could not be altered throughout the life. In addition, the concept of Emotional intelligence formally developed out of growing emphasis on research on the interaction of emotion and thought in the field of psychology in 1990s (Grewal & Salovey,2006). According to Harvard Psychologist Daniel Goleman (1995), emotional intelligence is a combination of five characteristics: motivating oneself (emotional control, the ability to delay gratification), d) recognizing emotions in others, and e) handling relationships. Emotional Quotient (EQ) is about the intelligent use of emotions and utilizing the power or information contained in emotion to make effective decisions (Ciarrochi and Mayer, 2007).

In relation to these variables are the Intrapersonal EQ involving emotional self-awareness, assertiveness, self-regard, self-actualization and independence; Interpersonal EQ involving empathy, interpersonal relationship and social responsibility; Adaptability EQ involving problem solving, reality testing and flexibility; Stress management EQ involving stress tolerance and impulse control; General Mood EQ involving happiness and optimism. Regarding the results, it can be concluded that age is only related to problem solving component skill that is one of the components of adaptability EQ whereas gender is only related to optimism that is the component of general mood EQ.

B. Five Domains of Emotional Intelligence

Bar-On (1997) duvided five domains emotional intelligence of Intrapersonal, Interpersonal, Stress Management, Adaptability, and General Mood. They were as follow:

- 1. The **Intrapersonal** realm of emotional intelligence concerns what we generally refer to as the "inner self." It determines how in touch with your feelings you are, how good you feel about yourself and about what you're doing in life. Success in this area means that you are able to express your feelings, live and work independently, and have confidence in expressing your ideas and beliefs. Subscales include:
 - **Self-Regard** The ability to respect and accept oneself as basically good.
 - **Emotional Self-Awareness** The ability to recognize one's feelings.
 - **Assertiveness** The ability to express feelings, beliefs and thoughts and defend one's rights in a non-destructive manner.
 - **Independence** The ability to be self-directed and selfcontrolled.

- **Self-Actualization** The ability to realize one potential capacities.
- 2. The **Interpersonal** realm of emotional intelligence concerns what are known as people skills. Those who function well in this area tend to be responsible and dependable. They understand, interact with and relate to others in a variety of situations. They inspire trust and function well as part of a group. Subscales include:
 - **Empathy** The ability to be aware of, understand, and appreciate the feelings of others.
 - Social Responsibility The ability to demonstrate oneself as a cooperative, contributing, and constructive member of one's social group.
 - **Interpersonal Relationship** The ability to establish and maintain mutually satisfying relationships that are characterized by intimacy and by giving and receiving affection.
- 3. **Stress Management** concerns the ability to withstand stress without caving in, falling apart, or losing control. Success in this area means that you are usually calm, rarely impulsive and cope well under pressure. In school, these skills are vital if you customarily face deadlines and tight demands. Subscales include:
 - **Stress Tolerance** The ability to withstand adverse events and stressful situations by actively and positively coping with stress.
 - Impulse Control The ability to resist or delay an impulse, drive, or temptation to act.

- 4. The **Adaptability** realm of emotional intelligence concerns the ability to size up and respond to a wide range of difficult situations. Success in this area means that you can grasp problems and devise effective solutions, deal with and resolve personal issues and meet conflicts within your social group. Subscales include:
 - **Reality Testing** The ability to assess the correspondence between what is expected and what objectively exists.
 - Flexibility The ability to adjust one's emotions, thoughts, and behaviors to changing situations and conditions.
 - Problem Solving The ability to identify and define problems as well as
 to generate and implement potentially effective solutions.
- 5. General mood concerns your overall outlook on life, your ability to enjoy yourself and others and your overall feelings of contentment or dissatisfaction. Subscales include:
 - **Optimism** The ability to look at the brighter side of life.
 - Happiness The ability to feel satisfied with one's life, to enjoy oneself
 and others, and to have fun.

C. The Benefit Having High Emotional Intelligence

Goleman (1995) states that intelligence only contribute as much as 20% for someone's success, the other factor that may have responsible on it is emotional intelligence (EI). Graeme Taylor as cited in Ciarrochi, et.al (2001) people with very low scores on emotional intelligence test are indeed more likely to be involved in substance abuse. More at risk of eating disorders, more likely to

suffer from panic attacks, have a greater tendency to violence, and have more severe problems in relationship. Petrides et.al(2004) in school students with low IQ, those with higher emotional intelligence. Performance considerably better than do those with lower emotional intelligence. It means that students with higher emotional intelligence more calm and patient when solve the problems in relationship their environment.

