

CHAPTER I

INTRODUCTION

1.0 Overview

The present research, aimed to study the effectiveness of group Rational Emotive Behavior Therapy (REBT) in reducing irrational beliefs in adolescents. In this chapter, background of the problem, rationale for using group REBT, a review of the conceptual literature related to adolescence, theoretical framework, statement of the problem, conceptual framework, purpose of the study, significance of the study, research questions, research hypotheses, limitations of the study, definition of terms, and eventually, the summary will be presented.

1.1 Background of the Problem

Recently, the number of Iranians living in Malaysia has increased. This is because Malaysia is an Islamic country with high educational standards, low cost of living, great transportation facilities as well as easy visa formalities (Al Arabiya, 2009). According to the Embassy of the Islamic Republic of Iran (2011), more than 80,000 Iranians live in Malaysia, and more than 10,000 of them are adolescents.

Adolescence is an important developmental period in human being's life. In fact, adolescence is somewhat more stressful than other developmental periods. Since most migrants experience some level of psychological distress (Mirsky, 2004), adolescents living abroad may experience some mental health problems fostered by their irrational beliefs. They may experience high levels of mental health problems amongst them depression

(Choi, Miller, & Wilbur, 2009). This is because “immigrant status is a mental health risk factor” (Choi et al., 2009) which needs to be addressed in studies relevant to adolescents. Due to age conditions, some adolescents develop irrational beliefs in their lives.

Beliefs play an essential role in human being’s life. They may lead to happiness or sadness. Beliefs are either, positive or rational; negative, or irrational. According to Davies (2006), irrational beliefs mean those illogical and rigid views about events which are inconsistent with reality. These beliefs consequently lead to self disturbing behaviors. Also, they are linked with poor individual functioning and individual adjustment.

Holding irrational beliefs (IBs) causes emotional problems (Coon & Mitterer, 2009), dysfunctional behaviors, and a lack of self-acceptance (Davies, 2008). In fact, holding irrational beliefs lead to negative consequences which cause different problems. This means that “irrational and maladaptive beliefs are associated with and may lead to psychological and physical malfunctioning” (Amutio & Smith, 2007, p. 321). Therefore, “people who suffer from psychological disorders, often carry around faulty or irrational beliefs about the world and about themselves” (Nairne, 2009, p. 493). This is because “irrational beliefs (IBs) are at the core of emotional problems and rational beliefs (RBs) are at the core of the solutions to these problems” (Dryden, 2006, p. 14).

Changing irrational beliefs to rational ones can have a positive impact on emotions and behaviors (Coon & Mitterer, 2009). Rational Beliefs (RBs) which are the result of a healthy way of thinking “produce healthier emotions, more functional behaviors and greater acceptance of the self and others” (Davies, 2008, p. 102).

Lega and Ellis (2001) pointed out that the concept of Irrational Beliefs was initially conceptualized by Albert Ellis in 1955. Beck’s cognitive model also suggests that major distortions in thinking cause emotional and behavioral problems (Coon & Mitterer, 2009). According to Ellis, “regardless of culture, irrational thinking exists in all individuals simply

because they are human” (Lega & Ellis, 2001, p. 204). Irrational beliefs may be induced by some other elements. One of them is stressful life events (Neenan & Dryden, 2004) such as migration (Ward, Bochner, & Furnham, 2001). As Prochaska and Norcross (1999) have cited, approaches used by Beck and Ellis help clients “to become conscious of maladaptive cognitions, to recognize the disruptive impact of such cognitions, and to replace them with more appropriate and adaptive thought patterns” (p. 340).

In general, the cognitive model suggests that people’s perceptions of situations influence how they react (Beck, 2005). This means, “people who hold more frequent and more intense irrational beliefs, tend to be more disturbed than those who hold fewer or less intense IBs” (Ellis, 2003a, p. 247). In fact, “at the core of the cognitive-behavioral approach is the assumption that human cognition and emotion are significantly interrelated” (Stackert & Bursik, 2003, p. 1421).

Rational Emotive Behavior Therapy (REBT) which is one of the cognitive - behavioral approaches to counseling and psychotherapy (Dryden, 2006), is used by counselors and psychologists for disputing irrational beliefs and replacing them with rational ones. This approach was established in the mid-1950s by Albert Ellis (Dryden & David, 2008), and its goal is “to use cognitive restructuring to eliminate self-defeating irrational beliefs” (Weiner & Craighead, 2010, p. 872).

1.2 Rationale for Using Group REBT

This study used group REBT in order to reduce irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur. There are several reasons for choosing REBT for this study. First is that in REBT, the therapeutic process is to identify the irrational beliefs that cause emotional problems (Blum & Davis, 2010; Coon & Mitterer, 2009), to dispute them vigorously, and then to replace them with more rational beliefs (Blum & Davis, 2010). Since, REBT sees thinking, feeling and behaving as an integrated process, therefore, a large number of cognitive, emotive, and behavioral methods are used in this therapeutic approach (Ellis, 1999, 2002, 2003a).

The second reason is that, REBT has been useful for children and adolescents with a variety of issues such as depression, test anxiety, parenting, hyperactivity, and assertion (Vernon, 2007). Moreover, there is no limitation in the age of clients, thus, “REBT can be utilized at any age” (Gazibara & Ross, 2007, p. 118).

The third reason is that, the researcher has been an individual and group REBT therapist for more than 10 years in Iran.

The fourth reason is that, based on the researcher’s experience, Iranian culture benefits more from a highly active and directive counseling approach than from a passive and nondirective therapy. Therefore, one effective approach which can address the needs of Iranian culture is Rational Emotive Behavior Therapy (REBT).

The reason for choosing group counseling in this research is that, based on the researcher’s experiences and consistent observations, Iranian adolescents enjoy working in groups. They relate well to the group. Therefore, group counseling is an effective approach in working with Iranian adolescents, specially the female. In Iranian culture, females are more social and emotional than males. This means that females are more enthusiastic to

take part in groups. Group REBT provides an opportunity for female adolescents to meet their psychological needs.

What is cited above are the reasons pertaining to Iranian culture that contributed to the choice of group REBT in the present study.

1.3 Adolescence

Adolescence is a transitional developmental period between childhood and adulthood (Fox, Halpern, Ryan, & Lowe, 2010). Adolescent development can be considered in terms of biological, cognitive, social (Plotnik, 2005), psychological, moral and spiritual challenges (Geldard & Geldard, 2004). “Adolescence refers to the period of development between *puberty*, the age at which a person becomes capable of sexual reproduction and adulthood” (Wade & Tavris, 2008, p. 548).

Many people confuse adolescence with puberty (Coon & Mitterer, 2009). “Puberty is the stage during which sexual functions reach maturity which makes the beginning of adolescence” (Weiten, 2007, p. 442). The timing of puberty is not the same in all individuals. In fact, “the timing of puberty varies from one adolescent to the next over a range of about 5 years (10-15 for girls, 11-16 for boys)” (Weiten, 2007, p. 443).

Although adolescence age boundaries are not exact, in the United States, adolescence begins at around age 13 and ends at about age 22. “Although most contemporary societies have at least a brief period of adolescence, it has not been universal historically or across culture. In some societies, young people used to move directly from childhood to adulthood” (Weiten, 2007, p. 442).

Newman and Newman (2009) based on their research on adolescence, and also their assessment of the research literature, have concluded that two distinct periods of psychosocial development occur during these years, early adolescence (12-18 years) and

later adolescence (18-24 years). Early adolescence begins with the onset of puberty, and ends at about age 18. Some rapid physical changes happen in early adolescence (Newman & Newman, 2009). At around age 10 for girls and age 12 for boys, growth hormones flow into the bloodstream (Gerrig & Zimbardo, 2008). This period is also characterized by newly energized sexual interests and sensitivity to peer relations as well as significant cognitive and emotional maturation (Newman & Newman, 2009). Later adolescence, which begins at about age 18 and ends at about age 24, is characterized by new advances in the establishment of autonomy from the family and the development of a personal identity (Newman & Newman, 2009).

In adolescence, body image becomes especially important. Also, the influence of peers increases at this age (Zimbardo, Johnson, & Weber, 2006). Moreover, “from a developmental psychology point of view, adolescence is a stressful period of growth. This period poses many challenges to the adolescent such as finding identity and values and respect for self and others, taking increasing responsibility for him-or herself, and an increase in problem-solving skills” (Emami, Ghazinour, Rezaeishiraz, & Richter, 2007, p. 574).

Erik Erikson who was especially interested in personality development during adolescence, has pointed out that the premier challenge of adolescence is the struggle to form a clear sense of identity; the process of identity formation begins before the period of adolescence and often extends beyond it. While the struggle for a sense of identity is a lifelong process, it does tend to be especially intense during adolescence (Weiten, 2007). It involves “a stable concept of oneself as a unique individual, and embracing an ideology or system of value that provides a sense of direction” (Weiten, 2007, p. 446).

According to Piaget, formal operational thinking emerges in adolescence. Also, adult-level reasoning can take place in this period. Therefore, “adolescents who have

achieved such thinking abilities are able to think more complexly, abstractly, and hypothetically. They are able to think in terms of possibilities, and may be able to think realistically about the future” (Holmbeck, O’Mahar, Abad, Colder, & Updegrave, 2005, p. 432). Adolescents by having the ability to think about and discuss abstract concepts can critically consider their beliefs, attitudes, values, and goals (Plotnik, 2005). However, adolescents may also develop irrational beliefs which may lead to psychological distress (Flett & Hewitt, 2008; Flett, Hewitt, & Cheng, 2008).

Adolescence is not necessarily the time of psychological turmoil (Plotnik, 2005). “For some adolescents, it is a time of adaptation and improved mental health, but for others it is a period of maladaptation and increasing levels of psychopathology” (Holmbeck et al., 2005, p. 421). In other words, “many adolescents experience new levels of emotional intensity, including positive feelings such as romantic sentiments, sexual desires, tenderness and spirituality, as well as the negative emotions of jealousy, hatred, and rage” (Newman & Newman, 2009, p. 319).

According to Weiten (2007), adolescents do experience more volatile and more negative emotions than their parents, or younger children do. Also, they may engage in risky behaviors such as substance abuse, careless sexual practices, and dangerous driving. On the other hand, adolescence does bring an increase in parent-child conflicts.

There is an interesting question about adolescents’ thinking and reasoning. That is: “why do some seem so slow to develop thinking and reasoning skills that prepare them to deal with typical problems and stressful situations that occur during adolescence”? Researchers have only recently discovered that the answer involves the developing adolescents’ brain. The adolescent’s brain has an underdeveloped prefrontal cortex which is involved in clear thinking and reasoning; but a well-developed limbic system or emotional center (Plotnik, 2005). “The relationship of the brain and behaviors is bidirectional”

(Newman & Newman, 2009, p. 327). In general, adolescence is somewhat more stressful than other developmental periods. Therefore, it is important to pay attention to the psychological needs of this age group. Interventions can be developed to prevent psychological problems such as depression, as well as promoting mental health among adolescents (Charoensuk, 2007).

One important issue in meeting the psychological needs of adolescents is providing counseling programs in schools. “Such programs could help to enhance adolescents coping strategies with their mental health problems, to improve their general coping and problem-solving skills, and even to prevent onset of mental health problems in this vulnerable population” (Emami, et al., 2007, p. 575).

By using different methods, counselors may provide help for adolescents in order to cope with their problems. For example, by using cognitive methods counselors can make adolescents be aware of their irrational beliefs, dispute these beliefs, and also teach adolescents how to challenge these beliefs (Ward, 2008). Also, by using techniques of behavioral therapy such as assertiveness training, counselors may help adolescents to improve their social skills and emotional health and prevent psychological problems. Group therapy is beneficial for adolescents, because it provides a positive atmosphere in which acceptance and support help them to learn new behaviors. Moreover, since adolescents are influenced by their peers, they will learn new behaviors which are modeled by peers (Cecen-Eragul & Zengel, 2009).

1.4 Theoretical Framework

Rational Emotive Behavior Therapy (REBT) which is one of the cognitive-behavioral approaches to counseling and psychotherapy (Dryden, 2006), was established in the mid-1950s by Albert Ellis (Dryden & David, 2008). Ellis has emphasized the negative role of irrational beliefs in human being's life, and "posited that if people could be prevented from indulging in irrational thoughts and beliefs, they would improve their ability to direct their energy toward self-actualization" (Sherin & Caiger, 2004, p. 227). Also, Ellis has cited, "the central theory of REBT says that people largely disturb themselves by thinking in terms of absolute imperatives- shoulds, oughts, and musts" (Ellis, 2003a, p. 247).

Thinking in terms of absolute imperatives is the reason for disturbance and maladaptive behavior in human beings. Therefore, events are not the main reason of making humans upset or happy but "emotions are largely, though not exclusively, determined by one's beliefs about an event as opposed to the existence of a direct causal relationship between an event and how one feels about it" (Weinrach, 2006, p. 170). Based on Ellis (2003b), irrational beliefs have the following characteristics:

- (1) rigid and extreme
- (2) inconsistent with reality
- (3) illogical or nonsensical
- (4) proneness to produce dysfunctional feelings
- (5) proneness to lead to dysfunctional behavioral consequences
- (6) Demanding

- (7) awfulizing and terrorizing
- (8) depreciating human worth.

The goal of REBT is to replace dysfunctional beliefs with a new set of rational beliefs (which are flexible and non- extreme). Rational beliefs which help clients live longer and happier are developed through this therapeutic process (Watson, 1999).

1.5 Statement of the Problem

Irrational beliefs are those illogical and rigid views about events (Davies, 2006). They contribute to the appearance of emotional problems (Coon & Mitterer, 2009), and abnormal behavior (Nairne, 2009). Irrational thinking “blocks persons from achieving their goals, creates extreme emotions that persist and which distress and immobilize, and leads to behaviors that harm oneself, others, and one’s life in general” (Gomathy & Singh, 2007, p. 173).

Some adolescents develop irrational ways of thinking in their lives. In fact, “adolescents commonly hold a range of beliefs which lead them to behave, or think in a way which are destructive for them” (Geldard & Geldard, 2004, p. 172). Problems arising from dysfunctional thinking might be psychological or/and physical. This means that other than causing psychological disturbances, individuals by developing irrational ways of thinking may cause some physical problems in themselves.

According to the previous studies, irrational beliefs are influential in the etiology of many unpleasant emotional experiences such as depression (Charoensuk, 2007; Delucia-Waack, & Gellman, 2007), death anxiety (Braunstein, 2004), anxiety (Harries, Davies & Dryden, 2006), anger (Jones & Trower, 2004; Martin & Dahlen, 2004), worry (Lorcher, 2003), neuroticism (Davies, 2006), social phobia (Rowa & Antony, 2005), marital

problems (Addis & Bernard, 2002; Eckhardt, Barbour, & Davison, 1998; Hamamci, 2005; Moller, Rabe, & Nortje, 2001), decreasing self esteem (Taylor & Montgomery, 2007), and problems in attachment style and relationship satisfaction (Bass, Drake, & Linnery, 2007; Stackert & Bursik, 2003). Also, some studies have revealed the relationship between irrational beliefs and physical problems such as pain (Borkum, 2010); blood pressure (Harries et al., 2006); and plasma inflammatory (Papageorgiou et al., 2006).

Irrational beliefs may induce special problems in adolescents. For example, “perfectionism in adolescents is associated with a host of irrational beliefs” (Flett & Hewitt, 2008, p. 131), and contributes uniquely to depressive symptoms in adolescents (Flett, Hewitt, & Cheng, 2008). In fact, what underlie depression are self-defeating thoughts (Coon & Mitterer, 2009). Depression, which is a worldwide health problem, in some people may begin in adolescence (Newman & Newman, 2009). Nonetheless, it “is a silent problem that may be unrecognized in adolescents” (Charoensuk, 2007, p. 70).

Therefore, paying attention to the adolescent’s depression is of immense importance, as it may cause isolation (Newman & Newman, 2009), and induce some other problems in the person’s life. “Adolescent depression potentially affects youth’s overall well-being, inter-personal relationships, and academic performance, as well as family and support system. More importantly, adolescent depression is often related to suicide, the third leading cause of death for those aged 15-24” (Charoensuk, 2007; McCarthy, Downes, & Sherman, 2008, p. 49). Therefore, it is of great importance to address the psychological needs of this age group, specially their cognitions which determine their behavior.

The concept of irrational beliefs has received extensive study in the West. However, this concept needs to be studied especially in developing countries such as Iran and Malaysia. Previous studies (Derowgar, 2005; Huang, 2007; Nik Seresht Masooleh, 2001) suggest working with adolescents’ irrational beliefs in different aspects, for example, how

irrational beliefs affect adolescents and how these can be reduced in adolescents inside and outside the country.

Although a few studies have been conducted about irrational beliefs (Esmaeil Zadeh, 2006; Seddighi, 2006; Takhti, 2000), to the best of the researcher's knowledge, several aspects have been ignored. For instance, irrational beliefs in adolescents living abroad have not been studied. Also, the comparison between reducing irrational beliefs in early adolescence and later adolescence has not been addressed in previous studies. Moreover, the researcher has had the chance of living in foreign countries as both a student and a counselor. She has observed that how living in a foreign country can foster stress especially for adolescents. As Neenan and Dryden (2004) have emphasized, stressful life events play an important role in inducing irrational beliefs. Therefore, the researcher aimed to address the issue of reducing irrational beliefs by the means of group REBT among Iranian female adolescents living abroad. Therefore, the subject of this study is effectiveness of group REBT in reducing irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur. The conceptual framework of the study is illustrated in Figure 1.1.

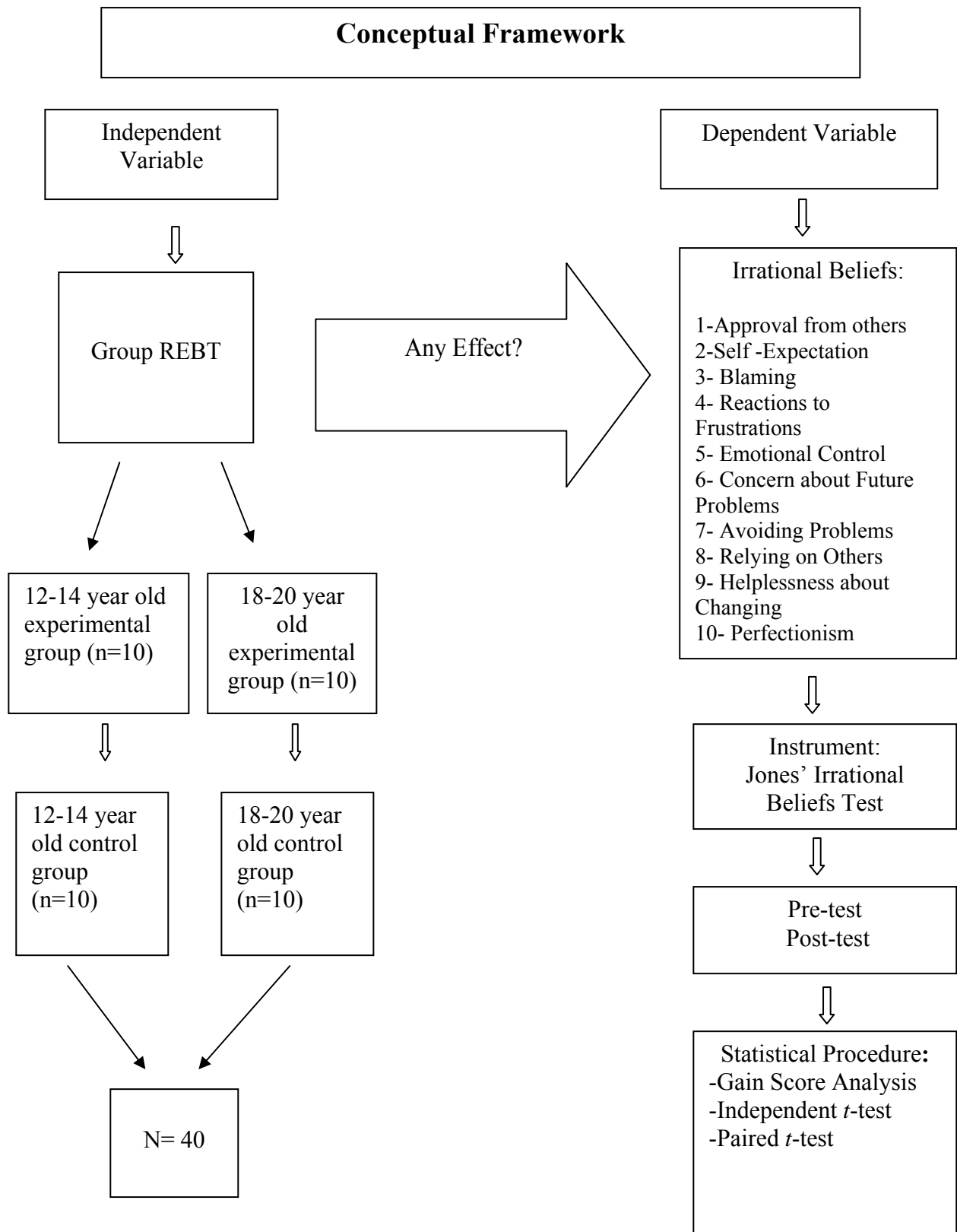


Figure 1.1. Conceptual Framework of the Study.

1.6 Purpose of the Study

The main purpose of this research was to study the effectiveness of group REBT in reducing irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur.

1.7 Significance of the Study

According to some studies carried out on the subject of “Irrational Beliefs” (Bass et al., 2007; Delucia-Waack & Gellman, 2007; Harries et al., 2006; Rowa & Antony, 2005; Taylor & Montgomery, 2007), these kinds of beliefs are associated with psychological and physiological disturbances in human beings. Unfortunately, some people are unaware of the original reasons for their behaviors, which are their beliefs.

As irrational beliefs are at the core of human being’s problems, changing these kinds of beliefs to rational, flexible, and logical beliefs develops better ways of healthy living, either physically or psychologically. For instance, Delucia-Waack and Gellman (2007) in a study found that therapeutic interventions for children of divorce do decrease anxiety and irrational beliefs in general, but specifically addressing irrational beliefs may also decrease depressive symptoms.

Too many people take medicine in order to overcome their psychological as well as physical problems. Some drugs have side effects which can cause some other problems in patients (MIMS, 2007). On the other hand, for medical reasons, some people cannot use drugs for remedy. Non-medical treatments such as cognitive behavior therapy have “been shown in over 375 outcome studies to be highly effective for the treatment of many mental health problems such as depression, general anxiety disorders, panic, anger, and marital distress. It has also been shown to be effective in the treatment of medical conditions such as chronic pain, hypertension, and fibromyalgia” (Academy of Cognitive Therapy, 2010).

Results of a study carried out by Harries et al., (2006) suggest that REBT may have a key role to play in the management and prevention of hypertension. Some studies have even demonstrated the superiority of cognitive therapy over medication (Rowa & Antony, 2005).

The present study investigates the effectiveness of group REBT in reducing adolescents' irrational beliefs. This research will be conducted among adolescents, because adolescence is a very special period in human being's life.

Results of this study may help policy makers and counselors to prepare counseling programs for reducing adolescents' irrational beliefs. This means that based on this study, by appropriate counseling programs and workshops they can provide better consultative, preventive, and also intervention strategies in order to help adolescents reduce their irrational beliefs. Rational thinking helps adolescents increase their academic adjustment. It also helps them to study in much better conditions, and eventually have productive lives in the society. Moreover, it helps them to cope with their present problems and prevent some other problems in the future. For developing countries such as Iran and Malaysia, paying attention to reducing adolescents' irrational beliefs is of immense importance.

1.8 Research Questions

Consistent with the statement of the problem and the purpose of the study, the answer to the research questions will reveal the effectiveness of group REBT in reducing irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur. The objective of this study which is changing the irrational beliefs of adolescents to rational ones is summarized in the following research questions:

Research Question 1. Is there a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the following irrational

beliefs?: (a) Approval from Others; (b) Self Expectation; (c) Blaming; (d) Reaction to Frustration; (e) Emotional Control; (f) Concern about Future Problems; (g) Avoiding Problems; (h) Relying on Others; (i) Helplessness about Changing; and (j) Perfectionism.

Research Question 2- To what extent, if any, does group REBT reduce the level of irrational beliefs in 12-14 year old adolescents?

Research Question 3- To what extent, if any, does group REBT reduce the level of irrational beliefs in 18-20 year old adolescents?

Research Question 4- Is there a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the following irrational beliefs?: (a) Approval from Others; (b) Self Expectation; (c) Blaming; (d) Reaction to Frustration; (e) Emotional Control; (f) Concern about Future Problems; (g) Avoiding Problems; (h) Relying on Others; (i) Helplessness about Changing; and (j) Perfectionism.

Research Question 5- Is there a significant difference in the extent to which group REBT reduces irrational beliefs between the two experimental groups that consisted of 12-14 year olds and 18-20 year olds?

1.9 Research Hypotheses

Based on the previous studies, amongst them Rowa and Antony (2005), Harries et al., (2006), and Emami et al., (2007), the research questions will be answered through the following hypotheses and sub-hypotheses:

Hypothesis 1:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational beliefs.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational beliefs.

Sub-hypothesis 1a:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Approval from Others.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Approval from Others.

Sub-hypothesis 1b:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Self Expectation.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Self Expectation.

Sub-hypothesis 1c:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Blaming.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Blaming.

Sub-hypothesis 1d:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Reaction to Frustration.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Reaction to Frustration.

Sub-hypothesis 1e:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Emotional Control.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Emotional Control.

Sub-hypothesis 1f:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Concern about Future Problems.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Concern about Future

Problems.

Sub-hypothesis 1g:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Avoiding Problems.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Avoiding Problems.

Sub-hypothesis 1h:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Relying on Others.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Relying on Others.

Sub-hypothesis 1i:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Helplessness about Changing.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Helplessness about Changing.

Sub-hypothesis 1j:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Perfectionism.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Perfectionism.

Hypothesis 2:

Ho: There is no significant difference in the level of irrational beliefs in the 12-14 year old group, before and after treatment using group REBT.

Ha: There is a significant difference in the level of irrational beliefs in the 12-14 year old group, before and after treatment using group REBT.

Hypothesis 3:

Ho: There is no significant difference in the level of irrational beliefs in the 18-20 year old group, before and after treatment using group REBT.

Ha: There is a significant difference in the level of irrational beliefs in the 18-20 year old group, before and after treatment using group REBT.

Hypothesis 4:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational beliefs.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational beliefs.

Sub-hypothesis 4a:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Approval from Others.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Approval from Others.

Sub-hypothesis 4b:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Self Expectation.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Self Expectation.

Sub-hypothesis 4c:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Blaming.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Blaming.

Sub-hypothesis 4d:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Reaction to Frustration.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Reaction to Frustration.

Sub-hypothesis 4e:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Emotional Control.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Emotional Control.

Sub-hypothesis 4f:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Concern about Future Problems.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Concern about Future Problems.

Sub-hypothesis 4g:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Avoiding Problems.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Avoiding Problems.

Sub-hypothesis 4h:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Relying on Others.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Relying on Others.

Sub-hypothesis 4i:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Helplessness about Changing.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Helplessness about Changing.

Sub-hypothesis 4j:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Perfectionism.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Perfectionism.

Hypothesis 5:

Ho: There is no significant difference in the level of irrational beliefs between 12-14 year old group, and 18-20 year old group using group REBT.

Ha: There is a significant difference in the level of irrational beliefs between 12-14 year old group, and 18-20 year old group using group REBT.

1.10 Limitations of the Study

There are several important limitations to this study. The first is the limitation of the therapeutic approach. This means that only one counseling approach which is REBT was used in reducing adolescents' irrational beliefs.

The second is the limitation of the statistical universe, as well as the number of participants. Since Kuala Lumpur is a big city, participants were recruited from some parts of this city, which may not be considered representative of the general population. Moreover, since group therapy was used in this research, and the nature of group intervention requires small groups, therefore, the number of chosen participants is limited.

The third is limitation in the following characteristics: adolescents' IQ and self-efficacy; economic, social, and cultural situations of their families; the number of family members; family background (family mental and physical illnesses); degree of irrational beliefs in their family members; and adolescents' commitment in doing homework.

1.11 Definition of Terms

1.11.0 Adolescence

Adolescence is a period of development between childhood and adulthood in human being's life (Coon & Mitterer, 2009). This period consists of early adolescence (12-18 years) and later adolescence (18-24 years) (Newman & Newman, 2009). In this research, two groups from early adolescence and later adolescence were addressed.

1.11.1 Adolescents

Adolescents are those who live in a period of development between childhood and adulthood (Coon & Mitterer, 2009). In this research, adolescents refer to all 12-14 and 18-20 year old Iranian girls who live in Kuala Lumpur.

1.11.2 Cognitive Behavior Therapy

Cognitive Behavior Therapy is a form of psychotherapy based on the formulation that, how one thinks largely determines how one feels and behaves. In Cognitive Behavior Therapy, clients' false beliefs and maladaptive thinking are changed through a collaborative relationship between therapist and client. The therapist is supportive and nonjudgmental, but strong and objective (James & Gilliland, 2003). The Cognitive Behavior Therapy used in this study is Rational Emotive Behavior Therapy (REBT).

1.11.3 Irrational Beliefs

Irrational beliefs mean those beliefs which are rigid and extreme; inconsistent with reality; illogical; and nonsensical (Ellis, 2003b). Irrational beliefs in this research are adolescents' unrealistic negative beliefs. These beliefs will be measured by Jones' Irrational Beliefs Test (Jones, 1969). These beliefs are as follows: (1) Approval from Others; (2) Self Expectations; (3) Blaming; (4) Reactions to Frustrations; (5) Emotional Control; (6) Concern about Future Problems; (7) Avoiding Problems; (8) Relying on Others; (9) Helplessness about Changing; and (10) Perfectionism.