D. Emotional Intelligence in Education

Emotional education within the family particular, is positively effective children's emotional intelligence and mental health. The first area of socialization that promotes children's' emotional intelligence if family and in Particular their parents, Currie (2004).

Gottman (2002) proposes the following stage of children emotional intelligence:

- Awareness of children's feelings
- Recognition
- Hearing with empathy confirm children's feelings
- Help the children to name their feelings
- Setting limits while helping to explore strategies for problem solving
- Recognition and setting target
- Thoughts on possible solution
- Assessment of proposed solution on the basis of family values
- Helping the child to choose a solution (Plomaritou V, 2006)

In school, we might also remember that the humanities have long been helping young people to become more thoughtful and articulate about emotion. Teacher have been using literature and the arts as powerful tools to help young people learned about 'delayed gratification', 'empathy', 'risk-taking' and the like. (The Association Teachers and Lecturers, 2005, p.14).

Emotional intelligence in education probably depends at least as much on the way teachers publicly respond to their own shifting moods and stresses, and the way they deal with these children, as it does on set-piece discussions or activities. On can see why these more personal channels of emotional education might have been down-played, but if they are, powerful opportunities to influence the development of emotional intelligence are being missed. It may also be that the emotional messages conveyed through these implicit channels sometimes run counter to those that are being espoused and discussed more consciously in the classroom. (The association Teachers and Lecturers, 2005,p.20).

Three elements commonly give rise to classroom confrontation between teachers and 'difficult' students. First, a lack of clarity about a teacher's expectations of students often lack both empathy and social skills, they may 'misinterpret a teacher's intentions, a normal interaction may be perceived as confrontational and stimulate an aggressive response. Thirdly, a teacher may react to the student's reputation rather than to actual level of disruption. Such a lack of empathy may itself provoke inappropriate behavior on the part of the student. (Autumn, 2000 p,2)

A teacher's ability to deal with problems firmly but with empathy reassures vulnerable students, whilst providing a model of acceptable, assertive interaction for the class as a whole.

The following list should not be considered complete and it is important to remember that all students are unique entities and strategies that are effective with a student may not be necessarily effective with someone else. (Stepien K, Baernstein A, 2006).

- Teamwork is an effective method to encourage students to listen to the other's view and to work together to solve problems. However, some people may have difficult, in term of teamwork, and thus their participation should not be encouraged if they are experiencing problems.
- Students should be actively encouraged to hear the views and experiences
 of other, examining the causes of their views and making comments
- Teachers should listen and understand their students' views. In this way,
 they create feelings of acceptance to their students', while helping them
 recognize how they can develop the ability of active listening themselves.

'Difficult' students often have strained relationship with peers and can be intimidating. The principal objective is to achieve a safe, effective learning environment, involving all students, because it is only within a social context that they can develop interpersonal skills. This may be achieved by:

 Involving students in settings social as well as academic expectations and targets, for individual and group activities;

- Making students aware of how their behavior is perceived by others and how it affects others;
- Helping students develop empathy and negotiation skills, to resolve conflict and promote their own and others' learning;
- Monitoring each students' behavior toward others, and their contribution to achieving collecting objectives in the case of group work;
- In the event of inappropriate social interaction, temporarily relocating individual students to safe guard the overall learning environment.

However, in these circumstances, it is a priority to make the student aware of the reason for his/her relocation, of its duration and of the behavioral changes required for re-entry into the group. Autumn (2000,p.4).

E. Speaking Ability

Speaking is a complex skill, which should be taught everywhere, and it is a skill that learners learn better in group (Celce-Murica, 2001). While young language learners acquire foreign language easier and faster, adults are eager in achieving new language and developing language abilities (Staib, 2008). Different factors are involved in speaking. The first one to emphasize is that this human ability is an interactive process, its form and meaning depend on the participants, their previous experiences, the physical setting and the purpose of speech. Brow (1994).

Generally speaking, this process takes place in real time and is described to be linear; so this process follows a certain permanent series of stages (words follow words an phrases follow phrases) Thornbury, (1998). At the level of utterances, or the spoken presentation of sentences, this produced speech goes

utterance by utterance opposite to word by word with the same rhythm from the part of the interlocutor. In its production, speech nature is described to be contingent through which we find that each word is dependent on the previous one and the same thing for utterances (interrelationship between utterances) and this fact leads to what is called in speaking "spontaneity" and this concept doesn't mean that speech is unplanned but as (thornbury (1998).