1.11.4 Rational Emotive Behavior Therapy (REBT)

Rational Emotive Behavior Therapy (REBT) which is one of the cognitive-behavioral approaches to counseling and psychotherapy (Dryden, 2006), was established in the mid-1950s by Albert Ellis (Dryden & David, 2008). Ellis has emphasized that how people think determines how they behave (James & Gilliland, 2003). Emotional difficulties are caused when the individual's cognitions are irrational. REBT corrects these self-defeating beliefs and replaces them with rational beliefs (Gelso & Fretz, 2001).

1.12 Summary

Irrational Beliefs may foster various psychological and/or physical problems in human beings. Due to age conditions in adolescence, irrational beliefs may lead to specific problems which induce negative effects on the individual's whole life. Although some studies have been carried out on "irrational beliefs" in Iran, there is little empirical investigation of this issue relative to adolescents. Moreover, to the best of the researcher's knowledge, the concept of irrational beliefs has not been studied in the Iranian adolescents living in foreign countries.

In the present research, group REBT was used in reducing adolescents' irrational beliefs. The main purpose of this research was to study the effectiveness of group REBT in reducing irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur. A more detailed review of the conceptual and empirical literature related to irrational beliefs, rational beliefs, Cognitive Behavior Therapy, and group counseling will be discussed in chapter II. Also, relevant studies on group REBT and irrational beliefs will be introduced in this chapter.

CHAPTER II

LITERATURE REVIEW

2.0 Overview

In this research, group REBT was used in reducing irrational beliefs in two groups of Iranian female adolescents. The main purpose of this research was to study the effectiveness of group REBT in reducing irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur. Therefore, in the present chapter, a review of the conceptual and empirical literature related to irrational beliefs, rational beliefs, Cognitive Behavior Therapy, and group counseling will be discussed. Moreover, relevant studies on group REBT and irrational beliefs will be introduced.

2.1 Irrational Beliefs

According to Lega and Ellis (2001), the concept of Irrational Beliefs was initially conceptualized by Albert Ellis in 1955 for a talk given at the Annual Meeting of the American Psychological Association, and then it was first published in 1958 under a theory called Rational Psychotherapy. As Ellis (2003b) has cited, irrational beliefs have the following characteristics:

- (1) rigid and extreme
- (2) inconsistent with reality
- (3) illogical or nonsensical
- (4) proneness to produce dysfunctional feelings
- (5) proneness to lead to dysfunctional behavioral consequences
- (6) demanding

(7) awfulizing and terrorizing

(8) depreciating human worth

In other words, irrational beliefs are those illogical and rigid views about events, and human beings are disturbed by these extreme views (Dryden, 2006). According to Ellis, general irrational beliefs are dysfunctional beliefs about oneself and one's world. These kinds of beliefs are linked with poor individual functioning (Foran & Smith Slep, 2007). Harries et al. (2006) have given the meaning of irrational and rational beliefs in relation with blood pressure. Therefore, "irrational thinking may be described as holding a rigid belief with an elevation in systolic blood pressure, whereas rational thinking may be described as holding a flexible belief with a reduction in systolic blood pressure" (Harries et al., 2006, p. 108).

Ellis believed that people "importantly create their disturbing emotions and actions by unconsciously and consciously elevating their Rational Beliefs (RB's)— which consist of *preferences* for success, approval, and pleasure—into Irrational Beliefs (IB's)—which mainly consist of *absolutistically demanding and insisting* that these preferences *must* be fulfilled" (Ellis, 2000, p. 23). Of course, human beings experience emotional disturbances in their lives. Nonetheless, as Ciarrochi (2004, p. 172) has cited, "a certain amount of emotional disturbance is natural, but humans also experience a great deal of unnecessary disturbance. This unnecessary disturbance is proposed to stem to some extent from dysfunctional attitudes or beliefs".

According to Ellis (1999), REBT theorizes that most clients have somewhat similar irrational beliefs (IBs), especially the three major absolutistic *musts* that frequently plague the human race:

(a) I must achieve outstandingly well in one or more important respects or I am an inadequate person!

(b) other people must treat me fairly and well or they are bad people!

(c) conditions must be favorable or else my life is rotten and I cannot stand it!

Those who think irrationally assume that events make them feel upset and guilty, while in reality the interpretation of events causes this problem. The following example in Table 2.1 demonstrates how a client believes the event made him feel guilty (Neenan & Dryden, 2004):

Table 2.1

How a Client Believes the Event Made Him Feel Guilty?

Event	Feeling
Arriving ten minutes late to pick up his sons from school	Guilty

In the above example, “the client supports his viewpoint by stating that if he got to the school on time, then he would not have felt guilty, so ‘it surely follows that the situation made me feel guilty, because I turned up late’” (Neenan & Dryden, 2004, p. 87). In cognitive behavior therapy, the therapist helps the client to understand “that not every father (or parent) would feel guilty if he arrived late at the school to pick up his children. Having made this opening into his thinking, the therapist asks him what it means to him to turn up late at the school” (Neenan & Dryden, 2004, p. 87). This is shown in Table 2.2.

Table 2.2

Event, Thoughts, and Feeling

Event	Thoughts	Feeling
Arriving ten minutes late to pick up his sons from school	My boys were very worried when I wasn't there to pick them up. I shouldn't have worried them like that. I'm a bad father for putting them through that ordeal	Guilty

In cognitive behavior therapy, the therapist helps the client to understand “that his feelings are mediated by his interpretation of the event and not directly caused by the event itself (‘it makes sense. If I had arrived late and my boys were playing about enjoying themselves, then I would have felt relieved, not guilty’)” (Neenan & Dryden, 2004, p. 88).

Ellis initially described eleven irrational beliefs, but subsequent research has identified four categories of irrational cognitive processes (Dilorenzo, David, & Montgomery, 2007):

The first is *Demandingness*. This “is viewed as a core belief involved in primary appraisal. It refers to absolutistic requirements expressed in the form of “musts”, “shoulds”, and “oughts” (e.g., “I must pass the exam”)” (Dilorenzo et al., 2007, p. 766). Demands are rigid beliefs that can be placed on yourself, others, and life conditions (Dryden, 2006).

The second is *awfulizing/catastrophizing*. This “refers to an individual’s belief that a situation is worse than it absolutely could be (e.g., “It is awful that I did not pass the exam”)” (Dilorenzo et al., 2007, p. 766). In fact, these kinds of beliefs are extreme ideas that a person holds about how bad it is when his/her demands are not met (Dryden, 2006).

The third is *low frustration tolerance*. This “refers to an individual’s belief that he/she will not be able to endure situations or have any happiness if what he/she wants does not exist (e.g., I could not stand failing the exam)” (Dilorenzo et al., 2007, p. 766). Low frustration tolerance beliefs are extreme ideas which are derivatives from demands (Dryden, 2006).

The fourth is *global evaluation and self-downing*. This “appears when individuals overgeneralize about others, themselves, and the world. It is typically expressed in excessively critical (e.g., self-downing), global evaluations (e.g., “I am stupid and worthless, because I did not pass the exam”)” (Dilorenzo et al., 2007, p. 766). Global evaluation and self downing beliefs (or depreciation beliefs) are extreme ideas which are derivatives from demands (Dryden, 2006).

David, Schnur and Belloiu (2002) have called those emotions that follow rational beliefs about negative events as functional/adaptive negative emotions (e.g., concern) and emotions that follow rational beliefs about positive events as functional/adaptive positive emotions (e.g., happiness).

REBT therapists posit that “irrational beliefs are at the core of emotional problems, and rational beliefs are at the core of the solutions to these problems” (Dryden, 2006, P. 14). Therefore, in cognitive behavior therapy, therapists help clients examine and change their maladaptive thoughts and beliefs. These irrational beliefs have a crucial impact on the other aspects of their life experiences (Neenan & Dryden, 2004).

An important issue concerning irrational beliefs is that, clients are not the only people who may have irrational beliefs (IBs). Counselors might also hold these kinds of self-defeating beliefs that “are usually unrealistic and illogical musts and demands” (Ellis, 2002, p. 290). There are words of ‘must’ and ‘must not’ in counselors’ irrational beliefs. For example, “I *must* be successful with practically all my clients and help them quickly, or

else I am a rotten counselor! My clients and my supervisors *must not* be too difficult and impede my counseling, or else they are not worth helping!” (Ellis, 2002, p. 290). Some counselors feel competent, having a lot of knowledge, but “counseling stressors and adversities may arise no matter how competent counselors may be” (Ellis, 2002, p. 290). Creating irrational beliefs prevents counselors to be helpful for themselves, and for their clients. As Ellis (2002, p. 290) has pointed out,

when counselors are disturbed and in danger of burnout, they frequently *also* tell themselves a set of self-defeating irrational beliefs such as ‘I can’t stand these adversities of counseling!...They make counseling so hard that they may cause me to fail at quickly helping my clients. That would be terrible, and would make me an incompetent counselor and an inadequate person’!

2.1.0 What are the Causes of Irrational Beliefs in Human Beings?

When do people have rigid and extreme views of adversities? Where do irrational beliefs come from? In Freud’s theory, conscious thoughts and beliefs provide clues to the inner working of the unconscious mind, but, in cognitive behavior therapy conscious beliefs are important themselves (Nairne, 2009). Ellis (1999) believed that people have biological tendencies to construct rational wishes and preferences. But, they also have the choice of holding and raising their preferences to absolutistic, rigid demands which can be self-defeating.

In other words, REBT “proposes that humans teach themselves irrational beliefs and are biologically prone to do so” (James & Gilliland, 2003, p. 234). This means that human beings have either resources for growth and powerful inborn tendencies to think irrationally (Gelso & Fretz, 2001). Ellis has cited that human beings “are born with an exceptionally strong tendency to want, to “need”, and to condemn: (1) themselves, (2)

others, and (3) the world, when they do not immediately get what they supposedly 'need'" (Gelso & Fretz, 2001, p. 353).

However, the concepts of learning, family and environment are important in inducing irrational beliefs. This is because those strong "tendencies are then deeply influenced by one's family upbringing and by social conditioning; early conditioning is the most durable. The irrational beliefs once conditioned, are maintained by the person's continual indoctrination of himself or herself" (Gelso & Fretz, 2001, p. 353).

Nairne (2009, p. 477) has emphasized the role of *learning*: "Irrational beliefs and explanatory styles that characterize depression must be learned somewhere, although two people with the same experiences may not always share the same set of beliefs". Nairne (2009) also has mentioned: "We might learn to think and act in abnormal ways in much the same way that we acquire other thoughts and actions- through operant conditioning" (p. 486), "or through modeling the behavior of significant people around us" (p. 480).

Adults' behavior is an important element which may foster irrational beliefs in children. It may lead children to start engaging in irrational beliefs such as blaming other people for their behaviors, or being intolerant of others (Geldard & Geldard, 2004).

Also, Neenan and Dryden (2004) have cited the role of early learning experiences in inducing irrational beliefs. They emphasized: "core beliefs are usually formed in the light of early learning experiences. They can be both positive (e.g., "I'm likeable"), and negative (e.g., "I'm unlikeable"); most people have both" (Neenan & Dryden, 2004, p. 203). Also, Hope, Heimberg, and Turk (2010) emphasized the role of previous experiences as dysfunctional thinking patterns and that "people who have had a history of unpredictable and uncontrollable bad things happening early in life, often come to believe that they have little control over important things in life" (Hope et al., 2010, p. 71).

From Beck's point of view predisposing factors for a disorder may be genetic, or may be learnt in the person's developmental years. Therefore, Beck's theory of depression emphasizes this reality that "children exposed to a number of negative influences and judgments by significant figures would be prone to extract such negative attitudes and incorporate them into their cognitive organization" (Free, 1999, p. 12). Also, Weinrach (2006, p. 477) has cited that "dysfunctional early messages sometimes come from one's family. Clients learn some of their irrational ideas from their parents".

Stackert and Bursik (2003) referred to the previous experiences of individuals as infants. They pointed out: "an insecure adult, who experienced unsatisfying and unfulfilled relationship as an infant, would presumably enter an adult romantic relationship with the same expectations. In the same way, a secure individual who experienced safety and comfort as an infant would enter a romantic relationship anticipating a similar environment" (Stackert & Bursik, 2003, p. 1427).

On the other hand, Stackert and Bursik (2003) emphasized that clinicians working with an individual or couple in a therapeutic relationship should be aware of these associations which influence the relationship.

An individual's unique relationship with an attachment figure furnishes a framework for an individual within which information about the self and the world is organized into a structured whole. During this process, an insecure background, and thus a vulnerable self-concept, may promote the acceptance of irrational and contradictory self-defeating beliefs (Stackert & Bursik, 2003, p. 1427).

Bohnert, Martin, and Garber (2007) have emphasized the relation of maternal rejection, and verbal criticism to negative cognitions in children and adolescents.

However, the role of social skills is important in how a person thinks and behaves. Weiten (2007) has mentioned that poor social skills may lead to a paucity of life's

reinforces such as good friends, top jobs, and desirable spouses. This could induce negative emotions in the person.

Stressful life events play an important role in inducing irrational beliefs because, “during psychological distress a person’s thinking becomes more rigid and distorted, judgments become over generalized and absolute, and the person’s basic beliefs about the self and the world become fixed” (Neenan & Dryden, 2004, p. 5). As Fox et al. (2010) have cited, there is a link between stressful events and depressive symptoms.

Boelen, Kip, Voorsluijs, and Bout (2004) carried out a study on irrational beliefs and basic assumptions in bereaved university students. In this study, bereaved students were compared with non-bereaved matched control subjects. Results of this study showed that bereaved students had a less positive view of the meaningfulness of the world, and the worthiness of the self than their non-bereaved counterparts. Also, the bereaved were found to have higher levels of irrational thinking.

Furthermore, it was found from this study that the degree to which bereaved individuals endorsed general as well as bereavement specific irrational beliefs was significantly associated with the intensity of symptoms of traumatic grief. Therefore, the results of this study are in line with one of the notions central to REBT that the human tendency to think irrationally is likely to increase after a stressful life event such as the death of a loved one.

Nairne (2009) has emphasized the role of cultural factors in human health. “Cultural goals or ideals can also influence psychological health. For example, living in a society that places enormous emphasis on weight ideals can increase the chances that individuals will suffer from an eating disorder such as bulimia or anorexia nervosa” (Nairne, 2009, p. 477).

In general, as Gomathy and Singh (2007, p. 173) have pointed out: “human beings are exceptionally complex and there neither seems to be any simple way in which they

become ‘emotionally disturbed’, nor is there a single way in which they can be helped to be less-defeating”. Anyway, misperceptions and mistaken cognitions about what human beings perceive are the cause of psychological problems.

Psychological problems arise from their misperceptions and mistaken cognitions about what they perceive; from their emotional under reactions or over reactions to normal and usual stimuli; and from their habitually dysfunctional behavior patterns which enable them to keep repeating non-adjustive responses even when they ‘know’ that they are behaving poorly (Gomathy & Singh, 2007, p. 173).

2.1.1 Consequences of Holding Irrational Beliefs

According to Dryden (2006), the influence of holding irrational beliefs on emotions, behaviors and subsequent thinking can be summed up as follows:

- (1) emotional= largely negative and unhealthy
- (2) behavioral= largely dysfunctional
- (3) thinking= largely negatively distorted and skewed

Irrational and maladaptive beliefs are associated with and may lead to psychological and physical malfunctioning (Amutio & Smith, 2007). Hence, “people who suffer from psychological disorders, often carry around faulty or irrational beliefs about the world and about themselves” (Nairne, 2009, p. 493).

Some people may think that all of their beliefs are correct and by these beliefs they can achieve their goals. Nonetheless, in reality, irrational thinking “blocks persons from achieving their goals, creates extreme emotions that persist and which distress and immobilize, and leads to behaviors that harm oneself, others and one’s life in general” (Gomathy & Singh, 2007, p. 173). In fact, the consequence of holding irrational beliefs is

negative because “as a result of holding irrational beliefs, people acquire unhealthy emotions, dysfunctional behaviors, and a lack of self-acceptance” (Davies, 2008, p. 102). Negative thinking is a significant factor contributing to depression, and depression may result in negative consequences, including isolation (Newman & Newman, 2009), and suicide (Charoensuk, 2007).

Irrational and maladaptive beliefs are associated with some other psychological and physical malfunctioning (Amutio & Smith, 2007) such as anxiety (Harries et al., 2006), anger (Martin & Dahlen, 2004; Jones & Trower, 2004), worry (Lorcher, 2003), neuroticism (Davies, 2006), social phobia (Rowa & Antony, 2005), pain (Borkum, 2010), blood pressure (Harries et al., 2006), and plasma inflammation (Papageorgiou et al., 2006).

2.2 Rational Beliefs

According to Dilorenzo et al. (2007) and David et al. (2002), the counterparts to Irrational Beliefs (IBs) are Rational Beliefs (RBs). Dryden (2006) pointed out that people can respond healthily to adversity by holding flexible and non-extreme views of adversity. These flexible and non- extreme views are known as Rational Beliefs.

Rational beliefs are healthy. “Non-dogmatic preferences lie at the very core of these healthy reactions. As such, for Ellis, they are the most important in accounting for healthy responses to life adversities” (Dryden, 2006, p. 16). Rational beliefs have the following characteristics (Dryden, 2006):

- (1) flexible or non-extreme
- (2) consistent with reality
- (3) logical or sensible
- (4) largely constructive in their consequences

According to Dilorenzo et al. (2007), rational beliefs are as follows:

(1) *Desire rather than demanding.* “The rational counterpart to demandingness stresses desires rather than demands. In therapy, individuals are taught to express their beliefs in the form of wishes, wants, and preferences rather than escalating into dogmatic “musts”, “shoulds”, and “oughts”, (e.g., “I really want to pass the exam, though I am aware that this may not happen”)” (Dilorenzo et al., 2007, p. 766).

(2) *Moderate evaluation of bad things rather than awfulizing them.* “A rational belief would be a more moderate evaluation of badness. In REBT, individuals learn to evaluate negative events as bad rather than awful, (e.g., “It is very bad that I did not pass the exam, but this is not the end of the world”)” (Dilorenzo et al., 2007, p. 766).

(3) *Statements of tolerance rather than low frustration tolerance.* “The rational counterpart is statement of tolerance. Therapists teach individuals that they can tolerate discomfort, (e.g., “Failing the exam would not make me feel good, but I could stand it”)” (Dilorenzo et al., 2007, p. 766).

(4) *Acceptance of fallibility rather than global evaluation of human worth and self downing.* “Acceptance of fallibility comprises the rational belief in this category. In treatment, individuals learn that no person can be evaluated based on a single global rating, and that life conditions are composed of good, bad, and neutral elements, (e.g., “I did not pass the exam. It was dumb not to prepare enough, but this does not mean that I am stupid and worthless”)” (Dilorenzo et al., 2007, p. 766).

As Dryden (2006) has cited, all these beliefs which are the counterparts to Irrational Beliefs, are non-extreme ideas. They are also derivatives from non-dogmatic preferences.

2.2.0 Consequences of Holding Rational Beliefs

According to Dryden (2006), the influence of holding rational beliefs on emotions, behaviors and subsequent thinking can be summed up as follows:

- (1) emotional= largely negative and healthy
- (2) behavioral= largely functional
- (3) thinking= largely realistic and balanced

Bohnert, et al. (2007) in a study found that adolescents who reported higher self-worth and more positive attributions about life events, tended to become more involved in organized activities during high school. Holding rational beliefs can lead to having better relationships, in that “more rational and realistic ways of thinking produce healthier emotions, more functional behaviors and greater acceptance of the self and others” (Davies, 2008, p. 102). Rational beliefs have advantages for human beings. They “help people to achieve their basic goals” (Montgomery, David, Dilorenzo & Schnur, 2007, p. 20). In counseling and psychotherapy, “clients will likely feel better when they think more rationally” (Weinrach, 2006, p. 171). In general, by holding rational beliefs, human beings are able to manage their lives positively.

2.2.1 How to Change Irrational Beliefs to Rational Beliefs?

Therapists use cognitive behavior approaches in order to change irrational beliefs to rational ones (Ellis, 2002). In the following section some theoretical aspects of Cognitive Behavior Therapy will be discussed.

2.3 Cognitive Behavior Therapy

Cognitive Behavior Therapy, which is a form of psychotherapy was introduced into the West in the late fifties (Free, 1999). Pioneers in the development of Cognitive Behavior Therapy include Albert Ellis (1913- 2007) who developed REBT, and Aaron T. Beck (1921-) whose Cognitive Therapy (CT) has been widely used for depression and anxiety (Free, 1999).

According to Cognitive Behavior Therapy, what determines individuals' moods and subsequent behaviors is the way that they structure and interpret experiences. Seeing and perceiving negatively are purported to cause negative feelings and debilitating behaviors. Cognitive Behavior Therapy changes this way of seeing and perceiving (James & Gilliland, 2003). According to Welfel and Patterson (2005), in the cognitive approach, erroneous thinking is the source of emotional upset and ineffective behavior.

From cognitive behavior therapists' point of view, people have the capacity to be rational or irrational, erroneous or realistic in their thinking. In fact, the way of thinking about their experiences determines how they feel about those experiences, and what they will do. In general, as Palmer and Gyllensten (2008) have cited, Cognitive Behavior Therapy "proposes that dysfunctional thinking is prevalent in psychological disturbance" (Palmer & Gyllensten, 2008, p. 39).

Cognitive Behavior Therapy is used in treating of a large number of psychological problems such as depression, anxiety, dysfunctional attitudes, phobias (James & Gilliland, 2003), mood disorders, anger management, schizophrenia (Free, 1999), and so on. Also, as Altrows (2002) has cited, theory, research, and practice show that cognitive behavior therapy can be extremely useful to the clinician working with offenders.

2.3.0 The Most Well Known Cognitive Behavior Therapy Approaches

2.3.1 Albert Ellis' Rational Emotive Behavior Therapy (REBT)

Rational Emotive Behavior Therapy (REBT) which is one of the cognitive-behavioral approaches to counseling and psychotherapy (Dryden, 2006), was established in the mid-1950s by Albert Ellis (Dryden & David, 2008). Ellis (1913-2007) derived REBT theory mainly from the ancient Asian philosophers, Gautama Buddha, Lao Tsu, and Confucius; the Greeks and the Romans, Epictetus, Marcus Aurelius, Epicurus, and Seneca; and from several modern constructivist philosophers, such as Kant, Russel, Dewey, and Wittgenstein (Overholser, 2003).

According to Ellis (2002), the philosophers found that human beings who are natural constructivists, largely disturb themselves about adversities because they choose to add to these adversities their own irrational beliefs. Ellis added to this, that the nature of people is such that when they think, they also feel and behave; when they feel, they also think and behave; and when they behave, they also think and feel. Their thoughts, feelings, and behaviors strongly include and interact with each other (Ellis, 2002).

Ellis used this philosophy at first, from the age of 16 onwards to combat his own anxiety (Overholser, 2003). He pointed out that Epictetus said two thousand years ago: "People are disturbed not by events that happen to them, but by their *view* of these events" (Ellis, 2004a, p. 74). Then he added: "This was a revelation to me, which I took seriously, and with which I trained myself to be much less anxious about many things..." (Ellis, 2004a, p. 74).

Ellis has emphasized the negative role of dysfunctional cognitions in human beings' lives and "posited that if people could be prevented from indulging in irrational thoughts and beliefs, they would improve their ability to direct their energy toward self-actualization" (Sherin & Caiger, 2004, p. 227). As Ellis has cited, "the central theory of

REBT says that people largely disturb themselves by thinking in terms of absolute imperatives- shoulds, oughts, and musts” (Ellis, 2003a, p. 247). Therefore, thinking in terms of absolute imperatives is the reason for disturbance and maladaptive behavior.

Albert Ellis started to create Rational Emotive Therapy in 1953, and then started using it in 1955. In fact, he started using his approach in 1955. Then therapies of Aaron T. Beck, Albert Bandura, Donald Meichenbaum, and so forth began to be often practiced (Ellis, 2004b).

Eventually, in 1993 Ellis changed his therapy to Rational Emotive Behavior Therapy (Prochaska & Norcross, 1999), because he believed “that the theory has always been highly cognitive, very emotive and particularly behavioral” (Weinrach, 2006, p. 169). This means that this approach “has always disputed counselee’s irrational believing-emoting-behavings (IBs) by using strong emotional arguments, and by also invariably using a number of important behavioral methods to uproot them” (Ellis, 2002, p. 291). What needs to be mentioned is that in REBT, behavior is and always has been an essential part of the theory (James & Gilliland, 2003). Also, Ellis has emphasized that his approach is the most comprehensive of the many existing behavior therapies (Ellis, 2004b).

Although Ellis had practiced various forms of psychoanalytic treatment, from the late 1940s to the early 1950s, he became dissatisfied with the effectiveness and efficacy of both classical analysis and psychoanalytic psychotherapy. Ellis believed that Freud was correct in his opinion that irrational forces keep neurotics troubled, but he was coming to believe that irrational forces were not unconscious conflicts from early childhood (Prochaska & Norcross, 1999). Ellis found that, “whatever happened to them in their childhood, it was their *present* thoughts, feelings, and actions with which they maintained their self-disturbing” (Ellis, 2000, p. 20).

The central tenets of Ellis' theory is that, "affect is thought to be the result of how a person construes an event rather than to be the result of the event alone. Therefore, how the event is construed depends upon the personal beliefs about the event" (Free, 1999, p. 19). In other words, events are not the main reason for making humans upset or happy but "emotions are largely, though not exclusively, determined by one's beliefs about an event as opposed to the existence of a direct causal relationship between an event and how one feels about it" (Weinrach, 2006, p. 170).

The goal of REBT is to replace dysfunctional beliefs (which are rigid, inconsistent with reality and illogical) with a new set of rational beliefs (which are flexible and non-extreme). Rational beliefs which help the client live longer and happier are developed through this therapeutic process (Watson, 1999). Since REBT is a form of tolerance training, three of the most important approaches to achieving tolerance are: unconditional self-acceptance, unconditional other-acceptance, and unconditional life-acceptance (Ellis, 2004a; Gazibara & Ross, 2007). In general, REBT is an approach which is problem-focused, goal-directed, structured and logical in its practice, educational focused, primarily present-centered and future-oriented, skills emphasized and having largely active and directive therapists (Dryden, 2006).

2.3.1.0 Theory of Personality

2.3.1.1 Biological Basis

According to James and Gilliland (2003), REBT suggests a biological basis for human behavior and that human beings have powerful tendencies toward growth and self-actualization. REBT "proposes that humans teach themselves irrational beliefs and are biologically prone to do so" (James & Gilliland, 2003, p. 234). Also, another suggestion in REBT is that "humans are born with an exceptionally strong tendency to want and to

insist that everything happens for the best in their life and to soundly condemn themselves, others, and the world when they do not immediately get what they want. In this sense, humans continue to think *humanly* all their lives, and only with great effort are they able to think and behave rationally” (James & Gilliland, 2003, p. 234).

2.3.1.2 Social Basis

From Ellis’ point of view, “people spend much of their lives attempting to live up to others’ expectations. They become *other-directed* and neglect to spend time developing the interpersonal skills they need to succeed socially, and develop a healthy self-concept” (James & Gilliland, 2003, p. 235). It is preferable to be valued by other people, but we do not have to become the prisoners of their approval (Prochaska & Norcross, 1999).

Ellis has emphasized that how people think determines how they behave, and “the notion that one learns from the environment is nonsense. In his view, a more appropriate term is that people *teach* themselves as they aspire to succeed socially and live comfortably” (James & Gilliland, 2003, p. 235).

2.3.1.3 Psychological Basis

Ellis believed that healthy people have an internal locus of control. Human beings are disturbed when they concentrate on external events as the source of their problems (James & Gilliland, 2003).). In reality, people’s negative interpretation of events leads to problems and make them upset (Nairne, 2009). “People become emotionally distraught by upsetting themselves *about* external events. Convinced that the trouble is outside themselves, they complicate matters by condemning others and the world in general” (James & Gilliland, 2003, p. 235).

However, having an internal locus of control leads to healthy emotions. On the contrary, if human beings “continue this faulty belief in an external locus of control, they eventually come to view themselves in the same despicable way. The way this twisted and convoluted thinking, emoting, and behaving occurs, can be explained by the ABC theory” (James & Gilliland, 2003, p. 235).

2.3.1.4 ABC Theory

According to Egbochuku, Obodo, and Obadan (2008) and Prochaska and Norcross (1999), Ellis introduced the ABC theory for rational explanation of personality. At point A are Activating Events, for instance, the failure to get into a graduate program. At point B are the Beliefs that people use to process the activating events in their lives. These beliefs can be rational, such as believing “the failure was unpleasant”. The beliefs can also be irrational, such as believing “how terrible it is that I didn’t get into graduate school; they have prevented me from ever being successful” (Prochaska & Norcross, 1999, p. 324). At point C, the person experiences the emotional and behavioral consequences of what has just occurred. In Ellis’ approach, “the ABC model of human disturbance is followed by D- the *disputing* of peoples’ irrational beliefs when they feel and act in a self-defeating way. This process leads them to E, which is an *Effective new philosophy* (effect of disputing irrational beliefs)” (Prochaska, & Norcross, 1999, p. 328).

In REBT, processes within the organism are the critical determinants of personality functioning and it is not the activating events that induce problems or happiness, but rather the person’s interpretations of the events (Prochaska, & Norcross, 1999). Moreover, “rational beliefs about negative events give rise to healthy negative

emotions and irrational beliefs about negative events lead to unhealthy negative emotions” (Gomathy & Singh, 2007, p. 175). This relation is shown in Table 2.3.

Table 2.3

Negative Event, Rational Belief; Negative Event, Irrational Belief

Healthy Response	Unhealthy Response
Negative Event (A)	Negative Event (A)
Rational Belief (B)	Irrational Belief (B)
Healthy Negative Emotion (C)	Unhealthy Negative Emotion (C)

2.3.1.5 Therapeutic Processes

In Ellis’s approach, the aim of therapy is “to increase an individual’s sense of self-worth and the potential to be self-actualized by getting rid of the system of faulty beliefs that block personal growth” (Gerrig & Zimbardo, 2008, p. 501). Therefore, considering the ABC theory of Rational Emotive Behavior Therapy, there are four main steps involved in the therapeutic process when applying the concept of REBT.

According to Watson (1999), the first step involves pointing out to the client that they have irrational beliefs. The second step is built on the awareness achieved in the previous step. The third step involves disrupting the pattern and discontinuing the cycle of irrational beliefs. By working in a collaborative effort, both therapist and client modify the client’s thinking and begin to move away from the irrational beliefs and setting new rational beliefs. This moves into the fourth step of the process. After

identifying irrational beliefs, the therapist by using cognitive, affective and behavioral techniques, challenges them in order to develop rational beliefs.

In Freud's theory, conscious thoughts and beliefs provide clues to the inner working of the unconscious mind, but, in cognitive behavior therapy conscious beliefs are important themselves (Nairne, 2009). In other words, "REBT does not place value upon insight into the unconscious or childhood causes. Rather, REBT therapists help their clients develop insights into how their own beliefs and assumptions, once learned, are the root causes of their problems, because clients keep reindoctrinating themselves" (Gelso & Fretz, 2001, p. 353). Thus, in REBT, developing the insight into the role of irrational beliefs in inducing psychological and physical problems is important. After gaining this insight, "REBT strives to give the client insight that only through *hard work and practice* will these irrational self-defeating beliefs be corrected— and remain corrected. Only repeated rethinking and actions will extinguish the irrational beliefs" (Gelso & Fretz, 2001, p. 353).

Also, in REBT, the therapeutic process is to identify the irrational beliefs that cause emotional problems (Blum & Davis, 2010; Coon & Mitterer, 2009), to dispute them vigorously, and then to replace them with more rational beliefs (Blum & Davis, 2010). REBT, sees thinking, feeling, and behaving as an integrated process. Therefore, a large number of cognitive, emotive, and behavioral methods are used in this therapeutic approach (Ellis, 1999, 2002, 2003a).

Various techniques such as "role-playing, assertion training, operant conditioning, desensitization, humor, suggestion and support" (Gelso & Fretz, 2001, p. 353) are used in REBT. "But above all, REBT entails active, vigorous, logical *persuasion* to help the client see and change irrational thinking and behavior" (Gelso & Fretz, 2001, p. 353). There is no limitation in the age of clients, thus, "REBT can be

utilized at any age” (Gazibara & Ross, 2007, p. 118). Moreover, “its techniques are tailored specifically for each individual client” (Watson, 1999, p. 16).

Various problems can be addressed in REBT. Its “techniques are applied to a wide variety of clinical problems such as anxiety, depression, anger, relationship difficulties, obsessive/compulsive disorders, eating disorders, parenting problem, and addiction” (Watson, 1999, p. 16). Also, Munoz-Eguileta (2007) suggested utilizing REBT in the treatment of divorced people.

Ellis (2004) emphasized the importance of his therapeutic approach and that “REBT seems to be more comprehensive than most other behavior therapies in that it strives for its clients *getting better* and not *merely feeling better*” (p. 88). In general, according to REBT, emotional difficulties are caused when the individual’s cognitions are irrational. REBT corrects these self-defeating beliefs, and replaces them with rational beliefs (Gelso & Fretz, 2001).

2.3.1.6 Therapeutic Relationship

In REBT the therapist is active and directive (Dryden, 2006). Although Albert Ellis “agreed that a therapeutic rapport is desirable, he primarily emphasized the importance of full and unconditional acceptance of a client as a part of a close collaboration in the treatment process” (Clark, 2007, p. 53). This means that in REBT, therapists have empathy and unconditional positive regard.

Nonetheless, they “do not believe a warm relationship between client and therapist is a necessary or a sufficient condition for effective personality change. On the contrary, Ellis suggests that too much personal warmth and empathic understanding may foster client dependence, and the need for the therapist approval” (James & Gilliland, 2003, p. 241).

2.3.1.7 Therapeutic Techniques

REBT counselors would often use cognitive, emotive, and behavioral techniques with their clients. These various techniques would maximally help clients overcome their anxieties. According to Ellis (2002), some cognitive, emotive, and behavioral techniques that REBT counselors might use in counseling are as follows:

2.3.1.8 Cognitive Techniques

Cognitive techniques deal with client's cognitions. Counselors, by using these techniques, help clients to change their beliefs. According to Ellis (2002), some of them are as follows:

(1) Disputing irrational believing-emoting-behaving: At first, counselors might show clients their irrational beliefs by asking questions such as: Where is the evidence for your beliefs? Why is this so terrible? These kinds of questions raise the consciousness in clients and help them to begin thinking on a more rational level. Clients can be asked for example, where is the evidence that I should not have any problem in my life? A typical answer would be: There is no evidence that I should not have any problem in my life.

Gradually, clients are able to see that things are not as bad as they make them out to be. Then, clients would be taught to do logical disputing of their irrational beliefs. For example: Does it logically follow that if I cannot solve my problems alone, I am therefore an inadequate person? Typical answer would be: No, if I were an inadequate person, I would fail at practically everything, and that, of course is not true. Then, clients would be taught to do pragmatic or heuristic disputing of their irrational beliefs. For example: What results will I get if I think that I *must* solve my problems alone, and that I am not a good person if I do not? A typical answer would be: It will

help me make myself very anxious and depressed.

(2) Rational coping self statement: Clients repeat rational coping self-statements such as “I am never a failure or a loser, but just a fallible human who fails some of the time” (Ellis, 2002, p. 292).

(3) Positive visualization: By this technique, counselors help clients in reaching their achievement-confidence, or self-efficacy.

(4) Modeling: By this technique, counselors help clients see that other people they know have similar difficulties, but do not awfulize about them. Moreover, Clients can model themselves after those people.

(5) Psycho-educational methods: Clients can be encouraged to read REBT self-help materials.

(6) Cognitive distraction: By using cognitive distraction such as reading, watching TV, meditation and yoga, clients temporarily block out some of their anxietizing.

(7) Practical problem-solving techniques: Counselors can help clients to use more practical methods of tackling their problems (Ellis, 2002).

2.3.1.9 Emotional Techniques

Emotive techniques help clients to imagine themselves in different situations.

According to Ellis (2002), some of these techniques are as follows:

(1) Unconditional self-acceptance: Counselors make the client familiar with the ways in which they could accept themselves unconditionally as a person.

(2) Unconditional other-acceptance: At first, counselors would give their clients Other-Acceptance, and that they are accepted. Then they will help them to see how others can be accepted as worthwhile human beings.

- (3) Shame attacking exercises: In order to achieve unconditional self-acceptance, counselors help clients to remove their guilt and self-damning.
- (4) Rational emotive imagery: By this technique clients could be shown how to imagine some terrible things happening. This technique helps clients to train themselves to feel healthy disappointment, instead of unhealthy anxiety.
- (5) Strong rational coping statements: These kinds of statements help clients undo their anxious reactions. For example: I am not a miracle-maker, and can only do my best.
- (6) Humor: Since anxious people take things too seriously, counselors might encourage clients use their sense of humor (Ellis, 2002). Geldard and Geldard (2004) suggest humor as a useful technique for working with adolescents.

2.3.1.10 Behavioral Techniques

By using behavioral techniques, clients are encouraged to do some activities that help them overcome their anxieties. According to Ellis (2002), some of the behavioral techniques are as follows:

- (1) Reinforcement: Clients might be encouraged to reward themselves with some pleasurable activities, only after they undertook some risks they commonly avoided.
- (2) Penalization: If clients refused to change their thinking, feeling, and behaving, then they might be encouraged to take some real penalties to discourage their resistance. For example, doing some very unpleasant tasks.
- (3) Skills training: Counselors might work with their clients' assertiveness. They also might encourage them to take assertiveness training workshops.

2.3.2 Beck's Cognitive Therapy

Aaron T. Beck “has played a key role in the development of cognitive therapy for anxiety and depression” (Eysenck & Keane, 2010, p. 596). According to James and Gilliland (2003, p. 266), “Beck’s belief derived from the Greek Stoic philosophers– that how one thinks largely determines how one feels and behaves”. Beck “came to pioneer Cognitive Therapy from psychoanalytic origins” (Prochaska & Norcross, 1999, p. 339).

“In the early 1960s, Beck investigated Freud’s theory of depression as ‘anger turned on the self’, but found that the data he gathered did not support the theory. Instead, he found that the basic problem in depression was in how patients processed information– their cognitive processing. Based on this research, Beck developed a cognitive theory of depression in 1967 and subsequently a cognitive therapy for depression as well as other disorders in 1976” (Gelso & Fretz, 2001, p. 353).

Therefore, Beck created a system of psychotherapy known as ‘Cognitive Therapy’ in which the goals were to correct faulty information processing, and aid clients in modifying assumptions that perpetuate maladaptive behavior, and emotions (James & Gilliland, 2003).

A number of instruments were developed by Beck, including the Beck Depression Inventory, the Beck Anxiety Inventory, and the Scale for Suicide Ideation (Prochaska & Norcross, 1999). Beck’s approach is used in treating a large number of mental problems such as depression, anxiety, phobia, and dysfunctional attitudes (James & Gilliland, 2003).

According to Beck, depressed individuals tend to interpret their experiences in negative ways, and they also generally feel hopeless about the future (Charoensuk, 2007). Therefore, “this way of thinking, which includes a negative view of self, a negative view of

the world, and a negative view of the future, contributes to the person's depression” (Charoensuk, 2007, p. 57).

Working with depressed patients, Beck found that they experienced streams of negative thoughts that seemed to pop up spontaneously. He termed these cognitions “automatic thoughts”, and discovered that their content fell into three categories: negative ideas about themselves, the world, and the future. He began helping patients identify and evaluate these thoughts and found that by doing so, patients were able to think more realistically, which led them to feel better emotionally, and behave more functionally (The Beck Institute for Cognitive Therapy and Research, 2008). In general, Beck's cognitive model suggests that major distortions in thinking cause emotional and behavioral problems (Coon & Mitterer, 2009).

2.3.2.0 Theory of Personality

James and Gilliland (2003, p. 269) have cited: “cognitive theory views personality as reflecting the individual's cognitive organization and structure, which are based on both genetic endowment and social influence”. Human beings' emotional and behavioral responses are largely determined by how they perceive and interpret events. Core beliefs and basic assumptions called schemas, have a substantial influence on one's cognitive operation. Schemas which may be either adaptive or dysfunctional, affect the individual cognition and behavior (James & Gilliland, 2003).

According to Eysenck and Keane (2010, p. 596), in Beck's view, “individuals with anxiety-related schemas should selectively process threatening information, and those with depressive schemas should selectively process emotionally negative information”. In general, how human beings form, organize, and interpret basic cognitive structures dictates how they perceive and behave (James & Gilliland, 2003).

2.3.2.1 Beck's Cognitive Model of Depression

As Free (1999) has cited, Beck's theory of depression, possesses four major cognitive components. They relate to internal events that the person may be aware of, but which are not directly observable by other people. These four components are as follows:

(1) "*Automatic thoughts* are a transient phenomenon. They include sentences and phrases that occur in the stream of consciousness, and images of various kinds. They only exist as long as the thought is in consciousness" (Free, 1999, p. 11).

(2) "*Schemas* on the other hand are permanent structures in the person's cognitive organization which act as filters, templates or stereotypes to summarize the individual's experience of the world and enable him or her to organize their behavior" (Free, 1999, p. 11).

(3) "*Logical errors* are errors in the process of reasoning, such that a distorted conclusion or inference is drawn from the facts. Examples are making a general conclusion on the basis of insufficient data, or deciding that an event has a totally negative meaning on the basis of a lack of positive meaning" (Free, 1999, p. 11).

(4) "*The cognitive triad* is concerned with the *content* of thoughts. Both automatic thoughts and schemas have content, and logical errors act to bias this content to make it more extreme. In depression, the content is mostly negative, and is about the self, the world, and the future. The result is extremely negative automatic thoughts and schemas concerning oneself, the world, and the future that are derived from logical errors in interpreting sensory data" (Free, 1999, p. 12).

Unrealistic and distorted thoughts disturb clients. Therefore, in therapy clients will be helped to identify the thinking errors which lead to negative moods and behavior. Most common thinking errors are as follows:

1. *All or nothing thinking*. In this type of thinking the client evaluates self, other people, situations, and the world in extreme categories; this thinking is absolutist, and does not allow for ambiguity. For example, the young mother who regards herself as entirely bad because she is frustrated with her young child, and regards other mothers as always being patient with their offspring. Hence, she takes the unrealistic viewpoint of seeing other mothers as all good, and herself as all bad (Curwen, Palmer & Ruddell, 2000).

2. *Personalization and blame*. This is a thinking error in which one totally blames oneself for everything that goes wrong and relates this to some inadequacy in oneself. The person assumes personal responsibility for an event which is not entirely under his or her control. For example, a trainee who believes the trainer is rude because she made an error and overlooks the role of others and disregards the possibility that she may have added to what happened, but was not entirely at fault. The opposite is blaming others for one's problems or circumstances and not believing one has a part in the problem. An example is the wife who totally blames her spouse for their divorce (Curwen et al., 2000).

3. *Catastrophizing*. In catastrophizing, the person predicts the future negatively, and thinks everything will turn bad. This thinking error is usually associated with anxiety problems; clients tend to mull on the worst possible outcomes of the situation. For example, a manager asked to do a presentation for his company becomes preoccupied with the possibility that he will make a mess of it, get fired and become poor (Curwen et al., 2000).

4. *Emotional reasoning*. This is where one concludes about an event based only upon feelings and ignoring any contrary evidence. For instance, the young man who has been waiting half an hour for his new girlfriend to arrive, feels rejected and thinks he has

been ditched and does not consider other reasons for his partner's delay such as missing the bus or having a flat tire (Curwen et al., 2000).

5- *Should or must statements*. This is where the person has a rigid idea of how she, others, or the world "must" or "should" behave. Preferences are turned into rigid demands. When these demands are unmet the person feels emotionally distressed and overestimates how bad it is when the expectations remained unsatisfied. For example, the gymnast doing a tough move degrades herself for making many mistakes. This led to feelings of frustration so she avoids practice for days (Curwen et al., 2000).

6. *Mental filter*. This is where the person does not view the picture as a whole and concentrates on the one negative aspect. For instance, a woman receives many positive comments about her new hairstyle from friends, but one friend said she did not like that particular hair style. Therefore, she had this comment on her mind for a long time and wore a hat (Curwen et al., 2000).

7. *Disqualifying or discounting the positive*. This is where the person ignores the positive aspects of situations. For instance, a man produces very good meals on most occasions, but does not give himself any praise. He thinks of himself as being an awful cook (Curwen et al., 2000).

8. *Overgeneralization*. The person thinks that because an unpleasant event happened once, it will always happen. He makes sweeping generalized conclusions on the basis of one event. For example, a person who attended a job interview but did not get the position believes that he would be rejected for every job (Curwen et al., 2000).

9. *Magnification and minimization*. This is where the person who makes this thinking error when evaluating herself, other people or situations pays attention to the negative components and minimizes or plays down the positive aspects. When being appraised at work she pays attention to the areas where change is needed and pays little

attention to a considerable range of positive aspect. Therefore, she concludes that this shows how inadequate she is (Curwen, et al., 2000).

10. *Labeling*. This is where the individual labels herself as a bad person. For instance, the mother we referred to in item 1, might label herself as a bad mother. When this thinking error is applied to others a client dislikes or disagrees with, he may say to himself, he is bad. The person will see others as globally bad, and may then feel angry with them. A person who makes an error at work may label herself as totally a stupid person (Curwen et al., 2000).

11. *Jumping to conclusions*. A person having this thinking error infers that a particular outcome will be negative, without having any evidence or even if the evidence points to a positive outcome. There are two main types of this thinking error: (1) *mind reading*. The person thinks she knows what others are thinking and does not consider other more plausible or likely possibilities. An example would be the client with social anxiety who thinks her work colleagues see her as inadequate person; (2) *fortune telling*. A person predicts that events in the future will turn out negatively. For instance, a person attending for a routine chest X-ray assumes he has an important illness (Curwen et al., 2000).

From Beck's point of view, predisposing factors for a disorder may be genetic, or may be *learnt* in the person's developmental years. Therefore, Beck's theory of depression emphasizes this reality that "children exposed to a number of negative influences and judgments by significant figures would be prone to extract such negative attitudes and incorporate them into their cognitive organization" (Free, 1999, p. 12). Also, individuals by negative interpretation of developmental experiences, form negative schemas. These negative schemas relate to themselves, the world, and the future.

The experiences may have been objectively negative. The schema may be conditional or absolute, as in ‘if I fail at something important, I am worthless’ or ‘I am worthless’. Depression is then precipitated when an event occurs that is relevant to the schema and therefore, activates it. For example, this could be failure experience in an activity seen as important (Free, 1999, p. 12).

2.3.2.2 Therapeutic Process

In Beck’s approach, once a warm and empathic therapeutic relationship is established, the therapist uses some cognitive techniques in order to help clients to identify negative forms of thinking. “The therapist uses collaborative empiricism, Socratic dialogue, and guided discovery in an attempt to get clients to recognize their erroneous assumptions, identify their cognitive distortions, and counteract their dysfunctional behavioral and emotional responses” (James & Gilliland, 2003, p. 274).

Also, in Beck’s approach “a major therapeutic technique used by cognitive therapists is *Socratic dialogue*. Thus, therapists carefully develop a series of questions that they ask clients to promote learning” (Gelso & Fretz, 2001, p. 355). The objectives of Socratic dialogue “are to catalyze the client’s exploration and definition of problems; identification of assumptions, thoughts, and images; evaluation of the meaning of situations and events; and assessment of the consequences of maintaining maladaptive thoughts and behaviors” (James & Gilliland, 2003, p. 274).

An important part of the therapy is giving homework assignments. Between sessions, therapists ask clients to record their automatic thoughts and emotions they experience during the day. They are then asked to write rational responses to those thoughts and emotions (Nairne, 2009). This part of the therapy is “aimed at helping clients see and correct dysfunctional thoughts, assumptions, and behavior” (Gelso & Fretz, 2001, p. 355).

According to Prochaska and Norcross (1999), in Beck's cognitive approach, therapists ask these three questions:

- (1) what's the evidence?
- (2) what's another way of looking at it?
- (3) so what if it happens?

In fact, by this approach clients will discover how irrational their assumptions are, and then realign their way of thinking.

2.3.2.3 Therapeutic Relationship

Due to the specific role of the therapist in Beck's approach which is helping clients to discover their own faulty way of thinking, "rather than directly confronting clients with their irrational beliefs, Beck suggests it's more therapeutic for clients to identify negative forms of thinking themselves" (Nairne, 2009, p. 498). Therefore, in Beck's approach the first and most important strategy is to develop a trustful and collaborative relationship through accurate empathy, warmth and genuineness. This kind of relationship enables the counselor to assess the client's expectations regarding therapeutic success (James & Gilliland, 2003).

In fact, in Beck's approach "rapport and open communication are sought in order to establish supportive conditions to challenge a client's dysfunctional cognitions, and to follow through with behavioral interventions" (Clark, 2007, p. 50).

2.3.3 Some Parallels and Dissimilarities between REBT and CT

Beck developed his Cognitive Therapy independently from Ellis. Nonetheless, there are some parallels and similarities between these two approaches. Some of them are as follows:

(1) “Both Beck and Ellis were originally trained in the psychoanalytic tradition and emigrated to a more contemporary-oriented, cognitive-focused psychotherapy as they became dissatisfied with the clinical theory and results of psychoanalysis” (Prochaska & Norcross, 1999, p. 339).

(2) Both approaches “are cognitive behavior therapies, relying on principles of learning and using behavioral methods in addition to focusing on cognitive change. But, at the core, the two approaches are more cognitive than behavioral, because they posit that cognitions are the primary motivators of behavior and emotions, and that changing cognitions provides the most effective treatment” (Gelso & Fretz, 2001, p. 351).

(3) Both Beck’s and Ellis’s approaches help clients “to become conscious of maladaptive cognitions, to recognize the disruptive impact of such cognitions, and to replace them with more appropriate and adaptive thought patterns” (Prochaska & Norcross, 1999, p. 340). In fact, Beck and Ellis “refer to a distorted process of thinking which leads to beliefs that are inconsistent with objective reality” (Free, 1999, p. 19).

(4) Both approaches are “rather eclectic in technique selection and empirical in theory revision, as is typical of cognitive-behaviorists in general” (Prochaska & Norcross, 1999, p. 340).

(5) Both Beck’s and Ellis’s approaches are “problem-oriented, directive, and psycho-educational” (Prochaska & Norcross, 1999, p. 340), and also “brief (typically 12-16

sessions), present-centered, and active approaches to counseling” (Gelso & Fretz, 2001, p. 354).

(6) Homework, in both therapies is seen as a central feature of treatment (Prochaska & Norcross, 1999).

(7) REBT is decidedly more philosophically comprehensive than CT. CT practitioners heavily analyze clients’ dysfunctional beliefs, and then encourage them to change these beliefs to more functional ones. REBT is usually more direct, confrontational, and didactic than CT (Ellis, 2004b).

(8) Beck’s therapy can be applied to depression and other maladaptive emotions, while Ellis’ approach is largely a theory of the origin of emotions, in particular the maladaptive emotions. It is not a theory specifically of depression, or other specific emotions (Free, 1999).

2.3.4 McMullin’s Cognitive Restructuring Therapy

According to (Free, 1999), McMullin has cited that “a single theory underlies all cognitive restructuring techniques that employ countering. This theory states that when a client argues against an irrational thought, and does so repeatedly, the irrational thought becomes progressively weaker” (p. 20).

Although as Free (1999) has mentioned, much of the theory underlying Cognitive Restructuring Therapy is derived from RET, but there are some important differences.

Cognitions such as ‘I must be perfect’, and ‘I am worthless’ are neither inherently nor invariably painful... the trauma elicited by irrational ideas is itself derived by means of direct or vicarious conditioning. This contention immediately provides a link with therapeutic approaches such as systematic desensitization that are derived from classical conditioning models of emotion. It implies that deconditioning of conditioned emotional reactions may be a necessary adjunct to cognitive therapy (Free, 1999, p. 20).

The researcher of the present study chose Rational Emotive Behavior Therapy (REBT) in order to reduce irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur. In REBT, the therapeutic process is to identify the irrational beliefs that cause emotional problems (Blum & Davis, 2010; Coon & Mitterer, 2009), to dispute them vigorously, and then to replace them with more rational beliefs (Blum & Davis, 2010). Also, REBT has been useful for children and adolescents with a variety of issues such as depression, test anxiety, parenting, hyperactivity, and assertion (Vernon, 2007).

2.4 Group Counseling

Group counseling is a therapeutic intervention which is widely used in a variety of settings (Corey, 2008). Group counseling provides a safe environment in which members can experiment with new behaviors, improve communication skills, and receive feedback from other members with similar concerns and interests. These interpersonal interactions can provide group members an opportunity to deepen their level of self-awareness, and how to relate to others. Group counseling is especially beneficial for adolescents, because it provides a positive atmosphere in which acceptance and support help them to learn new behaviors. Moreover, since adolescents are influenced by their peers, they will learn new behaviors which are modeled by peers (Cecen-Eragul & Zengel, 2009).

Group therapies have been effective in short-term psychiatric settings, long term psychiatric settings, counseling for special population, and with the chronically physically ill (Posthuma, 2002). According to Jacobs, Masson, and Harvill (2006), many people can get benefit more from group counseling rather than individual counseling. For instance, group counseling can be valuable for teenagers and those stuck in the grief process. Also,

abused women, adult children of alcoholics, and men who need to learn anger control can benefit from group counseling (Nugent, 2000).

Group counseling is inappropriate for those experiencing conflicts too private to share in a group; or those who have strong fears about social interactions. Also, group counseling is inadvisable for those who might constantly disrupt group interactions (Nugent, 2000). A competent group counselor is skilled in screening appropriate members for a group.

The size of a group depends on the age of the members, experience of the leader, type of group, and type of presenting problem (Posthuma, 2002). According to Nugent (2006), the recommended number of group members varies with the group's age range. Adolescent groups function best with 6-8 members.

According to Jacobs et al. (2006), there are several contemporary theories that have particular relevance for group work. They are as follows: Reality Therapy, Adlerian Therapy, Transactional Analysis, Gestalt Therapy, and Rational Emotive Behavior Therapy (REBT).

In group counseling, some issues such as ethical and professional considerations, leadership, and stages of the group are of immense importance. There are different ethical considerations with groups than with individuals. Some of them are screening of group members, allowing freedom to leave the group, confidentiality, and guarding against group members abusing each other (Nugent, 2000).

Group counseling requires skilled and competent leaders. There are several leadership skills which facilitate the process of group counseling. They are as follows: active listening; reflection; clarification and questioning; summarizing; linking; mini lecturing and information giving; encouraging and supporting; tone setting; modeling and

self-disclosure; use of eyes; use of voice; use of the leader's energy; identifying allies; and multicultural understanding (Jacobs et al., 2006).

Other than special skills, some attributes are considered important for group leaders. Posthuma (2002) has cited fourteen attributes which are thought to be representative of basic qualities displayed by effective group leaders. These are as follows: self-confidence; responsibility; attending and listening; objectivity; genuineness; empathy; warmth and caring; respect; flexibility; creativity and spontaneity; enthusiasm; humor; clinical reasoning; and therapeutic use of self.

2.4.0 Stages of Group Counseling

According to Jacobs et al. (2006), all groups go through three stages: the beginning stage, the middle stage and the ending stage. The beginning stage is the time for introduction and discussion of topics such as the purpose of the group, the process of group counseling, and group rules. In the middle stage which is the core of the group process, members interact in several ways. Eventually, in the ending stage members deal with sharing what they have learnt, and how they are going to use their learning in their everyday life. Terminating of the group happens in this stage.

2.4.1 Stages of Group REBT

One of the leading theories in the field of counseling which is widely used in group counseling is REBT. In group REBT, the leader teaches members to focus on changing their feelings by changing their beliefs. According to Jacobs et al. (2006), there are the following stages in group REBT:

- (1) Clarifying the event, person, or situation (A).
- (2) Clarifying the feelings and/or behavior (B).

- (3) Clarifying the negative self-talk (C).
- (4) Clarifying the feelings by changing the self-talk.

2.5 Relevant Studies on the Effectiveness of Group REBT; and Irrational Beliefs

2.5.0 Relevant Studies on the Effectiveness of Group REBT

Numerous studies have been done on the effectiveness of group REBT in helping people solve their psychological problems. For instance, Bistamam and Nasir (2009) conducted an experimental study on 10 female form two students who were selected to participate in the group counseling by purposive random sampling. Results of this study indicated that REBT group counseling was able to determine that the disturbance among the adolescents was due to their irrational belief system. Also, REBT group counseling was proven effective in changing irrational thinking to a more constructive thinking among the subjects and in moving them toward a more positive emotion and behavior. Finally, REBT group counseling was able to improve career and academic planning among the subjects.

In another study, Rieckert and Moller (2000) investigated the effectiveness of group REBT in treating adult victims of childhood sexual abuse. In this study, a sample of 42 women, seeking help for their psychological distress associated with childhood sexual abuse, was selected and randomly assigned to a treatment (n=28) and a delayed treatment control group (n=14). The treatment group participated in 10 weekly sessions of group REBT, followed up 8 weeks after termination of the treatment. Results of the study indicated significant reductions in depression, state anxiety, state anger, state guilt, and low self-esteem. Also, these improvements were maintained at follow-up.

Barekatian, Taghavi, Salehi, and Hasanzadeh (2006) in a study examined the efficacy of REBT versus Relaxation Group Therapy in treating aggression among offspring

of veterans with Post Traumatic Stress Disorder. In this study 36 male adolescents (aged 11-19 years) whose fathers had PTSD, were randomly assigned into three groups: REBT, Relaxation Therapy, and control group. Each method had a course of ten therapeutic group sessions of 60 minutes per week. Rates of aggression were assessed by the Aggression Questionnaire (AGQ) at baseline, end of intervention, and two months later. Results of the study revealed that the intervention groups were superior to control group in the reduction of aggressive behaviors.

Sharp (2003) in a study examined an anger management group training program based on REBT. Sixteen seventh and eighth graders from a rural East Tennessee middle school participated in this study. The participants were identified as having behavior problems in the school setting, characterized by the number of office referrals acquired in the previous school year. Results of this study suggest that training programs may be effective in teaching children the principles of REBT. Such knowledge may lead to an increase in the use of these principles for anger management, thus reducing aggressive behavior.

Another positive effect was found by Soodani (1995) who investigated the effects of individual and group counseling approaches with the emphasis on Rational Emotive approach on reducing irrational beliefs in 18-24 year old male single students studying in teaching fields of basic sciences at Shahid Chamran University.

A sample of 90 students was assigned in three individual counseling, group counseling, and control groups. In this study, individual counseling and group counseling have proven effective in reducing 10 irrational beliefs of students. Individual counseling was effective in reducing irrational beliefs of Self Expectation, Blaming, Reaction to Frustration, and Perfectionism. Also, group counseling was effective in reducing irrational beliefs of Approval from Others, Concerning about Future Problems, Avoiding Problems,

Relying on Others, and Helplessness about Changing. There was no difference between individual counseling and group counseling in reducing the irrational belief of Emotional Control.

Egbochuku et al. (2008) in a quasi experimental study examined the efficacy of REBT on reducing test anxiety among adolescents in secondary schools. A sample of 125 subjects were randomly selected for this study, out of which eighty (80) were test anxious and these went through the treatment program. In this study, REBT was found effective in reducing test anxiety.

In another study, Kumar (2009) examined the impact of REBT on adolescent students with conduct disorder. It was hypothesized that the REBT Psychotherapy would have a positive impact on adolescents' conduct disorder symptoms. The Youth Self Report (YSR) was distributed to 1142 students from schools and colleges. The sample included 200 students (100 girls and 100 boys), of whom 100 was taken as control group (50 girls and 50 boys), and other 100 was taken for experimental group (50 girls, and 50 boys).