The general analysis on correlations between all factors (emotional intelligence, EFL learner speaking ability) showed that they were related to each other. EFL learner who have high emotional intelligence level will also have high speaking ability and vice versa. This finding indicates the importance of having high emotional intelligence level in the life of EFL learner. This is in line with the view of Butcher and Harvey (1998) regarding the intellectual source (emotional intelligence) needed by individual to build other skills and competencies. In this context, it was the communication skills. This finding was also supported by a study from Patil and Reiner (2004). Their study found that emotional intelligence facilitates the communication process especially in group work. In general, the finding proofs that emotional intelligence is related to speaking ability among EFL learner.

2. Purpose of speaking ability

Basically the main goal of spacking is to communicate. To be able to convey your thought affectively, the speaker should understand the meaning of everything and trying to interact with their listener, it could be effective to transfer what they thought.

The general objective of speaking by Tarin (1990:149), there are categories, which name are:

1. Entertaining

Speaking to entertain means that the speaker attracts the listeners with a lot ways, such as humor, spontaneity, exciting, humorous stories, adventures, and so on to make good atmosphere for audience.

2. Inform

Speaking for information means that the speaker conveys information for the audience such as: first, to describe a process. Second, to decipher or interpret any matter. Third, to give distribute or impart knowledge, and the last, to give explanation.

3. Stimulating

Speaking is to stimulate much more complex than other speech purposes, because it has talked philandering, influence, or convince the audience. This can be achieved if the speaker really knows the will, interest, inspiration, needs and aspirations for the audience.

4. Move

Through good ability in speaking, it can used to exploit the situation and also can move the audience.

5. Convincing

The purpose of speaking is to convince listeners of something through a convincing conversation, along with options, facts or evidence to expect listener attitudes might be changed.

3. The component of speaking ability

1. Pronunciation

According to Harris (1986:84), there are five sets of qualities must be rated in pronouncing, they are:

- a. Pronunciation problems to serve as to make speech unintelligible
- Very hard to understand because of pronunciation problem which most frequently is asked to repeat.
- Pronunciation problems necessitate concentrated listening and lead to misunderstanding.
- d. Always intelligible, through on conscious of definite accent, she or he few traces of foreign accent.

2. Vocabulary

Jo Ann Aeborsold and Mary Lee Field (1977:139) active vocabulary refers to items the leaner can use appropriately in speaking or writing and it also called as productive vocabulary. In fact, it is more difficult to put into practices; it means that use productive vocabulary, the students were supposed to know the way to pronounce it as well.

According to Citravelu, Sithamparam and Choon (2005:243) might be used actively when a person produces their own speech. It means that the speaker must know what they should say. As like in speaking ability has component, also vocabularies have it. Fachurazzy (2002:58) stated that the elements of vocabularies are spelling, syllabication, pronunciation, stress, part of speech meaning, use/usage, derivation, idiom, and expression.

3. Grammar

Grammar is one of three English components and also one of speaking anilities to support and help students to give a good ability in communication as well. Grammar is common in both the written and spoken form of the languages; it means the existence was strongly needed in learning and speaking skill Manser (1995:82).

The explanation above shows that grammar is focuses on some roles to from words that might be easily understood and match with the rules. In addition, it also focuses on the way how to make a good sentence and easily to comprehend.

4. Several principles of designing speaking technique

The practical principles underneath should be put into consideration to design techniques that include oral communication as follow:

- Use techniques that cover the domain of students' need from accuracy and fluency.
- b. Provide intrinsically motivating techniques by helping them to see how activity will have good impact for them.
- c. Encourage the use of authentic language in meaningful contexts or meaningful interactions:
- d. Provide appropriate feedback and correction.
- e. Utilize the natural link between speaking and listening. If possible, integrate two skills most of the time since they reinforce each other.
- f. Give students opportunities to initiate oral communication, not always the teacher who most speak.

g. Promote the use of speaking strategies such as asking for clarification, using filters (I mean, well, ups) using paraphrase, asking somebody to repeat things (Nurhajati:2011:22-23).

There are three major stages that might be applied when teaching speaking, those are:

1. Introducing new language

When children start learning English, they obviously need to be given languages before they can produce it by themselves. Language has to go in before it can come out. At this initial stage the activities will be under control of the teacher.

2. Practice

The practice of language could be in controlled practiced. The controlled practice goes hand in hand with presentation since it is important that pupils try out new language as soon as they have heard it. In controlled practiced there is a bit opportunities for pupils who can make mistake.