The intervention program was given to the experimental group for 7 sessions, in seven weeks. There were 10 groups, with 10 subjects in each group. The intervention program consisted of Cognitive, Emotive, and Behavioral techniques of REBT. Subjects were taught the techniques of REBT and how to apply them to their problems. The results of this study showed that REBT has a positive impact on conduct disorder and other emotional and behavioral disorders co morbid with conduct disorder experienced by adolescents.

Other than group REBT, individual REBT has also been effective. For instance, Ghorbani (2008) investigated the effects of Individual Rational Emotive Counseling on reducing irrational beliefs of conflicting couples in the city of Ferdows with a sample of 20. Pre-test and post-test was conducted in this study. Statistical data indicated that Individual

Rational Emotive Counseling was effective in reducing the following irrational beliefs in the participants: Self Expectation, Reaction to Frustration, Concern about Future Problems, Avoiding Problems, Relying on Others, Helplessness about Changing, and Perfectionism.

2.5.1 Relevant Studies on Irrational Beliefs and Mental Problems

According to the World Health Organization (WHO), about 450 million people worldwide are affected by mental, neurological, or behavioral problems at any one time (Emami, et al., 2007). Due to age conditions in adolescents, many of them suffer from mental health problems. Some of these problems such as “depression, substance abuse, and suicide are among the three most common causes of death in adolescents” (Emami et al., 2007, p. 571).

On the other hand, the results of various studies, some of them cited in this chapter, provide evidence to suggest that there is a relationship between irrational beliefs and mental health problems. In other words, according to these studies, irrational beliefs are influential in the etiology of many unpleasant emotional experiences.

One of these studies, conducted by Flett et al. (2008), examined the association between dimensions of perfectionism and irrational beliefs in high school students. They tested the association between psychological distress and irrational beliefs in adolescents. Participants of the study were 250 students (108 males, and 142 females).

Results of the study confirmed the association between perfectionism and irrational beliefs and their respective roles in psychological distress among high school students. In addition, both perfectionism and irrational beliefs were found to be linked with depression. Therefore, depression which is a common mental illness may be caused by cognitive distortions.

A unique study by Marcotte (1996) explored the presence of different categories of irrational beliefs in relation to depressive symptoms in a sample of 11-18 year old adolescents. In this study, positive correlations were found between cognitive distortions and the presence of depressive symptoms. As irrational beliefs increased, reported depressive symptoms also increased. Results of this study support the hypothesis regarding the co-occurrence of depressive symptoms and irrational beliefs, and highlight the presence of a relationship between cognitive distortions and depression in adolescents.

Also, in another study, Harrington (2006) investigated the relationship between frustration intolerance beliefs and depression, anxiety and anger in a clinical population. The participants of the study were 254 individuals (105 men, and 149 women). Results of the study showed that frustration intolerance beliefs were significantly related to negative emotions. Emotional intolerance was a unique predictor of anxiety, discomfort intolerance of depressed mood and entitlement of anger. In fact, this study represents a preliminary attempt to map the relationship between specific irrational beliefs, and the emotional disorders. Also, results of a study conducted by David et al. (2002) showed strong association between irrational beliefs and dysfunctional negative emotions (e.g., anxiety).

Delucia-Waak and Gellman (2007), in their study examined the impact of addressing irrational beliefs within children of divorce groups and its impact on the reduction of self-reported depressive symptoms, as well as how irrational beliefs may serve a mediating variable in the treatment of depression.

The study examined the efficacy of children of divorce group using music in comparison to more traditional psycho-educational children of divorce group. Participants of the study were 134 elementary school children, 67 boys and 67 girls, from divorced and/or separated families. Results of this study suggest that irrational beliefs about divorce mediate the relationship between pre-and post-test depression scores.

Dilorenzo et al. (2007) in a study investigated the interrelations among irrational beliefs discussed in major cognitive theories in association with distress levels among students at the start of the semester, and before a midterm exam. A total of 99 students participated in this research. Results of the study showed that demandingness was significantly related to distress levels. Individuals, who were more demanding, experienced greater Time 1 and Time 2 distress. In other words, from a theoretical point of view, results of the study suggest the primacy of demandingness among irrational beliefs. Also, demandingness-awfulizing/catastrophizing, low frustration tolerance, and global evaluation/ self downing were directly related to distress levels at both times.

Martin and Dahlen (2004) explored potential interrelationships between irrational beliefs, and the experience and expression of anger. Participants were 161 (47 males, and 114 females) undergraduate volunteers from psychology and social rehabilitation service classes. When all participants had finished the questionnaires, they were exposed to the anger provoking vignette via audiotape, in order to determine whether irrational beliefs predicted state anger and hostile thoughts following provocation.

Findings of the study revealed that low frustration tolerance and awfulizing were related to trait anger, anger suppression, and outward anger expression. Only low frustration tolerance was related to state anger following provocation. Awfulizing as associated with all hostile thoughts and self-directed shoulds and self-worth were associated with derogatory thoughts about others. Only awfulizing had incremental validity over trait anger, and then, only in the prediction of derogatory thoughts.

Numerous studies have demonstrated the correlation between irrational beliefs and anxiety. For instance, Braunstein (2004) investigated the relationship between irrational beliefs and death anxiety as a function of human immunodeficiency virus (HIV) in homosexual and bisexual men. Recruited for this research were 101 HIV-seropositive, and

a contrast group (40 HIV-seronegative). Results of this study indicated that irrational beliefs significantly contribute to the existence of death anxiety as a function of HIV status. Also, irrational beliefs strongly predicted death anxiety for all participants.

Stebbins and Pakenham (2001) in their survey investigated the relationship between irrational schematic beliefs and psychological distress in caregivers of people with traumatic brain injury (TBI). According to this study, irrational schematic beliefs also known as irrational beliefs, irrational cognitions, dysfunctional attitude, and maladaptive schemas are essentially deeply held beliefs, values, and attitudes that promote unrealistic verbal reasoning processes by which external events are misinterpreted, and emotional distress (and subsequent dysfunctional automatic thoughts) is mediated. Participants of this study were 116 caregivers of persons with TBI living in the Australian states of Victoria and Queensland who were members of community support groups and brain injury associations. Results of this study showed that after controlling for effects of characteristics of the care giving situation and the individual with TBI, greater adherence to irrational beliefs was related to higher levels of global psychological distress.

Findings of this study highlight the need to target caregivers' irrational beliefs at the schema level in the therapy to reduce distress. In this regard, findings suggest Cognitive Therapy for caregivers, because psycho-educational strategies may assist caregivers to discern the difference between irrational and maladaptive worry; and rational and adaptive concern for their relative.

Davies (2006) in a study investigated the relation between irrational beliefs and unconditional self-acceptance. Complete data were obtained from 84 female and 18 male undergraduate students aged 18-40 who completed a number of questionnaires for course credit in mass-testing sessions.

According to the results of the study, unconditional self-acceptance was found to be significantly (negatively) correlated with Neuroticism. Also, irrational beliefs were found to correlate positively with Neuroticism, and negatively with openness. Thus, irrational thinking was associated with low unconditional self-acceptance, whereas rational thinking was associated with high unconditional self-acceptance. This is consistent with the basic tenets of REBT that irrational beliefs lead people to develop unhealthy emotions, dysfunctional behavior, and psychological disturbance; and that, by disputing their irrational beliefs, people can acquire more rational and realistic ways of thinking that result in greater acceptance of the self.

In a more recent research, Davies (2008) also conducted two other studies in order to investigate the relative importance of different types of irrational belief affecting unconditional self-acceptance. College students participated in these two studies, one correlation (N=158) and one experimental (N=128).

According to the results of these two studies, the Need for Achievement, the Need for Approval and Self-Downing were the most important irrational beliefs of the General Attitude and Belief Scale predicting unconditional self-acceptance. Also, the Need for Comfort, Demand for Fairness and Other-Downing subscales were found to be less influential. These two studies confirmed previous findings (Davies, 2006) that irrational beliefs are negatively related to unconditional self-acceptance, but showed that different types of irrational beliefs differ in their strength of relationship with unconditional self-acceptance.

Eventually, Lorcher (2003) in a study in the United States, hypothesized that higher scores on a measure of worry, would correlate with higher scores on a measure of irrational beliefs. Participants were 153 university students. Results of this study revealed that worry and irrational beliefs were positively, significantly correlated.

As it is obvious from the above studies, irrational beliefs which are those illogical and rigid views about events, may lead to psychological malfunctioning. Therefore, the cited studies provide support for REBT tenets that as a consequence of holding irrational beliefs, individuals develop unhealthy emotions, dysfunctional behaviors, and psychological disturbance.

2.5.2 Relevant Studies on Irrational Beliefs and Physical Problems

According to some studies that will be cited in this section, irrational beliefs not only are influential in the etiology of some mental illnesses, but also they can induce some physical diseases. Moreover, irrational beliefs are important elements in worsening one's physical problems.

Wong, Chau, Kwok, and Kwan (2007) have pointed out that the level of functional impairment is an outcome of a various cycle of illness-based stress, dysfunctional cognitive processes, ineffective coping, and poor emotional adjustment. To illustrate this relationship, a stroke survivor who engages in the cognitive distortion of absolutist thought, and believes that he or she is useless, may refuse to do any exercise and withdraw from participating in any rehabilitation programs. The lack of progress in rehabilitation may then hamper his or her self-esteem, and may lead to development of psychological problems such as depression.

Wong et al. (2007) have also cited that their clinical experience, as well as other studies had lent preliminary support to intertwining relationships among psychological ill-health, functional impairment, and rehabilitation. Whereas it is essential to help persons with chronic physical illness to develop self management skills, it is equally important to help them find ways of tackling their emotional disturbances by learning

strategies to modify their dysfunctional cognitive processes, and to develop adaptive coping strategies to deal with their emotional disturbances.

Empirical research has clearly demonstrated the negative consequences of irrational beliefs for human health. Harries et al. (2006) carried out an experimental research to study irrational beliefs from both the psychological and the physical point of view. In this study, a core REBT hypothesis was tested using multiple physiological as well as psychological measures. The main hypothesis was that in a real life stressful situation, holding an irrational belief would lead to increased blood pressure, while holding a rational belief would lead either to no change or even to a decrease in blood pressure. At the same time, holding an irrational belief would lead to increase in anxiety, while holding a rational belief would lead to an increase in concern.

Participants of the study were ninety patients from a medical practice. They were placed in a real-life stressful situation while holding either, a rational, an irrational, or an indifferent belief. Results of the study confirmed the main hypothesis. Patients holding irrational beliefs showed an increase in systolic blood pressure, whereas those holding rational beliefs showed a decrease in systolic blood pressure. At the same time, patients holding an irrational belief reported an increase in anxiety, while those holding a rational belief reported an increase in concern.

Papageorgiou et al. (2006) in a study examined the relationship of irrational beliefs and plasma inflammatory factors, markers of cardiovascular risk, in a general population sample of cardiovascular disease-free people. The central hypothesis of this investigation was that the number of irrational beliefs, which has been conceptualized by Ellis' model of psychopathology, as the underlying mechanism of depression would be associated with inflammatory factors.

Participants of the study were 453 men, and 400 women. Results of this study confirmed the hypothesis; they indicated that individuals who scored highly on irrational thinking, exhibited increased plasma levels of c-reactive protein, interleukin-6, tumor necrosis factor- α and white blood cell counts than do people who scored less highly on these measures of irrational thinking.

Lega and Ellis (2001) reviewed and discussed two multidisciplinary studies on the relationship between irrational beliefs, and medical conditions: one, using a patient population of women with menopause, and another one, using a population of patients with selected skin diseases. Both research projects were conducted in Colombia. Results of these two studies revealed that there is a relationship between the degree of “musts” and demandingness of patients, and the severity of their physical symptoms in medical conditions such as ‘Hot Flashes’ during menopause, or manifestations like rashes and itching of some skin diseases.

All the cited studies provide evidence to suggest that there is a relationship between irrational beliefs, and physical illnesses in human beings.

2.5.3 Relevant Studies on Irrational Beliefs and Relationship Problems

Irrational beliefs play an essential role in fostering relationship problems, because they may induce unrealistic relationship expectations. “Cognitive theory posits that the way in which people think, as well as the content of their thoughts exerts a profound influence on their adjustment within a relationship” (Stackert & Bursik, 2003, p. 1422).

According to Foran and Smith Slep (2007), one way that unrealistic relationship expectations may have a negative impact on relationships is blaming the partner when these expectations are inevitably not met. Furthermore, unrealistic expectations which

lead to anger and blaming of the partner may also lead to aggression. Irrational beliefs and rational beliefs have different effects on human beings' relationships. "Irrational thinking leads to self-defeating behavior, and thus, is seen to effect poorer adjustment, while more rational, functional thinking is seen to effect better adjustment" (Stackert & Bursik, 2003, p. 1422).

Previous studies on irrational beliefs have provided evidence that demonstrate the negative consequences of irrational beliefs in interpersonal relationships. Some studies have revealed the role of irrational beliefs in marital problems. For example, Addis and Bernard (2002) conducted a study to determine which aspect of Ellis' irrational beliefs as well as emotional traits (anxiety, curiosity, and anger) differentiate couples attending marriage counseling from couples not attending marriage counseling as well as levels of marital satisfaction in couples. Participants of the study were 61 married couples, 18 who were attending marriage counseling, and 43 who were not attending marriage counseling in Melbourne, Australia.

Results of this study supported Ellis' proposition espoused in rational emotive behavior theory, concerning the importance of individual partner's emotional traits, and accompanying irrational beliefs in marital adjustment and dissatisfaction. Also, the results of the study appear to have implications for the conduct of marriage and relationship counseling.

In another study, Moller, et al. (2001) investigated the association between the irrational evaluative beliefs, and marital conflict in distressed and non-distressed married individuals. Participants of the study were 37 married individuals (17 from distressed marriages and 20 from non-distressed marriages). According to the results of the study, the distressed group showed significantly more negative thoughts than the non-distressed group, while the latter group showed significantly more positive

thoughts than the distressed subgroup. The results of the study also showed that the non-distressed group displayed significantly more positive than negative thoughts for all the conflict scenes combined.

Eventually, Stackert and Bursik (2003) in a study with a sample of 118 male and female college students examined whether individual differences in adult attachment styles are associated with differential adherence to relationship-specific beliefs, and whether endorsement of irrational relationship beliefs is related to actual relationship dissatisfaction.

Results of the study showed that participants who described themselves as having either an anxious-ambivalent or an avoidant adult attachment style endorsed significantly more relationship-specific irrational beliefs, than those with a secure adult attachment style. Also, women demonstrated greater irrationality regarding beliefs that disagreement is destructive and that, partners cannot change. For men, greater irrationality was reported regarding sexual perfectionism in relationship.

The results also indicated significant negative correlation between dysfunctional relationship beliefs and relationship satisfaction for both genders. In addition, securely attached participants reported a higher level of relationship satisfaction than did either group of participants with an insecure attachment style.

As clearly shown in the cited studies, irrational beliefs play an essential role in relationship problems, because they may induce unrealistic relationship expectations. In general, due to the role of irrational beliefs in inducing different problems in human beings' life, the main purpose of this research was to study the effectiveness of group REBT in reducing irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur.

2.6 Summary

In this chapter, a review of the conceptual and empirical literature related to irrational beliefs, rational beliefs, Cognitive Behavior Therapy, and group counseling were discussed. Also, relevant studies on group REBT and irrational beliefs were introduced. The studies reviewed in this chapter provided support for the effectiveness of group REBT. Moreover, the cited studies revealed the relationship between irrational beliefs and mental, physical, and also relationship problems.

In the following chapter, the research methodology of the present study will be discussed.

CHAPTER III

METHODOLOGY

3.0 Overview

In this research, group REBT was used in reducing adolescents' irrational beliefs. The main purpose of this research was to study the effectiveness of group REBT in reducing irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur. The population of this research was all 12-14 and 18-20 year olds Iranian female adolescents who lived in Kuala Lumpur, Malaysia. Adolescents participated in group counseling, facilitated by the researcher.

This chapter is organized into nine sections: (1) research design; (2) dependent and independent variables; (3) population, sample, sampling, and setting; (4) instrumentation; (5) data collection procedure; (6) program for therapy groups; (7) statistical procedure; and (8) summary.

3.1 Research Design

This study used a quantitative approach. An experimental pre-test and post-test design was used in this research. The study had 4 groups: one 12-14 year old female adolescents group, one 18-20 year old female adolescents group; and 2 control groups. One control group for 12-14 year olds, and one control group for 18-20 year olds. The research design is showed in Table 3.1:

Table 3.1

Research Design

Group	Pre-test	Treatment	Post-test
CT	T1	12-14 year old female adolescents	T2
CT	T1	18-20 year old female adolescents	T2

3.1.0 Dependent and Independent Variables

The dependent variable of the research is Irrational Beliefs. The independent variable is group REBT.

3.2 Population, Sample, Sampling, and Setting

According to Creswell (2008, p. 151), “population is a group of individuals who have the same characteristics”. The population for this study consisted of all 12-14 and 18-20 year old Iranian female adolescents who lived in Malaysia. The target population of this study was all 12-14 and 18-20 year old Iranian female adolescents who lived in Kuala Lumpur. Random sampling and random assignment was used in this study.

The sample was a subgroup of the target population that the researcher planned to study, and should be representative of the entire population (Creswell, 2008). It consisted of 40 Iranian female adolescents aged 12-14 and 18-20. These age groups were selected randomly through the table of random numbers.

The population of this research was experiencing a special period in their lives which is called “adolescence”. Adolescents may develop irrational beliefs that may lead to specific problems. These problems may have negative effects on the individual’s life in the

future. Therefore, it is of great importance to pay attention to the psychological needs of this age group.

The rationale for choosing female adolescents was that according to Calvete and Cardenoso (2005), female adolescents have shown lower levels of positive thinking. As Fox et al. (2010) have cited, female adolescents are more at risk of some psychological problems such as depression and anxiety. On the other hand, due to the cultural limitation the researcher had to conduct the research only on female participants. Moreover, based on the researcher's experience, group counseling is an effective approach in working with the female Iranian adolescents. In Iranian culture, females are more social and emotional than males. This means that females are more enthusiastic to take part in groups. Group REBT provides an opportunity for female adolescents to meet their psychological needs.

Another issue is the significance of having a female counselor for a female Iranian adolescent group. Iranians have an Islamic culture. Based on the Islamic values, it is more beneficial to have a female counselor for a female Iranian adolescent group. Therefore, Iranians prefer to have a therapist or group leader from the same sex.

The therapy groups were held in an Iranian educational institution in Kuala Lumpur, Malaysia. This institution had some internal problems. Therefore, the researcher had to wait for a few months. Eventually, through the genuine help of its authorities, the researcher could enter the setting, and manage the process of the group therapy.

3.3 Instrumentation

The instrument of the study was the Jones' Irrational Beliefs Test (Jones, 1969). This test was translated to Persian, the formal language of Iranians. The translation was confirmed by the experts in psychology in Iran (Soodani, 1995). English in Iran is considered as a foreign language. The data were based on the Persian translation of the test.

3.3.0 Jones' Irrational Beliefs Test

According to Cash (1984), Jones' (1969) Irrational Beliefs Test (IBT) is one of the earliest and most popular instruments for assessing dysfunctional beliefs. This test is a 100 item, factor analyzed, self report inventory that assesses Ellis' (1962) 10 core irrational beliefs. The IBT contains 100 statements- 10 for each of the 10 irrational belief factors. Jones (1969) confirmed that, "this instrument was sufficiently reliable and valid as a measure of irrational beliefs for use in both research and specific clinical needs" (Jones, 1969, p. 67). According to Woods (1990), the subscales of the IBT are as follows:

(1) Approval from Others: you believe that you need to have the support and approval of everyone you know or care about. Questions 1-11-21-31-41-51-61-71-81-91 assess this irrational belief.

(2) Self Expectations: you believe that you must be successful, achieving, and thoroughly competent in every task you undertake, and you judge your worthiness as a person on the basis of your successful accomplishments. Questions 2-12-22-32-42-52-62-72-82-92 assess this irrational belief.

(3) Blaming: you believe that people including yourself, deserve to be blamed and punished for their mistakes or wrongdoing. Questions 3-13-23-33-43-53-63-73-83-93 assess this irrational belief.

(4) Reactions to Frustrations: you believe that it is pretty terrible, or even awful and catastrophic, when things are not the way they should be. Hence, you feel that it is appropriate to get upset when things go wrong or people behave in a way you do not want them to. Questions 4-14-24-34-44-54-64-74-84-94 assess this irrational belief.

(5) Emotional Control: you believe that you have little control over your unhappiness or other emotional disturbance. It is all caused by other people or events in this

world. If only “they” would change, “then” you would feel okay and everything would be all right. Questions 5-15-25-35-45-55-65-75-85-95 assess this irrational belief.

(6) Concern about Future Problems: you believe that if something bad or dangerous “might” happen, you must be terribly concerned about it and should worry and dwell upon the possibility of its occurring. Questions 6-16-26-36-46-56-66-76-86-96 assess this irrational belief.

(7) Avoiding Problems: you believe that it is much easier to avoid certain difficulties and responsibilities, and instead do things that are intrinsically enjoyable first. Questions 7-17-27-37-47-57-67-77-87-97 assess this irrational belief.

(8) Relying on Others: you believe that you must have someone stronger than yourself on whom to rely. Questions 8-18-28-38-48-58-68-78-88-98 assess this irrational belief.

(9) Helplessness about Changing: you believe that since you are a product of your past history, there is little you can do to overcome its effects. ‘This is the way I am and there is nothing I can do about it’. You believe, therefore, that you are helpless to change. Questions 9-19-29-39-49-59-69-79-89-99 assess this irrational belief.

(10) Perfectionism: you believe that every problem has a “right” or perfect solution, and further, that you cannot be happy or satisfied until you find that perfect solution. Failure to do so will be catastrophic. Questions 10-20-30-40-50-60-70-80-90-100 assess this irrational belief.

According to Jones (1969), each subscale addresses an area of irrational thought that has been discussed by Ellis and targeted for treatment. Items are designed to represent either a rational or irrational belief of a subscale. Items are ordered so that either a rational or irrational belief from each subscale is presented in the same order every tenth item.

The IBT is scored so that a higher score represents a greater number of irrational beliefs held, thus representing a higher level of irrational thought. Each subscale can be independently scored (Tittle, 1997). According to Jones (1969); and Gitlin and Tucker (1988), the instrument is scored in the direction of irrationality. On this 100-item self report inventory, subjects respond to each item on a five-point Likert scale ranging from “strongly disagree” to “strongly agree”.

In the Jones’ irrational beliefs test the following statements are positives (rational): 4, 5, 11, 14, 15, 16, 17, 20, 22, 25, 29, 30, 31, 32, 36, 37, 40, 41, 43, 44, 45, 48, 52, 54, 56, 57, 58, 60, 61, 63, 64, 65, 68, 70, 73, 74, 77, 80, 83, 85, 86, 87, 88, 91, 92, 93, 94, 95, 97, 98, and 100.

Also, the following statements are negative (irrational): 1, 2, 3, 6, 7, 8, 9, 10, 12, 13, 18, 19, 21, 23, 24, 26, 27, 28, 33, 34, 35, 38, 39, 42, 46, 47, 49, 50, 51, 53, 55, 59, 62, 66, 67, 69, 71, 72, 75, 76, 78, 79, 81, 82, 84, 89, 90, 96, and 99.

3.3.1. Scoring

The instrument is scored in the direction of irrationality. On this 100-item self report inventory, participants respond to each item on a five-point Likert scale, ranging from “strongly disagree” to “strongly agree”. The standard directions ask subjects to respond the way they actually feel about the items, not how they think they should feel (Jones, 1969).

Scoring is such that a low score indicates the more rational range on each scale, and a high score indicates the more irrational range. Therefore, responses which indicate acceptance of irrational statements or rejection of rational ones are given high scores, and responses which indicate rejection of irrational statements or acceptance of rational ones are given low scores. Thus, agreement with some statements will be scored high, while

agreement with others will be scored low. An example of a negative statement in the test is shown in Table 3.2.

Table 3.2

Example of a Negative Statement in the Jones' Irrational Beliefs Test

Statement number 1	Disagree Strongly	Disagree Moderately	Neither Agree Nor Disagree	Agree Moderately	Agree Strongly
It is important to me that others approve of me.	1	2	3	4	5

Also, an example of a positive statement in the Jones' Irrational Beliefs Test is shown in Table 3.3.

Table 3.3

Example of a Positive Statement in the Jones' Irrational Beliefs Test

Statement number 11	Disagree Strongly	Disagree Moderately	Neither Agree Nor Disagree	Agree Moderately	Agree Strongly
I like the respect of others, but I don't have to have it.	5	4	3	2	1

By using the scoring key, the score of each statement will be identified. Then, we sum up the score of all statements in each scale. The summed up score in each scale shows the total score of that scale, and total score of all scales shows total score of irrational beliefs. The maximum score in this test is 500 and the minimum score is 100 (Ziarati

Nasrabadi, 1998). Scores lower than the mean indicate having rational beliefs, and scores higher than the mean indicate having irrational beliefs.

3.3.2 Reliability

“Reliability means that scores from an instrument are stable and consistent” (Creswell, 2008, p. 169). The IBT has been repeatedly evaluated as a reliable and valid instrument (Tittle, 1997). Jones (1969) reported a one-day overall test-retest reliability of $r = .92$ and $r = .67$ to $.87$ for the various subscales, and internal reliability coefficients of $\alpha = .66$ to $.80$. Also, Trexler and Karst (1972) reported test-retest reliability of $.88$ for total scores.

The results of a study by Lohr and Bonge (1980) indicated that the IBT had considerable temporal consistency and suggest the relatively enduring status of irrational beliefs. In this study, Pearson product-moment correlations were computed for each subscale score and for total score; Demand for approval ($.80$), High Self Expectations ($.72$), Blame Proneness ($.74$), Emotional Irresponsibility ($.63$), Anxious Over Concern ($.72$), Problem Avoidance ($.80$), Dependency ($.58$), Helplessness ($.61$), Perfectionism ($.69$), and total score ($.79$). All correlations were significant ($p < .001$).

According to Gitlin and Tucker (1988), the inventory has shown a test-retest (two weeks) reliability of $.88$. Tittle (1997) reported that the reliability coefficient of the IBT was $.79$. Lohr and Bonge (1980) suggest that because of having retest reliability and factorial validity the measurement device appears to be useful in group research.

According to Ziarati Nasrabadi (1998), the reliability of the Jones' Irrational Beliefs Test was obtained in some studies in Iran. For example, results of a study by Taghipoor (1993) showed that the reliability of the IBT through Cronbach coefficient alpha was $.71$. In

another study, Soodani (1995), after translating the IBT to Persian language, reported a Cronbach coefficient alpha of .79.

3.3.3 Validity

“Validity means that the individual’s scores from an instrument make sense, are meaningful, and enable you, as the researcher, to draw good conclusions from the sample you are studying to the population” (Creswell, 2008, p. 169). Jones (1969) reported internal consistencies of .66 to .80 for the factor subscales (average $r = .74$). The IBT has been extensively evaluated and validated (Tittle, 1997).

Ray and Bak (1980) conducted a study on comparison and cross-validation of the IBT and the Rational Behavior Inventory. In this study, the IBT showed a cross-validation correlation of $-.72$ with the Rational Behavior Inventory.

Jones (1969) has reported acceptable internal validity for this scale. Moreover, according to Smith, KentHouston, and Zurawski (1984), the factorial validity of the scale has been confirmed independently with the exception of the absence of a frustration-reactivity factor. Also, the convergent validity of the scale has been demonstrated by high correlations with other measures of Ellis’ beliefs. Evaluations of the discriminant validity of the scale, however, have suggested that the total score from the IBT may be indistinguishable from measures of general trait anxiety. Other evidence of the validity of the scale includes studies indicating that specific belief scores and total scores demonstrate predicted correlations with measures of emotional distress.

The validity of the IBT has been reported in Iran (Ziarati Nasrabadi, 1998). For example, Soodani (1995) in a study found content validity of this test.

3.4 Data Collection Procedure

At first, permission to conduct the study was obtained from the management of the educational setting in which the study was conducted. After obtaining permission through formal letters (Appendices A, B and C), participants (Iranian female adolescents aged 12-14 and 18-20) were solicited through advertisement. In order to increase generalizability and prevent the threat of interaction of selection and treatment, which is a threat to the external validity, the researcher made participation in the experiment as convenient as possible for all individuals in the population.

The Jones' Irrational Beliefs Test-Persian translation (Appendices D and E) was given to 400 Iranian female adolescents. Two hundred were 12-14 year olds, and two hundred were 18-20 year olds. After scoring 40 adolescents with higher scores (more than the mean of 250) were considered eligible to participate. In the Jones' Irrational Beliefs Test, having higher scores means having more irrational beliefs. Those adolescents who had lower scores were not chosen, because having lower scores means having more rational beliefs. Therefore, they were not suitable for the treatment. In order to prevent the threat of "regression", the researcher selected individuals for the groups based on scores higher than mean, not the extreme scores, and also, used random assignment.

Participants were matched based on their scores, academic performance, familiarity to psychological treatment, age, religion (all were Moslems), and gender (all were females). None of them used psychiatric medicines, and none of them had specific psychological or physical illness. In order to prevent the threat of "selection", the participants were randomly assigned in groups. Ten of the participants were assigned randomly to the 12-14 year olds group, and 10 of them to the 18-20 year olds group. Also, 10 of them were assigned randomly to the control group for 12-14 year olds, and 10 of them were assigned randomly to the control group for 18-20 year olds.

The goal of random assignment “is to ensure that all individuals have the same chance of being assigned to a group” (Gravetter & Forzano, 2009, p. 227). Regarding the number of participants in each group, according to Nugent (2006), the recommended number of group members varies with the group’s age range. Adolescent groups function best with 6-8 members. Moreover, Ellis, Dryden, and Diguseppe (2007) have cited that REBT is usually employed in small group processes with from 8 to 10 clients. On the other hand, Gravetter and Forzano (2009, p. 133) have cited, “there is no simple solution to determining how many individuals should be in a sample. One helpful guide is to review published reports of similar research studies to see how many participants they used.”

Taraghi Jah (2007), in a similar study used 24 participants and assigned them to three groups, two experimental and one control. The researcher used *t*-test for data analysis. Also, Fallah Zadeh (2003) in another similar study used 4 groups (three experimental and one control). She assigned 15 participants to each group. The data were analyzed through the following statistical approaches: Correlation Coefficient, Regression Analysis, and One Way ANOVA. In general, according to Sharp (2003), the nature of group intervention requires small groups.

Participants and their parents were given a brief overview of the general focus of the research. Then, both participants and their parents were asked to read and sign the informed consent forms prior to the treatment (Appendices F, G, H, and I).

Due to the withdrawal of 2 participants in the 12-14 years old experimental group, the four groups were made even. Therefore, the number of participants was reduced randomly to 32 after the end of the treatment. The reason for the withdrawal of the participants was that, the first participant had to leave Malaysia urgently, and the second one was unable to continue the sessions because of some personal problems.

After participants were assigned to the groups, the treatment was conducted to the experimental groups, with no treatment for the control groups. “The term **experimental group** refers to the treatment condition in an experiment. The term **control group** refers to the no-treatment condition in an experiment” (Gravetter & Forzano, 2009, p. 208). The treatment groups had group counseling sessions as is shown in Table 3.4.

Table 3.4
Group Counseling Sessions

Groups	Number of Sessions	Time
12-14 year old group	10 sessions	90 minutes
18-20 year old group	10 sessions	90 minutes

These sessions were held for 5 consecutive weeks, with two sessions a week. Based on the limitation of the time in the setting as well as participants’ limitations, the sessions were arranged to be held at 12.30 pm till 2.00 pm. Tuesdays and Thursdays for the 18-20 year old group; and Wednesdays and Fridays for the 12-14 year old group.

The rationale for having 10 sessions for therapy groups was that, according to Jones (1969), there are 10 categories of irrational beliefs in the Jones’ Irrational Beliefs Test. Therefore, each session was scheduled about one of the irrational beliefs. Also, the rationale for conducting 20 therapy sessions within 5 weeks was the limitation of the educational setting in which the experiment took place. Because of the participants’ examination schedule in this setting, it was impossible to provide more time.

Detailed note-taking for each of the group sessions was done by the facilitator immediately after the group session ended. She also made records of her observation, feedback, and reflection of the group members during the group process. The facilitator recorded her feelings, thoughts, and reflection of the group members as an outer witness of the group and the inner witness of herself throughout the group process. The information gathered was examined in order to look for similar emerging themes, and the effectiveness of group REBT in reducing irrational beliefs of the Iranian female adolescents living in Kuala Lumpur.

The researcher carried out interview and observation to obtain information on the in-group interactions. The aim of interview and observation was to provide depth and richness of the data. It was considered that the quantitative and qualitative data obtained through the use of these different measures would supplement and complement one another in providing a better understanding of the findings of this study. Purposive sampling procedure was used to select the participants and their parents for the interview. Only those who were willing to be interviewed took part in the interview. The interviews were conducted by the researcher (facilitator). She interviewed individuals for about 30 minutes in a room provided in the research setting.

Participants were informed of the purpose of the interview and were assured that their responses would be kept confidential. Moreover, they were encouraged to respond to the interview questions sincerely and honestly. Also, they were assured that there was no right or wrong answer. The interview questions were open-ended, so that the participants were able to create the options for responding.

The researcher used one-on-one interview which is a popular approach in educational research. She interviewed 1 selected participant from each experimental group and their parents in a preliminary session of the group. Also, after group counseling she had

another interview with them. The questions of both interviews are presented in Appendices M and N. The interview transcript is presented in Appendix O.

The rationale for using group therapy in this research was that, group therapy is beneficial, especially for adolescents (Cecen-Eragul & Zengel, 2009; Terjesen & Esposito, 2006). It provides a positive atmosphere in which acceptance and support help them to learn new behaviors. Moreover, since adolescents are influenced by their peers, they will learn new behaviors which are modeled by peers (Cecen-Eragul & Zengel, 2009). As Glass (2010, p. 13) has cited, “group counseling can be a valuable adjunct in the educational process”.

The rationale for using REBT in this study was that according to Terjesen and Esposito (2006), REBT has been beneficial for working with children and adolescents’ irrational beliefs. Also, Banks and Zionts (2009) in a review of the literature identified related research and described how the application of REBT has been implemented with children and adolescents. They concluded that REBT has been effective in educational settings. Also, with developmentally appropriate modifications, it can be effective in disputing the irrational beliefs with children and adolescents in classrooms.

Due to ethical consideration, the facilitator was supervised by Dr. Diana Lea-Baranovich, a senior lecturer and Board Certified Counselor, from the Department of Educational Psychology and Counseling, Faculty of Education, University of Malaya. Weekly meetings were held with the supervisor to discuss the process of the group counseling and to be advised by the supervisor on activities in the group process.

3.5 Program for Therapy Groups

Based on Dryden (2006) and Free (1999), the program for the therapy groups was conducted. This program consisted of 10 sessions. In this group therapy the following activities were done: (1) review of homework from previous session; (2) lecture; (3) exercise; (4) homework for next session. In each session members of the group had some time to ask their questions.

In each session, one of the ten irrational beliefs was explained. Due to the importance of role playing, and based on her previous experience as a role player in theater, the facilitator (the researcher) used this technique in some occasions. This was quite interesting for the members. The facilitator role played, and also asked the members to do role playing in the group themselves. A detailed report from each session will be introduced in Appendix J.

After the treatment ended, the post-test was conducted immediately on the experimental groups. Also, after the end of the experiment, the post-test was conducted on the control groups. Moreover, the same treatment was offered to the control groups (10 sessions, each session 90 minutes). This prevented the threat of “compensatory equalization” to the study, and the threat of “resentful demoralization”. Also, in order to prevent the threat of “compensatory rivalry”, the researcher tried to reduce the awareness and expectations of the presumed benefits of the experimental treatment. A brief explanation of threats to internal and external validity is provided in Appendix P.

3.6 Statistical Procedure

The data were analyzed, using *the Statistical Package for the Social Sciences* (SPSS). Inferential statistics were used in this study: (1) Gain Score Analysis (GSA); (2) Independent *t*-test; and (3) Paired *t*-test. The Gain Score Analysis (GSA) was used to

compare pre-tests and post-tests. Independent *t*-test was used to compare the two sample means when the two samples are independent of one another. Paired *t*-test was used to compare the means of two variables for a single group. Moreover, descriptive statistics such as mean and tables were used to describe the basic features of the data.

3.7 Summary

The main objective of this research was to study the effectiveness of group REBT in reducing irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur. This research used a quantitative approach. The target population for this study consisted of all 12-14 and 18-20 year old Iranian female adolescents who lived in Kuala Lumpur. The sample of the study was a number of forty Iranian female adolescents, aged 12-14 and 18-20. The instrument of the research was the Persian translation of Jones' Irrational Beliefs Test (Jones, 1969). Inferential and descriptive statistics were used in this study. The results of this investigation will be presented in the following chapter.

CHAPTER IV

FINDINGS

4.0 Overview

The data for this research were obtained through the administration of the research instrument on the participants involved in the study. The data were analyzed, using *the Statistical Package for the Social Sciences* (SPSS). The present chapter is devoted to the analysis of the data gathered for this research, and is organized into the following sections: The first section of this chapter is participants' profile which describes the sample in terms of its demographics. The second section presents data analyses. The third section is the summary.

4.1 Participants' Profile

A total of 40 adolescents with higher than mean scores in the Irrational Beliefs Test, were considered eligible to participate in this study. Due to the withdrawal of two participants in the 12-14 year old experimental group, the four groups were made even. Therefore, the number of participants was reduced to 32. The participants were matched based on their pre-test scores, academic performance, familiarity to psychological treatment, age, religion (all were Moslems), and gender (all were females). Also, none of them had used psychiatric medicines and none had specific psychological or physical illnesses. Distribution of participants in the experimental and the control groups is shown in Table 4.1.

Table 4.1

Distribution of Participants in the Experimental and the Control Groups

Age	Groups	Frequency	Percentage (%)
12-14	1	8	25
	Experimental		
	2	8	25
	Control		
18-20	3	8	25
	Experimental		
	4	8	25
	Control		
Total		32	100

Descriptive statistics of the pre-tests and the post-tests of the control and the experimental groups are shown in Table 4.2.

Table 4.2

Descriptive Statistics of the Pre-tests and the Post-tests of the Control and the Experimental Groups

Groups	Pre-test			Post-test		
	M	Md	Mo	M	Md	Mo
Exp. 12-14	382.75	384.00	388.00	193.88	192.50	161.00
Exp. 18-20	364.62	362.50	356.00	203.38	205.50	207.00
Cont.12-14	374.75	375.50	362.00	372.50	369.50	369.00
Cont.18-20	373.70	371.00	354.00	383.50	384.00	384.00

4.2 Data Analyses

After collecting the data, at first data preparation was done through entering the data into a computer and checking for accuracy. There were no out-of-range scores and missing data. This study used descriptive and inferential statistics for data analysis. Descriptive statistical analysis was done to check the central tendency, variability, and relative standing. The present section reports results of the data analyzed using the following statistical measures: (1) Gain Score Analysis (GSA); (2) Independent *t*-test; and (3) Paired *t*-test.

The Gain Score Analysis (GSA) was used to compare pre-tests and post-tests. Since the data were interval, *t*-test which is a parametric test, was used to analyze the data. Independent *t*-test was used to compare the two sample means, when the two samples are independent of one another. Paired *t*-test was used to compare the means of two variables for a single group. The alpha level for testing the research hypotheses was set at .05.

Some studies with small samples have used *t*-test for analyzing data. For example, Flanagan, Allen, and Henry (2010) used a sample of 24 regular education children; Ouellet and Morin (2007) used a sample of 11 people who had sustained mild to severe TBI; Onasanya, Daramola, and Asuquo (2006) used a sample of 42 students; and Spoomaker, Bout, and Meijer (2003) used a sample of eight participants who received a one hour individual session.

In this section, based on the hypotheses, results of the data analyses will be presented. It will be stated whether each of the hypotheses tested will or will not be accepted. In analyzing the data for the hypotheses 1 and 4, the aim was to compare the subscales. Therefore, the analysis of the summed scores of all the 100 items in the test was not included in analyzing data for these two hypotheses. This was included in analyzing the data for hypotheses 2, 3, and 5, because the aim was to compare the summed scores.

Hypothesis 1:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational beliefs.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational beliefs.

Sub-hypothesis 1a:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Approval from Others.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Approval from Others.

Sub-hypothesis 1b:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Self Expectation.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Self Expectation.

Sub-hypothesis 1c:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Blaming.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Blaming.

Sub-hypothesis 1d:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Reaction to Frustration.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Reaction to Frustration.

Sub-hypothesis 1e:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Emotional Control.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Emotional Control.

Sub-hypothesis 1f:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Concern about Future Problems.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Concern about Future Problems.

Sub-hypothesis 1g:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Avoiding Problems.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Avoiding Problems.

Sub-hypothesis 1h:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Relying on Others.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Relying on Others.

Sub-hypothesis 1i:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Helplessness about Changing.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Helplessness about Changing.

Sub-hypothesis 1j:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Perfectionism.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Perfectionism.

At first, the equivalence of the control and experimental groups for each of the 10 subscales was established using *t*-test. The pre-test scores of the control and experimental group for the 10 subscales were not significantly different. As shown in Table 4.3, Levene's test was used to assess the equality of variances in the two groups. In all subscales, the *t*-test indicated that there was no significant difference between the pre-test of the experimental and the control group of 12-14 year old adolescents ($p > 0.05$). Therefore, the equivalence of the control and the experimental groups prior to the treatment was established.

Table 4.3
Independent t-test Between Pre-tests of the Experimental and the Control Groups of 12-14 Year Old Adolescents

		Levene's Test for Equality of Variances		<i>t</i> -test for Equality of Means						
		<i>F</i>	Sig.	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
AO	Equal variances assumed	1.74	0.21	0.48	14	0.64*	0.62	1.30	-2.17	3.42
	Equal variances not assumed			0.48	12.8	0.64	0.63	1.30	-2.19	3.44
SE	Equal variances assumed	0.28	0.6	0.95	14	0.36*	1.63	1.7	-2.03	5.28
	Equal variances not assumed			0.94	13.9	0.56	1.63	1.7	-2.03	5.28
B	Equal variances assumed	1.23	0.29	0.28	14	0.73*	0.37	1.34	-2.50	3.25
	Equal variances not assumed			0.20	11.16	0.78	0.37	1.34	-2.57	3.32
RF	Equal variances assumed	3.32	0.09	0.0	14	1.00*	0.0	1.51	-3.24	3.24
	Equal variances not assumed			0.0	10.07	1.00	0.0	1.51	-3.36	3.36
EC	Equal variances assumed	0.25	0.63	1.77	14	0.09*	1.62	0.92	-0.35	3.59
	Equal variances not assumed			1.77	13.92	0.09	1.62	0.92	-0.35	3.59
CFP	Equal variances assumed	0.18	0.67	0.48	14	0.64*	0.63	1.30	-2.17	3.42
	Equal variances not assumed			0.48	13.9	0.64	0.63	1.30	-2.17	3.43
AP	Equal variances assumed	8.06	0.01	0.63	14	0.54	0.75	1.20	-1.83	3.33
	Equal variances not assumed			0.63	10.23	0.55*	0.75	1.20	-1.92	3.42
RO	Equal variances assumed	6.98	0.02	-0.80	14	0.44	-1.25	1.56	-4.60	2.10
	Equal variances not assumed			-0.80	12.29	0.44*	-1.26	1.56	-4.65	2.15
HC	Equal variances assumed	1.19	0.29	1.52	14	0.15*	1.75	1.15	-0.73	4.23
	Equal variances not assumed			1.52	12.97	0.15	1.75	1.15	-0.75	4.25
P	Equal variances assumed	4.354	.056	.977	14	.34*	1.87	1.92	-2.24	5.99
	Equal variances not assumed			.977	9.103	.354	1.87	1.92	-2.46	6.21

As shown in Table 4.4, the mean and standard deviation of all subscales for the experimental and the control groups are presented. In all subscales, the mean of the control group is higher than that of the experimental group. Therefore, it is inferred that all irrational beliefs have been reduced in the experimental group of 12-14 year old adolescents.

Also, as shown in Table 4.4, the treatment has significantly reduced all subscales of the irrational beliefs in the experimental group of 12-14 year old adolescents: Approval from Others (Mean: -24.62; SD: 4.27), Self Expectation (Mean: -23.37; SD: 4.53), Emotional Control (Mean: -19.75; SD: 5.92), Reaction to Frustration (Mean: -19.50; SD: 4.72), Helplessness about Changing (Mean: -18.37; SD: 6.30), Avoiding Problems (Mean: -17.50; SD: 2.50), Concern about Future Problems (Mean: -17.50; SD: 4.89), Relying on Others (Mean: -17.00; SD: 3.20), Blaming (Mean: -16.37; SD: 5.01), and Perfectionism (Mean: -14.87; SD: 7.39). Negative values in the table indicate the “reduction” of irrational beliefs in the groups. Each of the irrational beliefs cited above, was the focus of the treatment sessions in this study.

Table 4.4

Means and Standard Deviations of Irrational Beliefs Subscales in the Experimental and the Control Groups of 12-14 Year Old Adolescents

	Group	N	Mean	Std. Deviation	Std. Error Mean
GainAO	Experimental	8	-24.62	4.27	1.51
	Control	8	-0.87	2.47	0.87
GainSE	Experimental	8	-23.37	4.53	1.60
	Control	8	-0.37	2.56	0.90
GainB	Experimental	8	-16.37	5.01	1.77
	Control	8	-0.50	3.02	1.06
GainRF	Experimental	8	-19.50	4.72	1.67
	Control	8	0.00	2.97	1.05
GainEC	Experimental	8	-19.75	5.92	2.09
	Control	8	-0.12	3.87	1.36
GainCFP	Experimental	8	-17.50	4.89	1.73
	Control	8	0.12	1.73	0.61
GainAP	Experimental	8	-17.50	2.50	0.88
	Control	8	0.12	2.35	0.83
GainRO	Experimental	8	-17.00	3.20	1.13
	Control	8	0.25	3.24	1.14
GainHC	Experimental	8	-18.37	6.30	2.22
	Control	8	-1.00	2.77	0.98
GainP	Experimental	8	-14.87	7.39	2.61
	Control	8	0.12	2.64	0.93

AO = Approval from others
 SE = Self expectation
 B = Blaming
 RF = Reaction to frustration
 EC = Emotional control
 CFP = Concern about future problems
 AP = Avoiding problems
 RO = Relying on others
 HC = Helplessness about changing
 P = Perfectionism

As shown in Table 4.5, Levene's test was used to assess the equality of variances in different samples. In all cases, *t*-test indicated that there were significant differences between the pre-tests and the post-tests of the control group and the experimental group. As shown in Table 4.5, in all subscales, the *t*-tests was significant. This indicated that there were significant differences between the control groups and the experimental groups of 12-14 year old adolescents in reducing irrational beliefs.

Table 4.5

Independent t-test Between Pre-test and Post-test of the Experimental and the Control Group of 12-14 Year Old Adolescents

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		<i>F</i>	Sig.	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
GainAO	Equal variances assumed	2.02	0.17	-13.60	14	.00*	-23.75	1.75	-27.49	-20.01
	Equal variances not assumed			-13.60	11.22	.00	-23.75	1.75	-27.58	-19.92
GainSE	Equal variances assumed	5.12	.040	-12.49	14	.00*	-23.00	1.85	-26.95	-19.05
	Equal variances not assumed			-12.49	11.05	.00*	-23.00	1.85	-27.05	-18.95
GainB	Equal variances assumed	3.81	.071	-7.67	14	.00*	-15.87	2.07	-20.31	-11.42
	Equal variances not assumed			-7.67	11.5	.00	-15.87	2.07	-20.41	-11.34
GainRF	Equal variances assumed	1.46	.247	-9.88	14	.00*	-19.50	1.97	-23.73	-15.27
	Equal variances not assumed			-9.88	11.8	.00	-19.50	1.97	-23.80	-15.19
GainEC	Equal variances assumed	1.86	.194	-7.85	14	.00*	-19.62	2.50	-24.98	-14.26
	Equal variances not assumed			-7.85	12.1	.00	-19.62	2.50	-25.07	-14.18

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Gain CFP	Equal variances assumed	9.22	.009	-9.60	14	.00	-17.62	1.84	-21.56	-13.69
	Equal variances not assumed			-9.60	8.71	.00	-17.62	1.84	-21.80	-13.45
Gain AP	Equal variances assumed	.10	.752	-14.49	14	.00	-17.62	1.22	-20.23	-15.01
	Equal variances not assumed			-14.49	13.94	.00	-17.62	1.22	-20.23	-15.01
Gain RO	Equal variances assumed	.17	.687	-10.70	14	.00	-17.25	1.61	-20.71	-13.79
	Equal variances not assumed			-10.70	13.99	.00	-17.25	1.61	-20.71	-13.79
Gain HC	Equal variances assumed	5.79	.030	-7.14	14	.00	-17.37	2.43	-22.59	-12.15
	Equal variances not assumed			-7.14	9.62	.00	-17.37	2.43	-22.82	-11.92
Gain P	Equal variances assumed	3.55	.080	-5.40	14	.00	-15.00	2.78	-20.95	-9.04
	Equal variances not assumed			-5.40	8.76	.00	-15.00	2.78	-21.30	-8.69

*Significant at $\alpha = .05$

AO = Approval from others
SE = Self expectation
B = Blaming
RF = Reaction to frustration
EC = Emotional control

CFP = Concern about future problems
AP = Avoiding problems
RO = Relying on others
HC = Helplessness about changing
P = Perfectionism

Based on the analyses, the first null hypothesis, and all its null sub-hypotheses are rejected, and the alternative hypothesis and the alternative sub-hypotheses are accepted. This means that group REBT has been effective in reducing all of the irrational beliefs in 12-14 year old experimental group.

Hypothesis 2:

Ho: There is no significant difference in the level of irrational beliefs in the 12-14 year old group before and after treatment using group REBT.

Ha: There is a significant difference in the level of irrational beliefs in the 12-14 year old group before and after treatment using group REBT.

At first, the equivalence of the control and the experimental groups prior to the treatment was established using *t*-test. The pre-test scores of the control and the experimental group were not significantly different (1.77 (14), $p > 0.05$).

Paired *t*-test was used to test hypothesis 2. As shown in Table 4.6, the pre-test mean of 382.75 (SD= 8.03) is significantly higher than the post-test mean of 193.88 (SD= 24.29). Therefore, it is inferred that the irrational beliefs have been reduced in the experimental group of 12-14 year old adolescents. This means that the treatment (REBT) has been effective in reducing the irrational beliefs in the experimental group of 12-14 year old adolescents.

Table 4.6

Means and Standard Deviation of Pre-test and Post-test Sum Scores in the 12-14 Year Old Experimental Group

	Mean	N	Std. Deviation	Std. Error Mean
post_SUM	193.88	8	24.29	8.59
pre_SUM	382.75	8	8.03	2.84

As shown in Table 4.7, in all cases, the *t*-test indicated that there was a significant difference between the pre-test and the post-test of the control group and the experimental group with $t(7) = -20.77$, $p = .00$. It can be inferred that the irrational beliefs have been reduced in the experimental group of 12-14 year old adolescents. Therefore, the treatment (REBT) has been effective in the reduction of irrational beliefs in the experimental group of 12-14 year old adolescents.

Table 4.7

Paired t-test Between Sum Scores of Pre-tests and Post-tests in the Experimental Group Of 12-14 Year Old Adolescents

	Paired Differences					<i>t</i>	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
post_SUM - pre_SUM	-188.87	25.71	9.09	-210.37	-167.37	-20.77	7	0.00*

Based on the analyses, the second null hypothesis is rejected and its alternative hypothesis is accepted. This means that group REBT has been effective in reducing the irrational beliefs in the experimental group of 12-14 year old adolescents.

Hypothesis 3:

Ho: There is no significant difference in the level of irrational beliefs in the 18-20 year old group before and after treatment using group REBT.

Ha: There is a significant difference in the level of irrational beliefs in the 18-20 year old group before and after treatment using group REBT.

At first, the equivalence of the control and the experimental groups was established using *t-test*. The pre-test scores of the control and experimental groups were not significantly different (1.77 (14), $p > .05$).

As shown in Table 4.8, the mean in the pre-test is 364.62 (SD: 9.288) which is higher than the post-test 203.38 (SD: 14.696). Therefore, it is inferred that the treatment (group REBT) has been effective in reducing irrational beliefs in the experimental group of 18-20 year old adolescents.

Table 4.8
Means and Standard Deviation of Sum Scores of Pre-tests and Post-tests in the Experimental Group of 18-20 Year Old Adolescents

	Mean	N	Std. Deviation	Std. Error Mean
post_SUM	203.38	8	14.696	5.196
pre_SUM	364.62	8	9.288	3.284

As shown in Table 4.9, Levene's test which is an inferential statistic was used to assess the equality of variances in different samples. In all cases, *t*-test indicated the significant difference between the pre-test and the post-test of the control group and the experimental group with $t(7) = -30.87, p = .00$. As shown in Table 4.9, *t*-test is significant. This means that REBT has reduced the irrational beliefs in the 18-20 year old adolescents.

Table 4.9

Paired t- test Between Sum Scores of Pre-tests and Post-tests in the 18-20 Year Old Experimental Group

	Paired Differences						<i>t</i>	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
post_SUM - pre_SUM	-161.25	14.77	5.22	-173.60	-148.90	-30.87	7	.00*	

Significant at $\alpha = .05$

Based on the analyses, the third null hypothesis is rejected, and its alternative hypothesis is accepted. This means that group REBT has been effective in reducing irrational beliefs in the experimental group of 18-20 year old adolescents.

Hypothesis 4:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational beliefs.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational beliefs.

Sub-hypothesis 4a:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Approval from Others.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Approval from Others.

Sub-hypothesis 4b:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Self Expectation.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Self Expectation.

Sub-hypothesis 4c:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Blaming.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Blaming.

Sub-hypothesis 4d:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Reaction to Frustration.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Reaction to Frustration.

Sub-hypothesis 4e:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Emotional Control.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Emotional Control.

Sub-hypothesis 4f:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Concern about Future Problems.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Concern about Future Problems.

Sub-hypothesis 4g:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Avoiding Problems.

Ha: There is a significant difference between the control group and the experimental group

of 18-20 year old adolescents in reducing the irrational belief of Avoiding Problems.

Sub-hypothesis 4h:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Relying on Others.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Relying on Others.

Sub-hypothesis 4i:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Helplessness about Changing.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Helplessness about Changing.

Sub-hypothesis 4j:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Perfectionism.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Perfectionism.

At first, the equivalence of the control and the experimental groups for each of the 10 subscales was established using *t*-test. The pre-test scores of the control and the experimental groups for the 10 subscales were not significantly different.

As shown in Table 4.10, Levenes' test was used to assess the equality of variances in the two groups. In all cases, the *t*-test indicated that there was no significant difference between the pre-test of the experimental and the control group of 18-20 year old adolescents ($p > 0.05$).

Table 4.10

Independent t-test Between Pre-test of the Experimental and the Control Group of 18-20 Year Old Adolescents

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		<i>F</i>	Sig.	<i>t</i>	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
AO	Equal variances assumed	3.42	0.09	0.36	14	0.73*	0.38	0.99	-1.77	2.52
	Equal variances not assumed			0.37	11.80	0.71	0.38	0.99	-1.81	2.55
SE	Equal variances assumed	0.28	0.60	-1.54	14	0.15*	-1.87	1.22	-4.48	0.73
	Equal variances not assumed			-1.54	13.0	0.15	-1.87	1.22	-4.50	0.75
B	Equal variances assumed	0.33	0.58	-0.35	14	0.73*	-0.37	1.07	-2.67	1.92
	Equal variances not assumed			-0.35	13.70	0.73	-0.37	1.07	-2.68	1.93
RF	Equal variances assumed	0.17	0.68	-1.67	14	0.12*	-2.50	1.49	-5.70	0.70
	Equal variances not assumed			-1.67	13.42	0.12	-2.50	1.49	-5.72	0.72
EC	Equal variances assumed	0.33	0.57	-0.12	14	0.91*	-0.12	1.04	-2.35	2.10
	Equal variances not assumed			-0.12	13.58	0.91	-0.12	1.04	-2.36	2.11
CFP	Equal variances assumed	0.09	0.77	0.10	14	0.92*	0.12	1.26	-2.57	2.82
	Equal variances not assumed			0.10	13.84	0.92	0.12	1.26	-2.57	2.82
AP	Equal variances assumed	1.00	0.33	-1.51	14	0.15*	-1.75	1.156	-4.23	0.73
	Equal variances not assumed			-1.51	9.32	0.16	-1.75	1.156	-4.35	0.85
RO	Equal variances assumed	3.84	0.07	-1.88	14	0.08*	-1.75	0.94	-3.75	0.25
	Equal variances not assumed			-1.88	11.08	0.09	-1.75	0.94	-3.80	0.30
HC	Equal variances assumed	0.96	0.34	-0.74	14	0.47*	-1.12	1.52	-4.38	2.13
	Equal variances not assumed			-0.74	13.08	0.47	-1.12	1.52	-4.41	2.16
P	Equal variances assumed	3.15	0.09	-1.85	14	0.09*	-2.75	1.49	-5.94	0.44
	Equal variances not assumed			-1.85	12.90	0.09	-2.75	1.49	-5.96	0.46

*Not significant at $\alpha = .05$

AO = Approval from others
SE = Self expectation

B = Blaming
RF = Reaction to frustration
EC = Emotional control
CFP = Concern about future problems
AP = Avoiding problems
RO = Relying on others
HC = Helplessness about changing
P = Perfectionism

As shown in Table 4.11, the mean and standard deviation of all subscales for the experimental and the control groups are presented. In all subscales, the mean of the control group is higher than that of the experimental group. Therefore, it is inferred that all irrational beliefs have been reduced in the experimental group of 18-20 year old adolescents.

As shown in Table 4.11, the treatment has significantly reduced all subscales of irrational beliefs in the experimental group of 18-20 year old adolescents: Approval from Others (Mean: -21.25; SD: 6.04), Concern about Future Problems (Mean: -17.25; SD: 4.33), Emotional Control (Mean: -17.12; SD: 2.03), Reaction to Frustration (Mean: -16.87; SD: 3.09), Blaming (Mean: -16.75; SD: 3.57), Self Expectation (Mean: -16.75; SD: 4.40), Helplessness about Changing (Mean: -16.37; SD: 2.77), Avoiding Problems (Mean: -14.50; SD: 3.50), Perfectionism (Mean: -12.25; SD: 4.37), and Relying on Others (Mean: -12.12; SD: 5.81). Negative values in the table indicate the “reduction” of irrational beliefs in the groups. Each of the irrational beliefs cited above, was the focus of the treatment sessions in this study.