3. Communicative activities

Using controlled and guided activities which have choices wherever possible provides a good background for activities where children say what they want to say. One of the characteristic of free activities is there is a genuine communication even though the situations are sometimes artificial. In a way, everything we had done in the classroom is artificial- we do it to prepare the students for their lives in outside the classroom Scott (1990:36-42).

When introducing new language, the teacher should find out the genre or the text, which is meaningful. In this stage teacher can ask students to pronounce the unfamiliar words and find out the meaning of the expression used in the text.

5. The strategy in speaking ability

Learning to speak fluently and accurately is one of the greatest challenges for all languages students. It is because for be able speak fluently, we have to speak and think at same time. As we speak, we have to monitor our output and correct any mistakes, as well as planning for what we are going or say next. For being able speak fluently in foreign language, it require a lot practice. Speaking practice start with practicing and drilling set phrases and repeating models. Pinter, (2010:54).

Speech intelligibility can be obtained through several strategies, including:

a. Learning from movie or film

As part of strategy to listen and understand movie form DVD or VCD format can help us to improve the ability of expressing ideas in English.

The following are the steps you can take to learn from movie. It should be noted that you can do this strategy to cut the movie into parts with a quite short. You also can find the way to understand them, as follow:

1. See the translation while listen the actor's speech simultaneously; see the translation of the actor while listening simultaneously to speech; attention to the speech and its meaning.

- Repeat the listening to cut movies with length 8-10 minutes at least twice to strengthen and complement the obtained that was missed. At the second screening use the pause on the DVD player to record the translation of some cuts.
- 3. After you watch a few minutes and noted some translations, turn off the DVD player. Now, practice to pronoun some utterances in English for the translations you have make noted.

b. Learning from native speaker

One of strategy for improving the ability to speak is listening from native speakers. If you had opportunity to talk with an American, UK, Australian, or other country which use English as first or second language, you slightly manipulate your conversation with him to learn the phrases in English. The way is as follows: while talking, occasionally stop talking for a moment. Let your words hung to give impression that you are searching for right expression. Usually, native speaker will fill the interlude with right utterances. Then, catch it and save it as your verbal repertoire.

c. Absorb the English language structure through a silent period

Learning English or another foreign language are the same as when children start learning their mother tongue. At the first time, the child did begin directly with the pronunciation of the words, but undergo a "silent period" in advance, where she or he only listened to the people around them to speak and interact with language. After an appropriate time, he or she can start to state any words, followed by phrases and sentences, and so

on until they became a fussy child, asking, answering, giving expression some utterances, commenting or even arguing and fighting.

d. Improving fluency

Fluency here is defined as the ability to speak with a relatively smooth, rarely, interrupted because the speaker still had to find the right words. One of the key to success for the successful students is that they know the way to improve their eloquence. Actually, the key is simple: they use words that have been understood as well in several context and situations. The most often words that has been studied used in various contexts, every single word would be stuck in our memory, it is easier to memorized and used in the speech. Djiwandono, (2009:135-139).

In learning speaking, students also need to know the kinds of knowledge that proficient speakers draw on during speaking:

a. Socio cultural knowledge

The value of teaching socio cultural knowledge, for example culturally embedded rules of social behavior is debatable; many of those so-called rules are based on flimsy, often hearsay, and evidence. Moreover, for many learners nowadays such 'rules' may be irrelevant since they will be learning English as an International Language (EIL) rather than English that used was used. The more important than learning local socio cultural customs might be develop intercultural competence- that is, ability to manage the cross culture encounters irrespective of the culture of the language is being used, and taking into account that difference and ambiguity are inherent in all communication. Thornbury, (2005:31-32)

b. Genre knowledge

Genre knowledge includes knowing how different speech events are structured, and this will be particularly relevant to students whose specific purpose for learning English include mastering spoken genres of more formal type, such as giving business presentations or academics lecturers.

c. Speech acts

Just as learners need to know how specific discourse moves are realized, they are also need to know the ways specific speech acts (also called functions) are typically encoded.

d. Register

Learners will also know the way how to adapt these speech act formulas for different situations, according to such context variables as the status of the person they are talking. Exposure to different registers of speech, plus directed attention to the ways in which spoken language was made more or less formal, should be sufficient, at least for general English purpose, to synthesize learner to this area.