Table 4.11

Means and Standard Deviations of Subscales in the 18-20 Year Old Group

	Group	N	Mean	Std. Deviation	Std. Error Mean
GainAO	Experimental	8	-21.25	6.04	2.14
	Control	8	1.12	4.02	1.42
GainSE	Experimental	8	-16.75	4.40	1.56
	Control	8	1.75	2.96	1.05
GainB	Experimental	8	-16.75	3.57	1.26
	Control	8	.62	2.61	.92
GainRF	Experimental	8	-16.87	3.09	1.09
	Control	8	.25	3.88	1.37
GainEC	Experimental	8	-17.12	2.03	.72
	Control	8	1.00	3.93	1.38
GainCFP	Experimental	8	-17.25	4.33	1.53
	Control	8	1.37	3.46	1.22
GainAP	Experimental	8	-14.50	3.50	1.24
	Control	8	.75	3.10	1.09
GainRO	Experimental	8	-12.12	5.81	2.06
	Control	8	-.12	3.14	1.11
GainHC	Experimental	8	-16.37	2.77	.98
	Control	8	2.00	2.33	.82
GainP	Experimental	8	-12.25	4.37	1.54
	Control	8	-.12	1.36	.48

AO = Approval from others
 SE = Self expectation
 B = Blaming
 RF = Reaction to frustration
 EC = Emotional control
 CFP = Concern about future problems
 AP = Avoiding problems
 RO = Relying on others
 HC = Helplessness about changing
 P = Perfectionism

As shown in Table 4.12, Leven's test was used to assess the equality of variances in the two groups. In all cases, the *t*-test indicated the significant difference between the pre-test and the post-test of the experimental group and the control group ($p < 0.05$). As shown in Table 4.12, in all subscales, the *t*-test is significant. This means that there is a significant difference between the experimental group and the control group of 18-20 year old adolescents in reducing their irrational beliefs.

Table 4.12

Independent t-test Between Pre-tests and Post-tests of the Experimental Group and the Control Group of 18-20 Year Old Adolescents

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		<i>F</i>	Sig.	<i>t</i>	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Lower	Upper
GainAO	Equal variances assumed	3.86	.07	-8.72	14	.000*	-22.37	2.56	-27.87	-16.87
	Equal variances not assumed			-8.72	12.17	.000	-22.37	2.56	-27.95	-16.79
GainSE	Equal variances assumed	1.49	.24	-9.86	14	.000*	-18.50	1.87	-22.52	-14.48
	Equal variances not assumed			-9.86	12.27	.000	-18.50	1.87	-22.57	-14.42
GainB	Equal variances assumed	1.62	.22	-11.09	14	.000*	-17.37	1.57	-20.73	-14.01
	Equal variances not assumed			-11.09	12.82	.000	-17.37	1.57	-20.76	-13.99
GainRF	Equal variances assumed	.89	.35	-9.76	14	.000*	-17.12	1.75	-20.89	-13.36
	Equal variances not assumed			-9.76	13.33	.000	-17.12	1.75	-20.90	-13.34
GainEC	Equal variances assumed	1.23	.28	-11.59	14	.000*	-18.12	1.56	-21.48	-14.77
	Equal variances not assumed			-11.59	10.49	.000	-18.12	1.56	-21.59	-14.66

Table 4.12-Continued

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		<i>F</i>	Sig.	<i>t</i>	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Lower	Upper
GainCFP	Equal variances assumed	0.06	0.80	-9.49	14	.00*	-18.62	1.96	-22.83	-14.42
	Equal variances not assumed			-9.49	13.35	.00	-18.62	1.96	-22.85	-14.39
GainAP	Equal variances assumed	0.03	0.86	-9.21	14	.00	-15.25	1.65	-18.80	-11.69
	Equal variances not assumed			-9.21	13.80	.00*	-15.25	1.65	-18.80	-11.69
GainRO	Equal variances assumed	1.66	0.22	-5.14	14	.00*	-12.00	2.34	-17.01	-6.99
	Equal variances not assumed			-5.14	10.75	.00	-12.00	2.34	-17.16	-6.84
GainHC	Equal variances assumed	0.25	0.62	-14.35	14	.00*	-18.37	1.28	-21.12	-15.63
	Equal variances not assumed			-14.35	13.59	.00	-18.37	1.28	-21.13	-15.62
GainP	Equal variances assumed	8.26	0.01	-7.50	14	.00*	-12.12	1.62	-15.59	-8.66
	Equal variances not assumed			-7.50	8.34	.00	-12.12	1.62	-15.83	-8.42

*Significant at $\alpha = .05$

AO = Approval from others
 SE = Self expectation
 B = Blaming
 RF = Reaction to frustration
 EC = Emotional control

CFP = Concern about future problems
AP = Avoiding problems
RO = Relying on others
HC = Helplessness about changing
P = Perfectionism

Based on the analysis, the fourth hypothesis, and all its null sub-hypotheses are rejected, and its alternative hypothesis and alternative sub-hypotheses are accepted. This means that group REBT has been effective in reducing all of the irrational beliefs in the experimental group of 18-20 year old adolescents.

Hypothesis 5:

Ho: There is no significant difference in the level of irrational beliefs between 12-14 year old group, and 18-20 year old group using group REBT.

Ha: There is a significant difference in the level of irrational beliefs between 12-14 year old group, and 18-20 year old group using group REBT.

Gain score was used to test Hypothesis 5. As shown in Table 4.13, in order to determine the existence of any significant difference between the 12-14 year old group and the 18-20 year old group, the means of the experimental groups were compared. The mean in the 18-20 year old group is -161.25 (SD=14.77). This is higher than the mean of the 12-14 year old group which is -188.88 (SD=25.71). This means that the treatment (group REBT) has been effective more in the 12-14 year old group.

Table 4.13

Mean and Standard Deviation of Sum Scores of the 12-14 Year Old Experimental Group and the 18-20 Year Old Experimental Group

	Grp_age	N	Mean	Std. Deviation	Std. Error Mean
GainSUM	12-14	8	-188.88	25.71	9.09
	18-20	8	-161.25	14.77	5.22

As shown in Table 4.14, Levene's test was used to assess the equality of variances in the two groups. The *t*-test indicated that there was a significant difference between the two groups with $t(14) = -2.64, p = .02$. This means that there was a significant difference between the 12-14 year old and 18-20 year old groups in reducing the irrational beliefs, and the treatment has been effective more in the 12-14 year old group.

Table 4.14

Independent t-test Gain Score Analysis between Sum Scores of the 12-14 Year Old Group and the 18-20 Year Old Group

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed) *	Mean Difference	Std. Error Difference	Lower	Upper
Gain SUM	Equal variance assumed	1.74	0.20	-2.64	14	0.02*	-27.62	10.48	-50.11	-5.14
	Equal variances not assumed			-2.64	11.17	0.02	-27.62	10.48	-50.66	-4.59

*Significant at $\alpha = .05$

Based on the statistical analyses, the fifth null hypothesis is rejected, and its alternative hypothesis is accepted. This means that there is a significant difference in the level of irrational beliefs between 12-14 year old and 18-20 year old adolescents using group REBT, and that the treatment has been effective more in 12-14 year old experimental group.

4.3 Summary

This chapter presented the results of the study. The results indicated that first, comparing the pre-test and the post-test of the experimental and the control group of 12-14 year old adolescents, the treatment significantly reduced the following irrational beliefs in the experimental group: Approval from Others, Self Expectation, Emotional Control, Reaction to Frustration, Helplessness about Changing, Avoiding Problems, Concern about Future Problems, Relying on Others, Blaming, and Perfectionism.

Second, the treatment has significantly reduced irrational beliefs in 12-14 year old adolescents. Third, the treatment has significantly reduced irrational beliefs in 18-20 year old adolescents. Fourth, comparing the pre-test and the post-test of the experimental and the control groups of 18-20 year old adolescents, the treatment significantly reduced irrational beliefs in this age group in the following irrational beliefs: Approval from Others, Concern about Future Problems, Emotional Control, Reaction to Frustration, Blaming, Self Expectation, Helplessness about Changing, Avoiding Problems, Perfectionism, and Relying on Others. Fifth, the treatment has been effective more in 12-14 year old group.

A detailed discussion of the research findings and their implications will be discussed in the following chapter.

CHAPTER V

DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

5.0 Overview

The present chapter is organized into the following sections: The first section consists of a brief summary of the research. The second section includes discussion of the research findings. The third section provides the conclusions of the research findings. The fourth section includes the limitations of the study. The fifth section consists of recommendations concerning the results of this research, and the suggestions for future studies. Eventually, the summary of the chapter will be presented.

5.1 Summary of the Study

Recently, the number of Iranians living in Malaysia has increased. There are too many Iranian adolescents in Malaysia. Due to age conditions, some adolescents develop irrational ways of thinking in their lives. Adolescence is an important developmental period in human being's life. In fact, adolescence is somewhat more stressful than other developmental periods. Some level of psychological distress is experienced by most adolescents living abroad. They may experience mental health problems fostered by their irrational beliefs.

Irrational and maladaptive beliefs are associated with, and may lead to psychological and physical problems. Therefore, people who suffer from psychological disorders often carry around faulty or irrational beliefs about the world, and about themselves. This is because irrational beliefs (IBs) are at the core of emotional problems, and rational beliefs (RBs) are at the core of solutions to these problems.

In fact, changing irrational beliefs to rational ones can have a positive impact on emotions and behaviors. Rational Beliefs (RBs) which are the result of a healthy way of thinking produce healthier emotions, more functional behaviors, and greater acceptance of the self and others.

Rational Emotive Behavior Therapy (REBT) is used by counselors and psychologists for disputing irrational beliefs, and replacing them with rational ones. This approach was established in the mid-1950s by Albert Ellis. REBT has been useful for children and adolescents with a variety of issues such as depression, test anxiety, parenting, hyperactivity, and assertion (Vernon, 2007).

Since the researcher of the present study has had the chance of living in foreign countries as both a student and a counselor, she addressed the issue of reducing irrational beliefs by the means of group REBT among Iranian female adolescents living in Kuala Lumpur. Therefore, the subject of this study was effectiveness of group REBT in reducing irrational beliefs in two groups of Iranian female adolescents.

The main purpose of this research was to study the effectiveness of group REBT in reducing irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur. The population for this study consisted of all 12-14 and 18-20 year old Iranian female adolescents who lived in Kuala Lumpur. The sample of the study consisted of 40 Iranian female adolescents aged 12-14 and 18-20.

The rationale for choosing female adolescents was that, according to Calvete and Cardenoso (2005), female adolescents have shown lower levels of positive thinking. Moreover, as Fox et al. (2010) have cited, female adolescents are more at risk of some psychological problems such as depression and anxiety. On the other hand, due to cultural limitations the researcher had to conduct the research only on female participants.

After obtaining permission through formal letters, participants were solicited through advertisement. The instrument of the research was the Persian translation of Jones' Irrational Beliefs Test (Jones, 1969). This test is sufficiently reliable and valid as a measure of irrational beliefs. After the pre-test, participants were assigned to 4 groups randomly. Ten of participants were assigned to the 12-14 year olds group, and ten of them to the 18-20 year olds group. Also, ten of them were assigned to the control group for 12-14 year olds, and ten of them were assigned to the control group for 18-20 year olds.

Due to the withdrawal of two participants, the four groups were made even. Therefore, the number of participants was reduced to 32 (8 participants for each group). The treatment was conducted on the experimental groups with no treatment for the control groups. Therapeutic sessions were held for 5 consecutive weeks, with two sessions a week. Each session lasted 90 minutes. After the treatment ended, the Jones' Irrational Beliefs Test was administered as post-test. Results showed that group REBT has been effective in reducing irrational beliefs in Iranian female adolescents living in Kuala Lumpur. Also, the treatment has been effective more in 12-14 year old experimental group.

5.2 Discussion

Emotions result from one's beliefs and perceptions. According to empirical studies, some of them cited in chapters 1 and 2, irrational beliefs lead to negative emotions such as anger, depression, anxiety, extreme guilt, and so forth. Also, irrational beliefs play an essential role in psychological, physical, and relationship problems.

Rational beliefs, on the other hand, result in moderate emotions that help achieve goals and satisfaction with life. As in adults, adolescents may present irrational beliefs that

can lead to emotional disturbance. Thus, helping adolescents to change their irrational beliefs to rational ones is a major focus of REBT.

The aim of REBT is “to increase an individual’s sense of self-worth, and the potential to be self-actualized by getting rid of the system of faulty beliefs that block personal growth” (Gerrig & Zimbardo, 2008, p. 501). In fact, the goal of REBT is to replace dysfunctional beliefs which are rigid, inconsistent with reality and illogical, with a new set of rational beliefs which are flexible and non- extreme.

As Banks and Zions (2009) have pointed out, an effective mental health program should increase rationality. REBT principles have been taught to children and adolescents, and found to be an effective intervention with many commonly occurring difficulties. REBT group counseling has its own advantages, and as Glass (2010, p. 13) has cited, “group counseling can be a valuable adjunct in the educational process”.

In this section, based on the research hypotheses the statistical results will be discussed. Later, the observation and the interview of this study will be presented.

Hypothesis 1:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational beliefs.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational beliefs.

Sub-hypothesis 1a:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Approval from Others.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Approval from Others.

Sub-hypothesis 1b:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Self Expectation.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Self Expectation.

Sub-hypothesis 1c:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Blaming.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Blaming.

Sub-hypothesis 1d:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Reaction to Frustration.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Reaction to Frustration.

Sub-hypothesis 1e:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Emotional Control.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Emotional Control.

Sub-hypothesis 1f:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Concern about Future Problems.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Concern about Future Problems.

Sub-hypothesis 1g:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Avoiding Problems.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Avoiding Problems.

Sub-hypothesis 1h:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Relying on Others.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Relying on Others.

Sub-hypothesis 1i:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Helplessness about Changing.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Helplessness about Changing.

Sub-hypothesis 1j:

Ho: There is no significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Perfectionism.

Ha: There is a significant difference between the control group and the experimental group of 12-14 year old adolescents in reducing the irrational belief of Perfectionism.

At first, the equivalence of the control and the experimental groups prior to the treatment was established. As shown in Table 4.3, statistical analysis indicated that there was no significant difference between the pre-test of the experimental and the control groups of 12-14 year old adolescents.

As shown in Table 4.4, the treatment has significantly reduced all subscales of irrational beliefs in the experimental group of 12-14 year old adolescents. In all subscales, the mean of the control group is higher than that of the experimental group. Therefore, it is inferred that all irrational beliefs have been reduced in the experimental group of 12-14 year old adolescents. Statistical analysis indicated that group REBT has been effective in reducing the following irrational beliefs in the experimental group of 12-14 year old adolescents: Approval from Others, Self Expectation, Emotional Control, Reaction to

Frustration, Helplessness about Changing, Avoiding Problems, Concern about Future Problems, Relying on Others, Blaming, and Perfectionism. In general, results of the present study indicate that group REBT has been effective in reducing irrational beliefs in the experimental group of 12-14 year old adolescents. Therefore, the first hypothesis, and its null hypotheses are rejected; and its alternative hypothesis and alternative sub-hypotheses are accepted.

Most of the previous studies investigated the relationship between irrational beliefs and variables such as depression, anxiety, distress, self esteem, marital adjustment, bereavement, and so on. Therefore, the present study cannot be compared to those studies. Nonetheless, the results reveal some similarities with Soodani (1995), and Ghorbani (2008).

Soodani (1995) concluded that individual counseling and group counseling have been effective in reducing 10 irrational beliefs of students. Individual counseling was effective in reducing irrational beliefs of Self Expectation, Blaming, Reaction to Frustration, and Perfectionism. Also, group counseling was effective in reducing irrational beliefs of Approval from Others, Concern about Future Problems, Avoiding Problems, Relying on Others, and Helplessness about Changing. There was no difference between individual counseling and group counseling in reducing the irrational belief of Emotional Control.

Ghorbani (2008) concluded that Individual Rational Emotive Counseling has been effective in reducing the following irrational beliefs in conflicting couples: Self Expectation, Reaction to Frustration, Concern about Future Problems, Avoiding Problems, Relying on Others, Helplessness about Changing, and Perfectionism.

Hypothesis 2:

Ho: There is no significant difference in the level of irrational beliefs in the 12-14 year old group before and after treatment using group REBT.

Ha: There is a significant difference in the level of irrational beliefs in the 12-14 year old group before and after treatment using group REBT.

At first, equivalence of the control and the experimental groups prior to the treatment was established using *t*-test. The pre-test scores of the control and the experimental groups were not significantly different.

As shown in Table 4.6, statistical analysis indicates that the treatment (REBT) has been effective in the reduction of irrational beliefs in the experimental group of 12-14 year old adolescents. Therefore, the second null hypothesis is rejected, and its alternative hypothesis is accepted. The results reveal some similarities with the other findings of some of previous studies such as Kumar (2009); Bistamam and Nasir (2009); Ghorbani (2008); Barekatian et al. (2006); Rieckert and Moller (2000); Sharp (2003); and Egbochuku et al. (2008). In the cited studies, REBT has been effective in the treatment of behavioral and psychological problems.

Hypothesis 3:

Ho: There is no significant difference in the level of irrational beliefs in the 18-20 year old group before and after treatment using group REBT.

Ha: There is a significant difference in the level of irrational beliefs in the 18-20 year old group before and after treatment using group REBT.

At first, equivalence of the control and the experimental group was established using t-test. The pre-test scores of the control and experimental group were not significantly different.

As shown in Table 4.8, the mean of the control group is higher than that of the experimental group. Therefore, it is inferred that all irrational beliefs have been reduced in the experimental group of 18-20 year old adolescents. Therefore, the third null hypothesis is rejected, and its alternative hypothesis is accepted.

The results reveal some similarities with the other findings of some of previous studies such as Kumar (2009); Bistamam and Nasir (2009); Ghorbani (2008); Barekatian et al. (2006); Rieckert and Moller (2000); Sharp (2003); and Egbochuku et al. (2008). In the cited studies, REBT has been effective in the treatment of behavioral and psychological problems.

Hypothesis 4:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational beliefs.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational beliefs.

Sub-hypothesis 4a:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Approval from Others.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Approval from Others.

Sub-hypothesis 4b:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Self Expectation.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Self Expectation.

Sub-hypothesis 4c:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Blaming.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Blaming.

Sub-hypothesis 4d:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Reaction to Frustration.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Reaction to Frustration.

Sub-hypothesis 4e:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Emotional Control.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Emotional Control.

Sub-hypothesis 4f:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Concern about Future Problems.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Concern about Future Problems.

Sub-hypothesis 4g:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Avoiding Problems.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Avoiding Problems.

Sub-hypothesis 4h:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Relying on Others.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Relying on Others.

Sub-hypothesis 4i:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Helplessness about Changing.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Helplessness about Changing.

Sub-hypothesis 4j:

Ho: There is no significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Perfectionism.

Ha: There is a significant difference between the control group and the experimental group of 18-20 year old adolescents in reducing the irrational belief of Perfectionism.

At first, the equivalence of the experimental group and the control group for each of the 10 subscales was established using *t*-test. The pre-test scores of the experimental group and the control group for the 10 subscales were not significantly different.

As shown in Table 4.11, group REBT has been effective in reducing the following irrational beliefs in the experimental group of 18-20 year old adolescents: Approval from Others, Concern about Future Problems, Emotional Control, Reaction to Frustration, Blaming, Self Expectation, Helplessness about Changing, Avoiding Problems, Perfectionism, and Relying on Others.

In general, results of the present study indicate that group REBT has been effective in reducing the irrational beliefs in the experimental group of 18-20 year old adolescents. Therefore, the fourth hypothesis, and its null hypotheses are rejected, and its alternative hypothesis, and alternative sub-hypotheses are accepted.

Most of the previous studies investigated the relationship between irrational beliefs and variables such as depression, anxiety, distress, self esteem, marital adjustment, bereavement, and so on. Therefore, the present study cannot be compared to those studies.

Nonetheless, the results reveal some similarities with Soodani (1995). He concluded that individual counseling and group counseling have been effective in reducing 10 irrational beliefs of students.

Hypothesis 5:

Ho: There is no significant difference in the level of irrational beliefs between 12-14 year old group and 18-20 year old group using group REBT.

Ha: There is a significant difference in the level of irrational beliefs between 12-14 year old group and 18-20 year old group using group REBT.

As shown in Table 4.13, statistical analysis indicated that there was a significant difference between the 12-14 year old group and 18-20 year old group in reducing the irrational beliefs. This means that the treatment has been effective more in the 12-14 year old group. Therefore, the fifth hypothesis is rejected, and its alternative hypothesis is accepted.

Most of the existing studies looked into the relationship between irrational beliefs and variables such as self esteem, depression, anxiety, distress, marital adjustment, bereavement and so on. Hence, the present study cannot be compared to those studies. The results however reveal some similarities with Soodani (1995). He concluded that individual and group counseling have been effective in reducing 10 irrational beliefs of students.

Based on the observations and the interviews of this study, the theme of “interest” in group counseling and generally in psychology, the “need” of both members and parents to these kinds of group therapies, “effectiveness” of the group counseling, and the “change” in the participants’ behavior were emerged. All of the participants were interested in psychological programs (See Appendix O). As they mentioned, they never experienced

such programs before. Moreover, parents of the participants were also interested in their daughters' participation (See Appendix O).

This group counseling was a new experience for the members of the two groups. Even those who had low scores in the test and were not eligible to take part in this experiment, were interested. They and their parents felt "need". They mentioned that it is necessary to have these kinds of programs. Some other Iranians living in other cities of Malaysia asked the facilitator to hold these kinds of sessions as well. They were promised to have some sessions later. (After the experiment was finished, these sessions were held by the facilitator for both adolescents and their parents in the Embassy of the Islamic Republic of Iran in Kuala Lumpur).

Since environment can play a role in affecting a person, the facilitator paid attention to the room in which group counseling took place. The group counseling place was a quiet, air conditioned room having educational facilities, located in the first floor of the educational setting.

During the group process, the facilitator disputed the irrational beliefs of the members, and demonstrated how those ideas brought about disturbances for them. Also, she persuaded the members of the two groups to change their dysfunctional beliefs and maladaptive behaviors to which such beliefs contributed. The facilitator provided both groups with REBT instruction that could help the members identify their irrational beliefs.

Other than instructions, in-group exercises and homework assignments were given to the members. Homework assignments were meant to confront members' irrational beliefs, and give the members practice in behaving differently. Cognitive, emotive, and behavioral changes would come about through practice.

Also, the facilitator was able to observe the groups; and interact closely and directly with the members. She looked for the members' feedback throughout the group process.

From the feedback she found that they not only enjoyed the groups, but also it was effective in changing their irrational beliefs to rational ones. In this regard, the participants mentioned the effectiveness of the group. They explained the way this group changed their thinking and behavior. Also, their parents mentioned the effectiveness of the groups.

During the group process, all members in the two groups took responsibility for the groups. Most of the members committed to being on time for the sessions. Some members were a few minutes late in the first session, therefore, the facilitator asked them to be on time. Some members came before the session began, just because they were very interested in group therapy, and wanted to prevent missing the minutes. Even their parents mentioned that their daughters would like to come to the setting earlier. In general, members in the 12-14 year old group were more on time in attending and leaving the setting.

In order to prevent diffusion in the treatment, in the first session ground rules were introduced to the members. One of these rules was confidentiality, and that until the end of the group they should not talk to anybody outside of the group about what happened in the sessions. All members agreed to keep all information disclosed within the group confidential, including the identities of the other members.

In the first sessions members of the two groups were observed less enthusiastic to take part in conversations and giving feedback. In later sessions, members in the two groups seemed to be more self confident and interested in discussing issues. During the sessions in both groups, when a member made a statement which indicated an irrational belief, other members made comments in order to change her irrational belief to a rational one. Therefore, members observed how people could change their beliefs. Self-disclosure was observed to occur more in the 12-14 year old group.

On occasions, the facilitator shared her previous experiences in counseling and explained that how irrational beliefs caused problems for her clients, and how they tried to

change their negative and catastrophic ideas. The members of the two groups gave feedback on the facilitator's experiences in counseling. From this feedback she observed how the group members paid attention to the details of each story, and how they interpreted them. Nonetheless, the facilitator felt more convenient in telling the stories to the members of the 18-20 year old group, because they were observed to have a more realistic interpretation of the stories. Of course, other than sharing her experiences in therapy groups, the facilitator had used them in her public speech and in-class lectures. The facilitator's experiences were interesting for the audience in all of these settings.

Members of the two groups actively contributed comments, and discussed suggestions made by the facilitator. The members of the 12-14 year old group tended to do more in-group exercises. Moreover, they actively did homework assignments. In this group, members were more interested in doing homework assignments, and did pay more attention to the details of assignments than the members of the 18-20 years old group.

In the 18-20 year old group, members were more enthusiastic to discuss issues, express their ideas over the facilitator's or other member's comments, rather than doing in-group exercises or homework assignments. Moreover, parents of the 12-14 year old group members reported more behavioral changes in their daughters than parents of the 18-20 year olds.

The members of the 12-14 year old group were observed helping each other to complete homework assignments. Also, they were observed to be more creative in doing assignments. Managing the 18-20 year old group was easier for the facilitator than managing the 12-14 year old group. The latter were physically and verbally more active. Moreover, while the 18-20 year olds were more focused on the topic in each session, sometimes the members of 12-14 year old group made comments which were irrelevant to the topics of the sessions. In fact, the 18-20 year olds had a tendency to be more attentive

and less distracted. Also, members of this group were observed to ask more relevant questions. The facilitator tried to guide the members of 12-14 year olds to ask more relevant questions.

While members of the 18-20 year old group were observed to be more interested in sharing their personal comments, the members of the 12-14 year old group tended to listen to the facilitator's comments. The members of both groups had a very good relationship with the facilitator. They were more interested in an active and directive facilitator rather than a passive and non-directive one. From the feedback and evaluation, it was found that the members of both groups viewed the facilitator as cheerful, scientific and patient, and that they enjoyed relating to her throughout the group process. Some of the members emphasized that the facilitator's sense of humor helped them to be more relaxed about life.

Sense of humor was an important technique used in the sessions of both groups. Therapy need not to be serious. Sense of humor can enrich the relationship between people. Experienced therapists are able to distinguish between the humor that is not suitable in group therapy, and humor that provides a relaxing and refreshing atmosphere in the therapy process. The facilitator tried to use sense of humor repeatedly. This enhanced the situation, and helped her and the group members to feel more energetic and refreshed.

The facilitator also encouraged all members to use their own sense of humor. They were taught that we aimed to laugh "with" each other, not "at" each other. In the final sessions, members of the two groups seemed to be engaged more in humor. None of the members in both groups were observed to misuse this technique, and everybody reported to be enjoying it.

Group members were observed helping and supporting one another in therapeutic sessions. This was more observable in the 18-20 year old group. During the sessions when the statements members made indicated irrational beliefs, the other members and the

therapist made comments on these mistakes in order to change the irrational beliefs to rational ones. Other members observed how people could change their beliefs and behaviors. While in the 12-14 year old group each member tried to verbalize her own comments about the issues rather than agreeing or disagreeing with another member, disagreeing with another member was more observed in the 18-20 year old group. They were more active in expressing their ideas on other members' comments. This difference between the younger and older adolescents had been observed in the facilitator's previous group counseling.

Most of the members of the two groups emphasized that they never thought that other people might have the same thinking, feeling and behaving like they had. They learnt that they were not alone, and that they could make a better world for themselves through this group counseling. Also, they learnt how to be of some therapeutic help to fellow group members. In fact, they found how to be a source of help for others. Learning of these behaviors is of immense importance, especially for adolescents.

Since one of the aims of group counseling is to give members the strength to be more open and assertive, the facilitator observed that members' openness and assertiveness increased in later sessions. In the final session in both groups, members were observed to be more active and enthusiastic to hear each others' comments; and respond rationally to these comments. Furthermore, members were observed to be more active in role playing which was a technique in this group counseling.

On the other hand, since another aim of group counseling is to help members feel clearer about themselves, and develop their emotional awareness as individuals, the facilitator observed that clarity attained by participants in the sessions induced change in the group members' behaviors. For example, some members were unsure about the roots of some of their irrational beliefs such as "Approval from Others". Step by step, they felt

clearer about themselves in the group. Comparing after treatment and when they first joined the group, members expressed that they disturbed themselves less over events occurring in their lives. They learnt how to cope with unpleasant realities.

Since members were interested in taking part in conversations, they asked the facilitator to continue the sessions after the arranged time (more than 90 minutes), but the schedule did not allow this. In general, the therapist persuaded the members of the two groups to change their dysfunctional beliefs and maladaptive behaviors to which such beliefs contributed.

Gender was an important issue in the present study which needs to be discussed. The rationale for choosing female adolescents for doing this research was that, according to Calvete and Cardenoso (2005), female adolescents have shown lower levels of positive thinking. Also, Fox et al. (2010) have cited that female adolescents are more at risk of some psychological problems such as depression and anxiety. On the other hand, due to the cultural limitation, the researcher had to conduct the research only on female participants. Moreover, based on the researcher's previous experiences, group counseling is an effective approach in working with the female adolescents. In Iranian culture, females are more social and emotional than males. This means that females are more enthusiastic to take part in groups. In general, group REBT in the present study, provided an opportunity for female adolescents to meet their psychological needs, and reduce their irrational beliefs.

The group counseling in this research enabled the members of the two experimental groups (12-14 year olds, and 18-20 year olds) to feel stronger and more confident. They learnt to be responsible for their emotional reactions. They also learnt that by having more realistic and rational beliefs they would experience positive emotions.

After the treatment sessions ended, members of the two groups answered evaluation questions (Appendices K and L), and gave the following feedback:

- 1- In this therapy, they learnt the many ways in which they could free themselves from irrational beliefs.
- 2- They could function more effectively in their personal and social lives.
- 3- Their negative feelings about realities of their lives were reduced.

One year after this group counseling, the same participants as well as their parents met the facilitator, and asked her to arrange counseling programs for them. They missed these kinds of programs, especially when abroad. Through meeting the authorities, the facilitator asked the Embassy of the Islamic Republic of Iran to facilitate psychological and counseling programs for Iranians living in Malaysia, especially for adolescents.

5.3 Conclusion of Findings

Previous studies on irrational beliefs have provided evidence that demonstrate the negative consequences of irrational beliefs in interpersonal and intrapersonal relationships. Although a few studies have been conducted about irrational beliefs in human beings, to the best of the facilitator's knowledge, irrational beliefs in adolescents living abroad have not been studied. Also, the comparison between reducing irrational beliefs in early adolescence and later adolescence has not been addressed in previous studies. Therefore, the subject of this study was "effectiveness of group REBT in reducing irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur". The following conclusions are drawn from the study:

First, the study indicates that in comparing the experimental group and the control group of 12-14 year old adolescents, group REBT significantly reduced the following

irrational beliefs in this group of age: Approval from Others, Self Expectation, Emotional Control, Reaction to Frustration, Helplessness about Changing, Avoiding Problems, Concern about Future Problems, Relying on Others, Blaming, and Perfectionism.

Second, the study indicates that group REBT has significantly reduced irrational beliefs in 12-14 year old adolescents.

Third, the study indicates that group REBT has significantly reduced irrational beliefs in 18-20 year old adolescents.

Fourth, the study indicates that comparing the control group and the experimental group of 18-20 year old adolescents, group REBT significantly reduced the following irrational beliefs in this age group: Approval from Others, Concern about Future Problems, Emotional Control, Reaction to Frustration, Blaming, Self Expectation, Helplessness about Changing, Avoiding Problems, Perfectionism, and Relying on Others.

Fifth, the study indicates that the treatment has been effective more in the 12-14 year old group.

Based on the interviews and the observation in this study, the group counseling enabled the members of the two experimental groups (12-14 year olds, and 18-20 year olds) to feel stronger and more confident. They learnt being responsible for their emotional reactions, and that by having more realistic and rational beliefs they would experience positive emotions.

In general, since Iranian culture benefits more from a highly active and directive counseling approach, therefore, in the present study, Rational Emotive Behavior Therapy (REBT) was effective in reducing irrational beliefs in Iranian female adolescents living in Kuala Lumpur.

5.4 Limitations of the Study

There were some limitations in the process of group counseling. Some of them are as follows:

- 1- Problems in getting approval from the authorities of the educational institute to hold the counseling sessions there. Due to some internal problems, the facilitator had to wait for a long time before entering the educational setting.
- 2- Convincing the participants and their parents to take part in this study. The facilitator had an interview with participants and their parents. For some of them it took longer time to make them familiar with the aims and the process of the groups.
- 3- Selection of homogeneous group for this study in term of age, gender and beliefs.
- 4- There was only one facilitator leading the groups. This study with one facilitator conducting the group counseling would be limited in observation of the group thus, missing some valuable aspects. The effect of this group counseling would be enhanced and improved, if there were other assistant facilitators to help the facilitator in running the groups.
- 5- The group consisted of one socio-economic class. All of the participants were from educated families. If they were from another class for example uneducated families, the results of the study could be different.
- 6- The lack of a placebo control group. Without a placebo control, we cannot determine if the group counseling brought about change in the treatment.
- 7- Collecting data immediately after the treatment ended, may inflate scores of the treatment groups, as participants have invested 5 weeks in the treatment.
- 8- Limitation of time. Because of the limitation of the time in the setting, each session was conducted in just 90 minutes. This time was not enough for both, the facilitator and the members of the two groups. Furthermore, the time of the sessions was from

12.30 pm till 2.00 pm. Therefore, members did not have the same energy and concentration compared to the morning time thus, preventing them from gaining maximum benefit out of the group experience. Moreover, if each session had lasted more than 90 minutes, members would have been able to hold more discussions and interactions. Therefore, this could affect the results of the study.

9- Lack of teaching aids in the setting. By having enough teaching aids, the facilitator could be more able to run the groups.

10- Problems in transportation. The setting was a little bit far from the main street. Therefore, some participants faced problem leaving the setting. Therefore, the facilitator had to provide them with transport.

5.5 Recommendations

Suggestions and recommendations are important for future research and practice. Therefore, recommendations concerning the results of this research, and recommendations concerning the future studies are presented in this section.

5.5.0 Recommendations Concerning the Results of this Research

The findings of this study indicate that REBT was effective in reducing irrational beliefs in Iranian female adolescents living in Kuala Lumpur. Therefore, it is suggested to provide this psycho-educational program in educational settings for adolescents who live in foreign countries.

Based on the findings of this study, it is suggested that educational settings provide group counseling especially for younger adolescents living abroad. Moreover, it is suggested that cognitive programming be integrated as a part of the classroom

curriculum. This means that counselors teach the basic principles of REBT in schools and make students familiar with identifying irrational thinking patterns, and how to effectively replace irrational beliefs with rational ones. This needs trained counselors. Therefore, it is suggested to train competent counselors for this program.

Based on the findings of this study, it is also suggested that through mass media such as radio, TV, magazines, and newspapers the idea of irrational cognitions be introduced to people so that they can understand how these cognitions may cause disorders in human beings.

Another recommendation is to utilize REBT for helping adolescents who live in foreign countries with different psychological problems such as depression and anxiety.

5.5.1 Recommendations Concerning the Future Studies

The present study was conducted to see the effects of group REBT on the reduction of irrational beliefs in the two groups of Iranian female adolescents living in Kuala Lumpur. It is suggested to do another research on groups of male adolescents. Also, repeating the study to compare groups of male and female adolescents would be of immense importance.

The present study used group REBT. It is suggested to do another research using Individual Cognitive Behavior Therapy. Also, comparing Individual Cognitive Behavior Therapy and Group Cognitive Behavior Therapy in reducing irrational beliefs would be of immense importance.

Another recommendation is to conduct Group Cognitive Behavior Therapy on people from different ages, genders, nationalities, and religions in different countries. It would be interesting to see whether this treatment can have effects on reducing irrational beliefs in different people.

The present study was conducted in a 5 week period. It is suggested to do another research over a longer time period.

In the present study, there were some limitations in characteristics such as adolescents' IQ. Further research could involve different issues concerning IQ such as comparing IQ and irrational beliefs in adolescents, or comparing adolescents' IQ and reduction of negative cognitions.

Due to the limitation of the sample size in this study, research using a greater sample size is suggested. In this case, participants would be considered representatives of the general population.

It is suggested that future studies pay attention to the issue of whether specific irrational beliefs lead to specific psychological and physical disorders in adolescents living abroad. Since there is little research on the role of irrational beliefs in inducing distress among adolescents, it is suggested that future studies concentrate on the consequences of irrational thinking in adolescents.

In the present study, REBT was used. Therefore, it is suggested that in the future studies the effectiveness of REBT be compared to other approaches of counseling.

According to previous research, religion has an important role in preventing and solving psychological problems in human beings. It is suggested that research be done on religion and its role in reducing irrational beliefs.

In general, the above recommendations for additional research could lead to new insights into the effects of psycho-educational programs such as REBT on individuals.

5.6 Summary

The present study provides evidence of the effectiveness of group REBT in reducing irrational beliefs in two groups of Iranian female adolescents living in Kuala Lumpur. This study was conducted on adolescents. Therefore, it is hoped that it could provide a step in introducing psycho-educational programs in educational settings for adolescents, especially for those who live in foreign countries. Further research, utilizing group Cognitive Behavior Therapy with adolescents would be valuable to help clarify the issues surrounding irrational beliefs in this group.

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Appendix A
Appointment as Supervisor

Appendix B
Supervision Form

Appendix C
Permission to Conduct Research

Appendix D

Irrational Beliefs Test (Jones, 1969)-English Translation

Instructions

This is an inventory of the way you believe and feel about various things. There are a number of statements with which you will tend to agree or disagree. For each statement, you should mark your answer sheet as follows, according to your own reaction to that item:

DS -- DISAGREE STRONGLY
DM -- DISAGREE MODERATELY
?? -- NEITHER AGREE NOR DISAGREE
AM -- AGREE MODERATELY
AS -- AGREE STRONGLY

It is not necessary to think over any item very long. Mark your answer quickly and go on to the next statement.

Be sure to mark how you actually feel about the statement, not how you think you should feel.

Try to avoid the neutral or “??” response as much as possible. Select this answer ONLY if you really cannot decide whether you tend to agree or disagree with a statement.

Please do not mark the question pages.

1. It is important to me that others approve of me.
2. I hate to fail at anything.
3. People who do wrong deserve what they get.
4. I usually accept what happens philosophically.
5. If a person wants to, he can be happy almost under any circumstances.
6. I have a fear of some things that often bothers me.
7. I usually put off important decisions.
8. Everyone needs someone he can depend on for help and advice.

9. "A zebra cannot change his stripes"
10. There is a right way to do everything.
11. I like the respect of others, but I don't have to have it.
12. I avoid things I cannot do well.
13. Too many evil persons escape the punishment they deserve.
14. Frustrations don't upset me.
15. People are disturbed not by situations but by the view they take of them.
16. I feel little anxiety over unexpected dangers or future events.
17. I try to go ahead and get some irksome tasks behind me when they come up.
18. I try to consult an authority on important decisions.
19. It is almost impossible to overcome the influences of the past.
20. There is no perfect solution to anything.
21. I want everyone to like me.
22. I don't mind competing in activities where others are better than I.
23. Those who do wrong deserve to be blamed.
24. Things should be different from the way they are.
25. I cause my own moods.
26. I often can't get off my mind some concern.
27. I avoid facing my problems.
28. People need a source of strength outside themselves.

29. Just because something once strongly affects your life doesn't mean it needs to do so in the future.
30. There is seldom an easy way out of life's difficulties.
31. I can like myself even when many others don't.
32. I like to succeed at something but I don't feel I have to.
33. Immorality should be strongly punished.
34. I often get disturbed over situations I don't like.
35. People who are miserable have usually made themselves that way.
36. If I can't keep something from happening, I don't worry about it.
37. I usually make decisions as promptly as I can.
38. There are certain people that I depend on greatly.
39. People overvalue the influence of the past.
40. Some problems will always be with us.
41. If others dislike me, that's their problem, not mine.
42. It is highly important to me to be successful in everything I do.
43. I seldom blame people for their wrongdoing.
44. I usually accept things the way they are, even if I don't like them.
45. A person won't stay angry or blue long unless he keeps himself that way.
46. I can't stand to take chances.
47. Life is too short to spend it doing unpleasant tasks.

48. I like to stand on my own two feet.
49. If I had different experiences I could be more like I want to be.
50. Every problem has a correct solution.
51. I find it hard to go against what others think.
52. I enjoy activities for their own sake, no matter how good I am at them.
53. The fear of punishment helps people be good.
54. If things annoy me, I just ignore them.
55. The more problems a person has, the less happy he will be.
56. I am seldom anxious over the future.
57. I seldom put things off.
58. I am the only one who can really understand and face my problems.
59. I seldom think of past experiences as affecting me now.
60. We live in a world of chance and probability.
61. Although I like approval, it's not a real need for me.
62. It bothers me when others are better than I am at something.
63. Everyone is basically good.
64. I do what I can to get what I want and then don't worry about it.
65. Nothing is upsetting in itself - - only in the way you interpret it.
66. I worry a lot about certain things in the future.
67. It is difficult for me to do unpleasant chores.

68. I dislike for others to make my decisions for me.
69. We are slaves to our own personal histories.
70. There is seldom and ideal solution to anything.
71. I often worry about how much people approve of and accept me.
72. It upsets me to make mistakes.
73. It's unfair that "the rain falls on both the just and the unjust".
74. I am fairly easygoing about life.
75. More people should face up to the unpleasantness of life.
76. Sometimes I can't get a fear off my mind.
77. A life of ease is seldom rewarding.
78. I find it easy to accept advice.
79. Once something affects your life, it always will.
80. It is better to look for a practical solution than a perfect one.
81. I have considerable concern with what people are feeling about me.
82. I often become quite annoyed over little things.
83. I usually give someone who has wronged me a second chance.
84. I dislike responsibility.
85. There is never any reason to remain sorrowful for very long.
86. I hardly ever think of such things as death or atomic war.
87. People are happiest when they have challenges and problems to overcome.

88. I dislike having to depend on others.
89. People never change basically.
90. I feel I must handle things in the right way.
91. It is annoying but not upsetting to be criticized.
92. I'm not afraid to do things that I cannot do well.
93. No one is evil, even though his deeds may be.
94. I seldom become upset over the mistakes of others.
95. Man makes his own hell within himself.
96. I find myself planning what I would do in different dangerous situations.
97. If something is necessary, I do it even if it is unpleasant.
98. I've learned not to expect someone else to be very concerned about my welfare.
99. I don't look upon the past with any regrets.
100. There is no such thing as an ideal set of circumstances.

Appendix E

Irrational Beliefs Test (Jones, 1969)-Persian Translation

این پرسشنامه شامل جملات در مورد باورها و احساسات شما نسبت به چیزهای مختلف است که ممکن است شما با آنها موافق یا مخالف باشید. هر جمله را با دقت بخوانید و سپس میزان موافقت و مخالفت خود را با علامت (X) در پاسخنامه مشخص نمایید. توجه داشته باشید که جواب صحیح یا غلط وجود ندارد و لازم نیست در مورد هر جمله زیاد فکر نمایید. سریع علامت بزنید و به سراغ جمله بعد بروید. سعی نمایید تا جایی که ممکن است از پاسخ به مورد "نه موافق و نه مخالف" خودداری کنید. فقط هنگامی این پاسخ را انتخاب کنید که واقعا نمیتوانید تصمیم بگیرید که آیا با این جمله موافق هستید یا مخالف.

- ۱- برای من مهم است که دیگران مرا تایید کنند.
- ۲- از شکست خوردن در هر کاری متنفرم.
- ۳- افرادی که کار خطایی انجام میدهند، مستحق مجازات هستند.
- ۴- من معمولا آن چه را که اتفاق می افتد آرام و بی سروصدا می پذیرم.
- ۵- اگر انسان بخواهد، تقریبا تحت هر شرایطی می تواند خوشحال باشد.
- ۶- اغلب از چیزهایی که مرا ناراحت می کنند می ترسم.
- ۷- معمولا از گرفتن تصمیمات مهم طفره می روم.
- ۸- هر فرد به کمک و مشورت کسی نیاز دارد.
- ۹- انسان نمی تواند سرنوشت خویش را تغییر دهد.
- ۱۰- برای انجام دادن هر کاری یک راه درست وجود دارد.
- ۱۱- دوست دارم دیگران به من احترام بگذارند، اما نه اینکه حتما باید احترام بگذارند.
- ۱۲- از کارهایی که نمی توانم به خوبی انجام دهم دوری می کنم.
- ۱۳- بیشتر اشخاص شرور از مجازاتی که مستحق آن هستند فرار می کنند.
- ۱۴- ناکامی ها مرا آشفته نمی سازد.
- ۱۵- افراد را موقعیت ها آشفته نمی کنند، بلکه برداشتی که از آنها دارند باعث آشفته گی ایشان می شود.
- ۱۶- برای حوادث آینده یا خطرات غیر منتظره کمتر احساس اضطراب می کنم.
- ۱۷- سعی می کنم هنگام برخورد به امور سخت و خستگی آور، بر آنها غلبه کنم و جلو بروم.
- ۱۸- سعی می کنم در تصمیم گیری های مهم با شخص صاحب نظری مشورت کنم.
- ۱۹- غلبه بر تاثیرات زندگی گذشته، تقریبا غیر ممکن است.

- ۲۰- برای هیچ چیزی راه حل کاملی وجود ندارد.
- ۲۱- می‌خواهم همه افراد مرا دوست بدارند.
- ۲۲- به رقابت در فعالیتهایی که شرکت کنندگانی قویتر از من در آنها حضور دارند، اهمیت نمی‌دهم.
- ۲۳- افراد خطا کار مستحق سرزنش هستند.
- ۲۴- امور زندگی و پدیده‌ها باید از آنچه که ظاهراً هستند متفاوت باشند.
- ۲۵- علت حالات خلقی خویش، خودم هستم.
- ۲۶- غالباً نمیتوانم بعضی از نگرانی‌ها را از ذهنم خارج کنم.
- ۲۷- از روبرو شدن با مشکلات خویش دوری می‌کنم.
- ۲۸- افراد به منبع قدرتمندی در خارج از خودشان نیازمندند.
- ۲۹- صرفاً به این خاطر که زمانی موضوعی زندگی را به شدت تحت تاثیر قرار داده است، بدین معنی نیست که که در آینده نیز زندگی را تحت تاثیر قرار میدهد.
- ۳۰- به ندرت راه حل آسانی برای رهایی از مشکلات زندگی وجود دارد.
- ۳۱- حتی هنگامی که دیگران مرا دوست ندارند، می‌توانم خودم را دوست بدارم.
- ۳۲- دوست دارم در برخی از کارها موفق شوم، اما احساس نمی‌کنم که حتماً باید موفق شوم.
- ۳۳- اعمال خلاف اخلاق را باید با شدت مورد مجازات قرار داد.
- ۳۴- غالباً به وسیله موقعیتهایی که آنها را دوست ندارم، به شدت آشفته می‌شوم.
- ۳۵- معمولاً علت بدبختی افراد خودشان هستند.
- ۳۶- اگر نتوانم از وقوع حادثه‌ای جلوگیری کنم ناراحت نمی‌شوم.
- ۳۷- معمولاً می‌توانم به سرعت تصمیم بگیرم.
- ۳۸- اشخاص خاصی وجود دارند که تا حد زیادی به آنها متکی هستم.
- ۳۹- افراد بیش از حد تحت تاثیر زندگی گذشته خود هستند.
- ۴۰- برخی از مشکلات انسان همیشه ثابت و غیر قابل تغییر هستند.
- ۴۱- اگر دیگران از من خوششان نمی‌آید، این مشکل به خودشان مربوط است نه به من.
- ۴۲- موفقیت در هر کاری برایم بسیار مهم است.
- ۴۳- به ندرت دیگران را به خاطر خطا هایشان سرزنش می‌کنم.
- ۴۴- معمولاً واقعیت‌ها را به همان شکلی که هستند می‌پذیرم حتی اگر آنها را دوست نداشته باشم.

- ۴۵- انسان مدت زیادی خشمگین یا ناراحت نمی ماند، مگر این که خودش بخواهد.
- ۴۶- جرات خطر کردن (ریسک کردن) را ندارم.
- ۴۷- عمر انسان کوتاه تر از آن است که صرف امور ناخوشایند و نا مطبوع شود.
- ۴۸- دوست دارم در هر کاری روی پای خود بایستم.
- ۴۹- اگر از تجارب مختلفی برخوردار بودم، میتوانستم بیشتر شبیه آن چیزی که می‌خواهم باشم.
- ۵۰- برای هر مشکلی یک راه حل درست وجود دارد.
- ۵۱- انجام کاری بر خلاف فکر و نظر دیگران، برایم دشوار است.
- ۵۲- من فعالیت‌ها را به خاطر خودشان دوست دارم و مهم نیست که تا چه حد در انجام آنها موفق می‌شوم.
- ۵۳- ترس از مجازات و تنبیه به افراد کمک می‌کند تا خوب باشند.
- ۵۴- اگر اموری مرا آزار دهند، فقط نسبت به آنها بی‌اعتنایی می‌کنم.
- ۵۵- هر چه فرد مشکلات بیشتری داشته باشد، خوشیهای او کمتر خواهد بود.
- ۵۶- به ندرت در مورد آینده دچار اضطراب می‌شوم.
- ۵۷- به ندرت از کارهایم طفره می‌روم.
- ۵۸- من تنها کسی هستم که می‌توانم مشکلاتم را واقعا درک کرده و با آنها روبرو شوم.
- ۵۹- به ندرت فکر می‌کنم که تجارب گذشته در حال حاضر من را تحت تاثیر قرار می‌دهند.
- ۶۰- ما در دنیایی از شانس و احتمال زندگی می‌کنیم.
- ۶۱- اگر چه تایید دیگران را دوست دارم، اما یک نیاز حتمی نیست.
- ۶۲- وقتی دیگران در چیزی از من بهتر هستند، ناراحت می‌شوم.
- ۶۳- هر انسانی ذاتاً خوب است.
- ۶۴- برای رسیدن به خواسته‌ام هر کاری را بتوانم در حد توان انجام می‌دهم و پس از آن نگران نمی‌شوم.
- ۶۵- هیچ چیز ذاتاً آشفته کننده نیست، بلکه برداشت ما از آن باعث ناراحتی می‌شود.
- ۶۶- تا حد زیادی در مورد برخی حوادث آینده نگران هستم.
- ۶۷- انجام کارهای ناخوشایند روزانه و عادی برایم مشکل است.
- ۶۸- دوست ندارم که دیگران برای من تصمیم‌گیری کنند.
- ۶۹- ما اسیر زندگی خویش هستیم.
- ۷۰- به ندرت یک راه حل ایده آل و کامل برای هر کاری وجود دارد.

- ۷۱- غالباً در مورد اینکه مردم تا چه اندازه مرا تایید می کنند و می پذیرند نگران هستم.
- ۷۲- اشتباه کردن در هر کاری مرا آشفته می کند.
- ۷۳- ضرب المثل "خشک و تر باید با هم بسوزند" عادلانه نیست.
- ۷۴- من زندگی را آسان می گیرم.
- ۷۵- افراد بیشتر باید ناملایمات زندگی را بپذیرند و با آنها مقابله کنند.
- ۷۶- گاهی اوقات نمیتوانم ترسی را از ذهن خود دور کنم.
- ۷۷- به ندرت راحت طلبی، خوشبختی به دنبال می آورد.
- ۷۸- به راحتی نصیحت دیگران را می پذیرم.
- ۷۹- چیزی که یک بار زندگی مرا تحت تاثیر قرار دهد، در آینده نیز همواره بر زندگی ام اثر خواهد گذاشت.
- ۸۰- بهتر است که انسان برای هر کاری به دنبال یک راه حل عملی باشد تا یک راه حل کامل.
- ۸۱- در مورد احساس دیگران نسبت به خودم بسیار نگران هستم.
- ۸۲- غالباً به خاطر چیزهای جزیی بسیار آزردده خاطر می شوم.
- ۸۳- معمولاً وقتی از کسی اشتباهی نسبت به خود ببینم به او فرصت می دهم تا اشتباهش را جبران کند.
- ۸۴- از پذیرش مسئولیت خوشم نمی آید.
- ۸۵- هرگز دلیلی وجود ندارد که برای مدت زمانی طولانی غمگین باشم.
- ۸۶- من به ندرت راجع به موضوعاتی از قبیل ترس از مرگ یا جنگ فکر می کنم.
- ۸۷- هنگامی که افراد با مشکلاتی روبرو می شوند که باید حل شوند، بیشترین احساس خوشحالی را دارند.
- ۸۸- از این که به دیگران وابسته باشم خوشم نمی آید.
- ۸۹- افراد هرگز ذاتاً تغییر نمی کنند.
- ۹۰- احساس می کنم هر کاری را باید از راه درست خودش انجام داد.
- ۹۱- مورد انتقاد دیگران قرار گرفتن آزار دهنده است ولی آشفته کننده نیست.
- ۹۲- از این که نمی توانم کارها را به خوبی انجام دهم نمی ترسم.
- ۹۳- هیچ کس ذاتاً بد نیست، هر چند ممکن است اعمال بد مرتکب شود.
- ۹۴- من به ندرت به خاطر اشتباهات دیگران آشفته می شوم.
- ۹۵- انسان در درون خویش جهنم خود را می سازد.
- ۹۶- من در موقعیتهای خطرناک می دانم که چه کار کنم.

- ۹۷- اگر کاری ضروری باشد آن را انجام میدهم، حتی اگر ناخوشایند باشد.
- ۹۸- انتظار ندارم که دیگران بیش از حد در مورد آسایش و رفاه من نگران باشند.
- ۹۹- نسبت به زندگی گذشته‌ام متاسف نیستم.
- ۱۰۰- چیزی به عنوان کمال مطلوب وجود ندارد.

Appendix F

Informed Consent Form for Participants-English Translation

Dear Participant

My name is Tayebbeh Najafi. I have been a counselor at the Counseling Center of Tarbiat Moallem University in Tehran-Iran for more than 10 years. I am completing my Ph.D in Counseling under the supervision of Dr. Diana-Lea Baranovich, a faculty member in the Department of Educational Psychology and Counseling at the University of Malaya (UM). My study is about the effectiveness of group cognitive therapy on reducing adolescents' irrational beliefs through group counseling. As a participant you will fill out a test. Then you will either immediately receive 10 sessions of group counseling or receive group treatment following a delay period. The group counseling will take 5 consecutive weeks, with two sessions per week. Participation in this study is completely voluntary. You may withdraw from participation at any time with no consequences. All identifying information will be kept confidential.

The results of this study will add to our knowledge about some of the variables involved in reducing irrational beliefs in adolescents. Moreover, you will learn more about how to think rationally and how to reduce irrational beliefs. A written summary of this study will be available when the research is complete, and will be forwarded to you at your request. Please give your address at the bottom of this form if you would like to receive the results of the study.

Thank you for your cooperation- Tayebbeh Najafi

Yes, I have read and understand the information given above and agree to participate in this study.

Name: _____ Age: _____

Signature: _____ Date: _____

Contact Number: _____

Appendix G

Informed Consent Form for Participants-Persian Translation

اینجانب طیبه نجفی که بیش از ۱۰ سال مشاور مرکز مشاوره دانشگاه تربیت معلم تهران بوده ام، هم اکنون مشغول گذراندن دوره دکتری مشاوره در دانشگاه UM مالزی تحت نظارت دکتر دایانا لی بارانویچ عضو دپارتمان روانشناسی تربیتی و مشاوره این دانشگاه هستم. موضوع تحقیق من اثر بخشی شناخت درمانی گروهی بر کاهش باورهای غیر منطقی دختران نوجوان است. شما به عنوان شرکت کننده تستی را پر می‌کنید. سپس یا بلافاصله و یا بعداً در مشاوره گروهی شرکت خواهید کرد. این مشاوره گروهی ۵ هفته متوالی برگزار خواهد شد. بطوری که در هر هفته دو جلسه خواهیم داشت و هر جلسه یک ساعت و نیم طول خواهد کشید. شرکت در این مشاوره گروهی کاملاً داوطلبانه است. هر زمانی که تمایل نداشتید می‌توانید از آن کناره گیری کنید. تمام اطلاعات در این برنامه کاملاً محرمانه خواهد ماند. نتیجه این تحقیق به دانش ما در خصوص کاهش باورهای غیر منطقی دختران نوجوان خواهد افزود. بعلاوه، شما خواهید آموخت که چگونه منطقی تر بیندیشید و چگونه باورهای غیر منطقی خود را کاهش دهید. در صورتی که تمایل داشتید، خلاصه‌ای از نتایج تحقیق پس از انجام آن در اختیار شما قرار خواهد گرفت. بدین منظور، لطفاً نشانی خود را در انتهای این برگ بنویسید.

با تشکر از همکاری شما- طیبه نجفی

بله، من مطالب نوشته شده در فوق را مطالعه کردم و تمایل دارم در این تحقیق شرکت کنم.

نام: _____

سن: _____

شماره تماس: _____

تاریخ: _____

امضا: _____

بله، تمایل دارم خلاصه‌ای از نتایج تحقیق پس از انجام آن را دریافت کنم.

نشانی: _____

Appendix H

Informed Consent Form for Parents-English Translation

Dear Parents

My name is Tayebbeh Najafi. I have been a counselor at the Counseling Center of Tarbiat Moallem University in Tehran-Iran for more than 10 years. I am completing my Ph.D degree in Counseling under the supervision of Dr. Diana-Lea Baranovich, a faculty member in the Department of Educational Psychology and Counseling at the University of Malaya (UM). My study is about the effectiveness of cognitive therapy on reducing adolescents' irrational beliefs through group counseling. In order to conduct this study I am asking your permission to allow your daughter's participation. As a participant, she will fill out a test. Then, she will either immediately receive 10 sessions of group counseling or receive group counseling following a delay period. The group counseling will take 5 consecutive weeks, with two sessions per week. What is obvious is that your daughter's participation in this study is completely voluntary. She may withdraw from participation at any time with no consequences. All identifying information will be kept confidential. The results of this study will add to our knowledge about some of the variables involved in reducing irrational beliefs in female adolescents. Moreover, your daughter will learn more how to think rationally and how to reduce irrational beliefs. A written summary of this study will be available when the research is complete, and will be forwarded to you at your request. Please give your address at the bottom of this form if you would like to receive the results of the study.

Please sign the consent form below and return it to me if you would like to have your daughter participate in this research study. You may contact me at tayebeh.najafi@yahoo.co.uk or call 0173038348 if you have any question regarding this study.

Thank you for your cooperation.

.....

Yes. I would like my daughter to take part in this study. I understand that my decision about whether or not my daughter will participate is entirely voluntary, and that we can withdraw at any time with no penalties of any kind. If I have any questions, I understand that I may call Tayebah Najafi at 0173038348 or email her at tayebeh.najafi@yahoo.co.uk

Adolescent's Name: _____ Age: _____

Parent/Guardian Name: _____

Parent/Guardian Signature _____ Date: _____

Yes, I would like a written summary of the study conducted by Tayebah Najafi.

Name: _____ Adolescent's Name: _____

ADDRESS: _____

Appendix I

Informed Consent Form for Parents-Persian Translation

بسم الله الرحمن الرحيم

والدین عزیز

سلام علیکم

اینجانب طیبه نجفی که بیش از ۱۰ سال مشاور مرکز مشاوره دانشگاه تربیت معلم تهران بوده ام، اکنون مشغول گذراندن دوره دکتری مشاوره در دانشگاه UMI مالزی تحت نظارت دکتر دایانا لی بارانویچ عضو دپارتمان روانشناسی تربیتی و مشاوره این دانشگاه هستم. موضوع تحقیق من اثر بخشی شناخت درمانی گروهی بر کاهش باورهای غیر منطقی دختران نوجوان است. بدینوسیله اجازه شرکت دخترتان در این تحقیق را از شما تقاضا می‌کنم. فرزند شما به عنوان شرکت کننده تستی را پر می‌کند. سپس یا بلافاصله و یا بعدا در مشاوره گروهی شرکت خواهد کرد. این مشاوره گروهی ۵ هفته متوالی برگزار خواهد شد. بطوری که در هر هفته دو جلسه خواهیم داشت و هر جلسه یک ساعت و نیم طول خواهد کشید شرکت در این مشاوره گروهی کاملا داوطلبانه است. فرزندان هر زمانی که تمایل نداشت میتواند از آن کناره گیری کند. تمام اطلاعات در این برنامه کاملا محرمانه خواهد ماند. نتیجه این تحقیق به دانش ما در خصوص کاهش باورهای غیر منطقی نوجوانان دختر خواهد افزود. بعلاوه فرزندان خواهد آموخت که چگونه منطقی تر بیندیشد و چگونه باورهای غیر منطقی خود را کاهش دهد. در صورتی که تمایل داشته باشید خلاصه‌ای از نتایج تحقیق پس از انجام آن در اختیار شما قرار خواهد گرفت. بدین منظور، لطفا نشانی خود را در انتهای این برگ بنویسید.