e. Discourse

Discourse knowledge involves using grammar and vocabulary in order to connect speaking turns and to signal speaker intentions. Discourse knowledge also assumes an understanding of how speaking turns managed. However, since this is universal features of spoken interaction, it is not something learners need to be thought. The simply need to know the way how these turn management moves are realized in the second school language, through the use, primarily, of discourse makers.

f. Grammar knowledge

Grammar knowledge for speaking purpose consists largely of those grammar systems that favor rapid, real-time speech production. Since spontaneous speech is produced in clause-length units rather than sentences-length ones, a sentence grammar will be limited uselessness for speaking. It is sentence grammar. However, that has always been the main focus of language teaching. Learners taught are to manipulate relatively lengthy and complex constructions that more typical of written than spoken language. Thornbury, (2005:33).

g. Vocabulary

Learners can probably get by on a lot of fewer, may be half that number, especially, for the purpose of casual conversation. Obviously, for more specialized purpose such as business negotiation or academic speaking, they will need more. Short of knowing exactly which words the students will need, the most useful criterion for selection is probably frequency. A working knowledge of the 1.500 most frequent words in English would stand a learner in a good stead.

h. Phonology

Phonology is an area which is perhaps the least amenable to conscious control at the moment of articulation. Most adult learners will betray, to varying degrees, the influence of their first language pronunciation while speak a second language, and this need not be a problem so as long as intelligibility is not threatened. Intelligibility, however, is I the ear of the beholder. That is to say,

what might be intelligible to one listener is not necessarily intelligible to another. Thornbury, (2005:37).

6. Previous study

In this research, there some previous related studies which are related to the writer's present study.

students in English department speaking classes in language learning process.

There are a number of studies in the literature which link emotional intelligence with foreign language learning.

First, Sadeghi and Farzizadeh (2013) explored the relationship between emotional intelligence and writing ability of Iranian EFL learners. The participants of this study were selected from the population of Urmia University students majoring in English Literature during winter 2010. The study included the female BA (Bachelor of Arts) sophomores as the participants. The study was conducted with a sample of 55 male and female EFL learners, ranging in age from 18 to 25. The students were administered Bar-On's EQ-i (1997) as well as a test of writing ability adopted from the IELTS. Thereafter, the students were given a writing test and the resulting scores were correlated with their EI scores. The scoring of writing tasks was done analytically following pre-specified criteria. The writings were scored once by two raters, yielding an inter-rater reliability of 0.8. Results obtained through Multiple Regression rendered a positive relationship between writing ability and emotional self-awareness, a subcategory of EI.

The second Tabrizi Nemat and Esmaeili Leila (2016) on their study about

The Relationship between the Emotional Intelligence and Reading

Comprehension of Iranian EFL Impulsive vs. Reflective Students. The

participants of the study were 121 female EFL high school students studying at Emamat High School in Tabriz. they filled out impulsiveness questionnaire reflectiveness questionnaire. The results of these questionnaires and the reading test were compared. The first finding of the research revealed that there was a significant relationship between Iranian EFL learners' emotional intelligence and their reading comprehension. Based on the next result, it was concluded that there was significant relationship between impulsive Iranian EFL learners' emotional intelligence and their reading comprehension.

Afshar, Tofighi, and Hamazavi (2016) their research about Iranian EFL learners' emotional intelligence, learningstyles, strategy use, and their L2 achievement. The participants in this study included 138 EFL learners from English language institutes in Kermanshah, a city in the west of Iran. The participants were at intermediate and upper intermediate proficiency levels. Their age ranged from 17 to 30. The strategy used in the selection of participants was convenience sampling. The first instrument they were asked to complete was the *Emotional Quotient Inventory* developed by Bar-on (1997). The original questionnaire consisted of 133 items. Soodmand Afshar and Rahimi (2016) pilot tested this questionnaire with 150 Iranian EFL learners and reduced it to 125 items, to suit the context of Iran. The results of Pearson correlation analyses revealed there was no statistically significant relationship between learning styles and L2 achievement; however, the findings indicated L2 achievement was significantly related to emotional intelligence as well as to language learning strategy use.

The fourh, Abdolrezapour (2012) on his study is an attemp to investigate the effect of emotional intelligence on EFL student's writing performance. 44 intermediate EFL learners studying in a language centre in Iran participated in this study and they were randomly assigned to two groups (control and experimental). To make sure of the initial comparability of the two groups, they had a writing test and the TEIQue-ASF was administered prior to the experiment. As the result there is no significant difference between the means of writing scores of the subjects in the experimental group and those of the control group.