چنانچه با شرکت فرزندان در این پژوهش موافق هستید، لطفا فرم رضایت نامه زیر را امضا نموده و آن را به اینجانب تحویل فرمائید. همچنین اگر سؤالی راجع به این تحقیق داشتید، با شماره ۰۱۷۳۰۳۸۳۴۸ و یا با ایمیل

tayebeh.najafi@yahoo.co.uk با اینجانب تماس حاصل فرمائید. با تشکر از همکاری شما- طیبه نجفی

بله، مایلم دخترم در این پژوهش شرکت کند. همچنین اطلاع دارم که تصمیم اینجانب مبنی بر شرکت فرزندم در این پژوهش کاملاً داوطلبانه است و اینکه فرزندم میتواند هر زمان که مایل بود از تحقیق کناره گیری کند. چنانچه

سوالی راجع به این تحقیق داشتم، با شماره ۰۱۷۳۰۳۸۳۴۸ و یا با ایمیل

uktayebeh.najafi@yahoo.co.uk تماس خواهم گرفت.

فرزند

سن

نام پدر یا مادر/سرپرست

امضا

تاریخ

بله، تمایل دارم خلاصه‌ای از نتایج تحقیق پس از انجام آن را دریافت کنم.

نشانی: _____

Appendix J

Detailed Report of Each Group Counseling Session

Introduction

Group counseling sessions of the both groups were held in an Iranian Educational institution in Kuala Lumpur, Malaysia. These sessions were arranged to be held at 12.30 pm till 2.00 pm. Wednesdays and Fridays for the 12-14 year old group; and Tuesdays and Thursdays for the 18-20 year old group.

Due to the cooperation of the authorities in the setting as well as the members of the both group, all sessions were held regularly. Therefore, the therapist as a facilitator moved based on the program for the therapy groups.

Since any person who is part of a group wants to feel accepted and included in the group, the facilitator tried to check the members of the both groups throughout the process of group counseling. Also, she tried to be alert to gestures; verbal and non-verbal cues; and also, to be aware of discrete behaviors (e.g. who interrupts? Who is silent, and who is talkative). All these were done to enhance the participating of all members and preventing ignorance in the group. The same treatment was conducted on the both groups. Detailed report of the counseling sessions of the both groups is as follows:

A. Detailed Report of the Counseling Sessions of the 12-14 Year Olds' Group

Session One: This session was held on 25th of November 2009. The goals of session one were as follows: (1) for participants to accept that physiological processes; cognitive processes; and behavior, interact in human beings, and that emotions are made up of cognitive, physiological and behavioral components; (2) for participants to accept that most, or all, emotional reactions include a cognitive component; (3) for participants to be

able to catch the initial surface thoughts that come between an event, which produces an emotional reaction (an “activating event”), and the emotion and write them down in three columns, one for the event, one for the thought, and one for the emotional reaction; (4) for participants to become familiar with the irrational belief of Approval from Others; (5) for participants to have self-acceptance and other-acceptance.

At this session, the following activities were done: (1) review of pre-therapy tasks; (2) lecture A: welcome/pep talk, overview of session structure and number of sessions which is 10 sessions of 90 minutes each, ground rules (which are avoiding negative talk, being supportive, providing equal time, and confidentiality); (3) exercise: getting to know people (members introduced themselves); (4) lecture B: the A-B-C model; thinking and feeling; the saint, the standards we set for ourselves and others; the suitcase analogy for cognitive therapy; (5) exercise: at this session we had three exercises. The first was producing some events to the group members using role playing by the facilitator. They were asked to interpret these events based on their current beliefs. The second was asking participants to produce a list of occasions in which they would like to be approved by others. Then the facilitator challenged participants’ irrational statements. The third was guided relaxation imagery; (6) Lecture C: characteristics of irrational beliefs and rational beliefs; and why we need to change irrational beliefs to rational ones. Explaining the first irrational belief which is “Approval from Others”; (7) homework for next session which consisted of the following activities: (1) write down the 10 worst things in adult life using the A-B-C sequence; (2) write down the worst A-B-C sequence that you have each day.

Before the session began, one of the members had brought her friend to join the group and asked the facilitator to accept her as a new member! This was due to her

willingness to join the group counseling. Explaining that this was impossible because it was a research process, she was promised to be a member in other groups after the experiment ended.

Most of the members came to the setting on time. All members seemed excited and interested in attending the session. Smiles were obvious on the faces of the group members. After a review of pre-therapy tasks, welcome/pep talk; overview of session structure, and number of sessions; and ground rules were introduced to members. The facilitator tried to use her sense of humor. Since after months of trying she could facilitate the groups, she was enthusiastic and excited.

In order to prevent diffusion in the treatment, in the first session ground rules were introduced to the members. One of these rules was confidentiality, and that until the end of the group they should not talk to anybody outside of the group about what happened or was discussed in the group. All members agreed to keep all information disclosed within the group confidential, including the identities of the other members.

After lectures and some exercises, members shared their ideas. Some of them seemed to be interacting actively in the session. At the end of the session, homework assignments were given to the members. They seemed excited in doing homework assignments.

Since this was the first session of the 12-14 year old group, the session ended a few minutes later and the facilitator asked members to pay attention to the time and prevent missing minutes.

Session Two: This session was held on 2nd of December 2009. The goals of session two were as follows: (1) for participants to obtain knowledge of the following: the main aspects of the cognitive theories of irrational beliefs and maladaptive cognitions; (2)

for participants to acknowledge potential resistance they may have to undergo Cognitive Behavior Therapy and develop strategies to counter the resistance; (3) for participants to become familiar with irrational belief of Self Expectation; (4) for participants to have rational Self Expectation.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: theory of emotional disturbance; (3) exercise: categorizing beliefs; (4) lecture B: resistance to therapy; (5) exercise: identifying potential resistance and strategies for prevention; (6) Lecture C: Explaining the second irrational belief which is “Self Expectation”; (7) exercise: to produce a list of occasions in which participants have self expectation. Then, the facilitator challenged participants’ irrational statements; (8) homework for next session which consisted of the following activities: (a) capture as many irrational beliefs as possible. Record them in the A-B-C format, if you can. Try to get at least one per day; (b) finish belief categorization, and drawing up the contract; (c) continue to note your worst A-B-C event each day

All of the members were present at this session. At first, homework assignments were reviewed. Some of the members were unsure about the accuracy of what they had done as homework assignments. The facilitator assured them that they had done right, and encouraged them to do more assignments in the future sessions.

The facilitator tried to use sense of humor repeatedly. She also encouraged all members to use their own sense of humor. They were taught that we aimed to laugh “with” each other, not “at” each other. Members seemed interested in the lectures offered by the facilitator. All of the members took notes.

At this session, each member tried to verbalize her own comments about the issue of the session rather than agreeing or disagreeing with another member’s comments. The

facilitator encouraged members to pay attention to each other, and give comments about other members' statements.

Based on her previous experience as a role player in theater, the facilitator role played in this session on the issue of "Self Expectation". Also, members were asked to do role playing in the group themselves. The group members were excited about the role play, and expressed that they looked forward to have role playing in the future sessions. They hoped that they could learn more from such activities. Nonetheless, members did not seem to be interested much in their own role playing, but were interested in the facilitator's. At the end, homework assignments for the next session were given to the members of the group.

Session Three: This session was held on 4th of December 2009. There were three goals for session three: (1) to orient participants to the idea that their beliefs have behavioral consequences as well as emotional ones, and to the idea that those behavioral consequences may themselves be dysfunctional; (2) for participants to become familiar with the irrational belief of Blaming; (3) for participants to accept their problems and not to blame others.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: behavioral consequences of beliefs; (3) exercise: thought injection; (4) lecture B: introduction to the vertical arrow procedure; (5) exercise: vertical arrow; (6) Lecture C: Explaining the third irrational belief which is "Blaming"; (7) exercise: produce a list of others' negative behaviors and thinking and to write down their own feelings about them. Then, to concentrate on their unhealthy feeling and change them in to healthy ones. The facilitator then cited that blaming others causes affective disorders; (8) homework for next session which consisted of the following activities: (a) continue to

write out A-B-Cs, especially for new situations; (b) complete thought injection; (c) write the behavioral consequences for the A-B-Cs completed so far; (d) do two vertical arrow analyses on their own A-B-Cs.

The members seemed to mingle more with each other compared to the previous sessions. In fact, interaction became more obvious. At first, homework assignments were reviewed. One of the members was sad. Due to her illness, she could not do her homework assignment. The facilitator assured her that she can do it later. Others had done their homework assignments as requested. It was interesting to observe during the group process that members were active and creative.

The facilitator was able to proceed based on the program. Members were active and cooperative. Of course, two of the members liked to share their ideas with each other. The facilitator asked them to share their ideas with all of the members, and be active in the group. One of the members seemed to be over enthusiastic in sharing her ideas. The facilitator tried to prevent this situation, and to provide an atmosphere in which all members can interact and share their ideas. Therefore, she did not focus on this member for a long time, and asked others to interact.

After lectures and exercises, homework assignments were given to the members of the group.

Session Four: This session was held on 9th of December 2009. The goals of session four were as follows: (1) to consolidate the work on vertical arrows which was introduced at the previous session; to solve any problems participants were having with applying the vertical arrow procedure to identify negative schemas; (2) for participants to be able to recognize ten common types of negative schemas, and to be able to categorize their own beliefs into those ten common categories; (3) for participants to become familiar

with the irrational belief of Reaction to Frustration; (4) for participants to interpret frustrations as unpleasant events, not as catastrophes.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: review vertical arrow, advanced vertical arrow; (3) exercise: continue vertical arrow; (4) lecture B: types of beliefs; (5) exercise: categorizing beliefs; (6) Lecture C: explaining the fourth irrational belief which is “Reaction to Frustration”; (7) exercise: produce a list of events which are different from participants’ will. Then, to replace “musts” and “shoulds” with “preferences”. Instead of saying “it is awful” participants learn to say “it is unpleasant”; (8) homework for next session which consisted of the following activities: (a) continue to do vertical arrows until all A-B-Cs have been done, unless the vertical arrow is a clear repetition of others that have been done; (b) continue belief classification.

This session began with the review of homework assignments. The member, who could not do her homework in the previous session, brought an interesting homework assignment. This session was not quite organized overall, as some group members were a few minutes late. However, the participation of group members was satisfactory. They were more active in conversations and sharing ideas. Some members preferred to ask the facilitator their questions. The facilitator tried to involve all members in answering questions.

Since one of the aims of group counseling is to give members the strength to be more open and assertive, the facilitator observed that members’ openness and assertiveness increased more in this session.

After lectures and exercises, homework assignments were given to the members of the group. Although the time of the group was over, the members asked the facilitator to

continue the session after the scheduled time. Due to the rules of the setting, and also the rules of the group, the facilitator asked them to leave the setting on time.

Session Five: Since 11th of December was a public holiday, this session was held on 12th of December 2009. The goals of session five were as follows: (1) for participants to come to some ‘big picture’ understanding of how negative beliefs fit together; (2) for participants to become familiar with logical errors and logical analysis; (3) for participants to become familiar with the irrational belief of Emotional Control; (4) for participants to know themselves responsible for being irrational over their emotions.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: making a master list of beliefs; (3) exercise: start the master list of beliefs; (4) lecture B: cognitive maps; (5) exercise: making cognitive maps; (6) Lecture C: Logical errors and logical analysis; explaining the fifth irrational belief which is Emotional Control; (7) exercise: participants were asked to talk about problems which others are responsible for. Then, the facilitator explained how to control emotions; (8) homework for next session, which consisted of the following activities: (a) continue with vertical arrows; (b) classify any new beliefs discovered; (c) complete master list of beliefs, and add new beliefs to it; (d) do logical analysis.

At this session, the members were more on time and saved the time of the group. In the previous session, they were asked to pay attention to the limitation of time. The facilitator observed the change in the behavior of the most of the members. As they cited, at first they were not aware about the roots of some of their irrational beliefs such as “Approval from Others”. Step by step in the group, they felt clearer about themselves.

Also, the facilitator observed that group members helped and supported one another more in the therapeutic sessions. Some members stated that they never thought that other

people might have the same thoughts, feelings and behaviors like they had. They learnt that they were not alone.

Some of the members indicated that in this group counseling they developed an understanding of the problems of other members. Also, they learnt how to be of some therapeutic help to fellow group members. In fact, they found how to be a source of help for others.

At this session, the facilitator role played. Also, she asked members to do role playing in the group themselves. Two members role played, and showed how to have emotional control. After lectures, exercises, and role playing of the facilitator and the members, homework assignments were given to the members of the group.

Session Six: This session was held on 16th of December 2009. There were 5 goals for session six: (1) for participants to accept the idea that beliefs are not immutable, that predominant cultural beliefs change over the course of human history, and that individuals also change their beliefs over the course of time; (2) participants accept that it is possible to consider their beliefs objectively; (3) for participants to learn how to do exercise for changing irrational beliefs; (4) for participants to become familiar with the irrational belief of Concern about Future Problems; (5) for participants to understand that anxiety is the consequence of irrational cognitions.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: do you believe in Father Christmas (in Iran, Amoo Nowrooz)? Beliefs can be changed; (3) exercise: in small groups making lists of beliefs which have changed in human history and in the participants' own lives; (4) lecture B: testing beliefs, the Loch Ness Monster analogy, objective (judge and jury) analysis and standard analysis; (5) exercise: objective analysis and standard analysis; (6) Lecture C:

explaining the sixth irrational belief which is “Concern about Future Problems”; (7) participants produced a list of problems which make them anxious, and then they were helped to replace the negative feeling with a positive one; (8) homework for next session which consisted of the following activities: (a) complete master list of beliefs; (b) complete objective analysis of beliefs identified to date.

The members were on time at this session. As usual, they had done their homework assignments. One of the members was late, but joined the group. Most of the members were observed to speak more fluently. It is interesting to note that self-disclosure was observed to be more obvious in this session. Members felt more confident and seemed to show more trust in each other. Also, the facilitator used self-disclosure as a counseling technique. She addressed her previous experiences regarding Concern about Future Problems and explained how she could manage this problem. Some members seemed enthusiastic when the facilitator was telling her stories.

In general, at this session the facilitator was able to proceed based on the program. Members were active and cooperative. After lectures and exercises, homework assignments were given to the members of the group.

Session Seven: Since 18th of December was a public holiday, this session was held on 19th of December 2009. The goals of session seven were as follows: (1) for participants to understand that beliefs can be evaluated according to a number of criteria; (2) for participants to rate successfully the beliefs on their master list of beliefs according to these criteria; (3) for the participants to become familiar with the irrational belief of Avoiding Problems; (4) for participants to take responsibility over their behaviors.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: utility analysis; (3) exercise: utility analysis; (4) lecture B:

consistency analysis; (5) exercise: consistency analysis; (6) Lecture C: explaining the seventh irrational belief which is “Avoiding Problems”; (7) exercise: participants were asked to produce a list of problems and say why they avoid these problems. Then the facilitator challenged them; (8) homework for next session which consisted of completing utility analysis and consistency analysis for all beliefs on the master list of beliefs.

At this session one of the members was absent. Other members came on time and submitted their homework assignments. Lectures were given by the facilitator. During the lecture, the facilitator used her previous experiences in counseling. She explained how irrational beliefs created problems for her clients, and also how they tried to change their negative and catastrophic ideas, as well as the consequences of this change.

The members asked the facilitator to tell more about her experiences in counseling. They paid careful attention to the details of these experiences. The facilitator felt enthusiastic in telling her experiences. Other than using these experiences in group counseling, the facilitator had used them in her public speech and in class lectures. In all of these settings the audiences were excited by these experiences.

Most of the members were observed to be enthusiastic in doing exercise for changing their irrational beliefs. They did in-group exercises carefully, and seemed enthusiastic in completing them. They agreed that the exercises were fun and simple. After lectures and exercises, homework assignments were given to the members of the group.

Session Eight: This session was held on 23d of December 2009. The goals of this session were as follows: (1) for participants to be able to apply the logical analysis procedure to their beliefs; (2) for participants to be able to construct hierarchies of situations associated with core beliefs; (3) for participants to be able to generate counters to

their negative beliefs; (4) for participants to become familiar with the irrational belief of Relying on Others; (5) for participants to reduce their dependency.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: logical analysis; (3) exercise: logical analysis; (4) lecture B: hierarchy construction; (5) exercise: generate at least one hierarchy; (6) lecture C: countering; (7) exercise: start to develop counters; (8) Lecture D: explaining the eighth irrational belief which is “Relying on Others”; (9) exercise: participants were asked to produce a list of occasions in which they are dependent on others. Then, they were asked to think that others do not accompany them in these occasions. Then, think about their negative feelings, and change these unhealthy feelings in to healthy ones; (10) homework for next session which consisted of the following activities: (a) completing logical analysis, especially on beliefs that are still true, and all conditional and absolute schemas; (b) develop counters for all beliefs on master list; (c) develop evidence for your counters; (d) complete hierarchies for all core beliefs and transfer to index cards, one scheme per card, including negative thoughts and counters.

All of the members were present at this session. The session began with the review of homework assignments. After lectures and some exercises, members shared their ideas. Some of them seemed to be interacting actively in the session. The facilitator role played and also, 4 members role played at this session. Other members commented on this role playing. Some members had irrational thinking on what happened in the role playing. The facilitator asked all members to provide their comments about these irrational statements. Then, she gave her comments.

Those who had irrational thinking on this issue were observed to become convinced that they were irrational. They said that they would do more practice. Since just two sessions still remained some members wished the group could last longer. The facilitator

was able to proceed based on the program. After lectures and exercises, homework assignments were given to the members of the group.

Session Nine: Since 25th of December was a public holiday, this session was held on 28th of December. There are two main content areas in session nine: perceptual shift and voluntary cortical inhibition. The goals for the perceptual shift section are that: (1) participants understand that a set of information can be seen in multiple ways, as demonstrated by the ambiguous figures; (2) participants understand that perceptual shifting is partly an act of will, partly looking at the detail of the information; (3) participants learn to generate components for perceptual shifting: the counters, the broad category of evidence supporting the counter and some items of detailed evidence supporting the counter. The goal for the voluntary cortical inhibition section is that, the participants understand the procedure for voluntary cortical inhibition sufficiently to do it at home, and have experienced it at least briefly; (4) participants understand the procedure of self-punishment, self-reward, and are able to do it independently; (5) participants devise a workable plan for themselves that encourages them to continue practicing the techniques, and approaches they have learnt during the program; (6) participants become familiar with the irrational belief of Helplessness about Changing; (7) participants become hopeful to changes in their lives.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: perceptual shift; (3) exercise: filling out perceptual shift forms; (4) lecture B: voluntary cortical inhibition; (5) exercise: voluntary cortical inhibition in large group; (6) Lecture C: self-punishment, self-reward; (7) exercise: self-punishment, self-reward; (8) lecture D: techniques for maintenance; (9) exercise: developing a maintenance plan; (10) Lecture E: explaining the ninth irrational belief which is “Helplessness about Changing”; (11) exercise: participants were asked to produce a list of

occasions which they think cannot be changed, and write down their reasons. Then, the facilitator challenged them; (12) homework for next session which consisted of doing either perceptual shift or voluntary cortical inhibition for at least half an hour each day; perceptual shift all beliefs, and voluntary cortical inhibition 2-3 times at least.

The members were more on time, and saved the minutes of the group session. This session began with the review of homework assignments. One of the members could not do her homework assignments. At this session members seemed to be more hopeful to changes in their lives. Some of them mentioned that they tried to do their best to change their irrational beliefs into rational ones. Members were observed to do in-group exercises actively. After lectures and exercises, homework assignments for the next session were given to the members.

Session Ten: This session was held on 30th of December 2009. There were 4 goals of this session: (1) for participants to become familiar with the irrational belief of Perfectionism; (2) for participants to understand that there are various ways of solving a problem, not just one way; (3) to review the participants' plans for maintaining the gains they made in therapy; (4) to obtain feedback on the program from the participants. This session consisted of the following activities: (1) review of homework from previous session; (2) explaining the tenth irrational belief which is "Perfectionism"; (3) exercise: participants were asked to produce a list of problems in which they considered just one way of solving them. Then, they were asked to write down several ways of solving these problems, and then, they were helped to choose the more rational one; (4) review of the program; (5) termination function.

This was the last session of the 12-14 year old group. All members were present, and were on time. After reviewing homework assignments, lecture, and exercise, the

program and also the participants' plans for maintaining the gains they made in therapy were reviewed. The facilitator asked the participants to give their ideas about the program and answer some questions. Members gave feedback on what they learnt in this group.

Although all of the members were glad that they had learnt new skills and had changed their irrational beliefs, none of them wanted the group to end. Some members were observed to be sad. Nonetheless, they appreciated the time spent in the group. The facilitator gave her final words, and cited that this group counseling was an excellent experience in her life. Then the evaluation questions were given to the members (Appendices K and L).

After therapeutic sessions ended, the Jones' Irrational Beliefs Test was administered as post-test. At the end of the experiment, the researcher presented gifts to all of the participants.

B. Detailed Report of the Counseling Sessions of the 18-20 Year Olds' Group

Session One: This session was held on 24th of November 2009. The goals of session one were as follows: (1) for participants to accept that physiological processes; cognitive processes; and behavior, interact in human beings, and that emotions are made up of cognitive, physiological and behavioral components; (2) for participants to accept that most, or all, emotional reactions include a cognitive component; (3) for participants to be able to catch the initial surface thoughts that come between an, event which produces an emotional reaction (an “activating event”), and the emotion and write them down in three columns, one for the event, one for the thought, and one for the emotional reaction; (4) for participants to become familiar with the irrational belief of Approval from Others; (5) for participants to have self-acceptance and other-acceptance.

At this session, the following activities were done: (1) review of pre-therapy tasks; (2) lecture A: welcome/pep talk, overview of session structure and number of sessions which is 10 sessions of 90 minutes each, ground rules (which are avoiding negative talk, being supportive, providing equal time, and confidentiality); (3) exercise: getting to know people (members introduced themselves); (4) lecture B: the A-B-C model; thinking and feeling; the saint, the standards we set for ourselves and others; the suitcase analogy for cognitive therapy; (5) exercise: at this session we had three exercises. The first was producing some events to the group members using role playing by the facilitator. They were asked to interpret these events based on their current beliefs. The second was asking participants to produce a list of occasions in which they would like to be approved by others. Then the facilitator challenged participants' irrational statements. The third was guided relaxation imagery; (6) Lecture C: characteristics of irrational beliefs and rational

beliefs; and why to change irrational beliefs to rational ones. Explaining the first irrational belief which is “Approval from Others”; (7) homework for next session which consisted of the following activities: (a) write down the 10 worst things in adult life using the A-B-C sequence; (b) write down the worst A-B-C sequence that you have each day.

This was the first session of the 18-20 year old group. Some members came before the session began, just because they were very interested in attending and wanted to prevent missing the minutes. All members seemed glad, excited and interested in coming to the group. After a review of pre-therapy tasks, welcome/pep talk; overview of session structure and number of sessions; and ground rules were introduced to members. The facilitator tried to use her sense of humor. Since after months of trying she could facilitate the groups, she was enthusiastic and excited.

As in the 12-14 year old group, in order to prevent diffusion in the treatment, ground rules were introduced to the members in the first session. One of these rules was confidentiality, and that until the end of the group they should not talk to anybody outside of the group about what happened in it. All members agreed to keep all information disclosed within the group confidential, including the identities of the other members.

After lectures and some exercises, members shared their ideas. Some of them seemed to be interacting actively in the session, but some were observed to be silent and less enthusiastic about participating. At the end of the session, homework assignments were given to the members of the group. They seemed interested in doing homework assignments, but not as interested as the 12-14 year olds.

Session Two: This session was held on 26th of November 2009. The goals of session two were as follows: (1) for participants to obtain knowledge of the following: the main aspects of the cognitive theories of irrational beliefs and maladaptive cognitions; (2) for participants to acknowledge potential resistances they may have to Cognitive Behavior Therapy and develop strategies to counter the resistances; (3) for participants to become familiar with the irrational belief of Self Expectation; (4) for participants to have rational Self Expectation.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: theory of emotional disturbance; (3) exercise: categorizing beliefs; (4) lecture B: resistances to therapy; (5) exercise: identifying potential resistances and strategies for prevention; (6) Lecture C: Explaining the second irrational belief which is “Self Expectation”; (7) exercise: to produce a list of occasions in which participants have self expectation. Then, the facilitator challenged participants’ irrational statements; (8) homework for next session which consisted of the following activities: (a) capture as many irrational beliefs as possible. Record them in the A-B-C format, if you can. Try to get at least one per day; (b) finish belief categorization and drawing up the contract; (c) continue to note your worst A-B-C event each day.

One of the members was absent at this session. Other members were present. At first, homework assignments were reviewed. The assignments had been done haphazardly. The facilitator expected to get more detailed assignments, but participants spent less time doing this. The facilitator encouraged members to pay more attention to the assignments, and said that through doing assignments they would be able to change their irrational beliefs. The facilitator also asked members to pay attention to each other, and give comments about other members’ statements.

The facilitator tried to use sense of humor repeatedly. She also encouraged all members to use their own sense of humor. They were taught that we aimed to laugh “with” each other, not “at” each other. Members seemed interested in the lectures offered by the facilitator. Some of the members took notes.

Based on her previous experience as a role player in theater, the facilitator role played in this session. Also, members were asked to do role playing in the group themselves. The group members were excited about the role play. They hoped that they could learn more from such activities. Members of this group were more enthusiastic to take part in role playing. At the end, homework assignments for the next session were given to the members of the group.

Session Three: This session was held on 1st of December 2009. There were three goals for session three: (1) to orient participants to the idea that their beliefs have behavioral consequences as well as emotional ones, and to the idea that those behavioral consequences may themselves be dysfunctional; (2) for participants to become familiar with the irrational belief of Blaming; (3) for participants to accept their problems and not to blame others.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: behavioral consequences of beliefs; (3) exercise: thought injection; (4) lecture B: introduction to the vertical arrow procedure; (5) exercise: vertical arrow; (6) Lecture C: Explaining the third irrational belief which is “Blaming”; (7) exercise: produce a list of others’ negative behaviors and thinking and to write down their own feelings about them. Then, to concentrate on their unhealthy feeling, and change them to healthy ones. The facilitator then cited that blaming others causes affective disorders; (8) homework for next session which consisted of the following activities: (a) continue to write

out A-B-Cs, especially for new situations; (b) complete thought injection; (c) write the behavioral consequences for the A-B-Cs completed so far; (d) do two vertical arrow analyses on their own A-B-Cs.

At first, homework assignments were reviewed at this session. One of the members had not done the assignment, and two members had forgotten to bring their assignments.

This session was not quite organized overall, as some group members were a few minutes late. However, the participation of group members was satisfactory. Hence, the facilitator was able to proceed based on the program. Members were active and cooperative. They were observed to be critical when issues were discussed in the group. Some members preferred to ask the facilitator their questions. The facilitator tried to involve all members in answering questions.

Also, the facilitator observed that members' openness and assertiveness increased more in this session. Like the 12-14 year old group, some members were willing to continue the session after the scheduled time, but due to the rules of the setting and the rules of the group, the facilitator asked them to leave the setting on time.

After lectures and exercises, homework assignments were given to the members of the group. Since members participated in discussions, the group ended a few minutes later.

Session Four: This session was held on 3rd of December 2009. The goals of session four were as follows: (1) to consolidate the work on vertical arrows which was introduced at the previous session; to solve any problems participants were having with applying the vertical arrow procedure to identify negative schemas; (2) for participants to be able to recognize ten common types of negative schemas, and to be able to categorize their own beliefs into those ten common categories; (3) for participants to become familiar

with the irrational belief of Reaction to Frustration; (4) for participants to interpret frustrations as unpleasant events, not as catastrophes.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: review vertical arrow, advanced vertical arrow; (3) exercise: continue vertical arrow; (4) lecture B: types of beliefs; (5) exercise: categorizing beliefs; (6) Lecture C: explaining the fourth irrational belief which is “Reaction to Frustration”; (7) exercise: produce a list of events which are different from participants’ will. Then, to replace “musts” and “shoulds” with “preferences”. Instead of saying “it is awful” participants learn to say “it is unpleasant”; (8) homework for next session which consisted of the following activities: (a) continue to do vertical arrows until all A-B-Cs have been done, unless the vertical arrow is a clear repetition of others that have been done; (b) continue belief classification.

The members were not on time. Just two of them came before the time of the group. Again, the facilitator asked them to be on time. This session began with the review of homework assignments. Participants were observed to be more active in conversations and sharing ideas. The homework assignments were done properly.

Some members in this group were observed to be more enthusiastic in sharing their personal problems than in the 12-14 year old group. Others were observed to be more enthusiastic in providing comments and helping other members. The facilitator encouraged all of them to be active in the group. In general, at this session members seemed to mingle more with each other, compared to the previous sessions. In fact, their interaction improved.

Self-disclosure was observed to be more evident in this session. Members felt more confident and showed greater trust in each other. Therefore, they were enthusiastic to reveal more about themselves than in previous sessions. The facilitator used self-disclosure

as a counseling technique. After lectures and exercises, homework assignments were given to the members of the group.

Session Five: This session was held on 8th of December 2009. The goals of session five were as follows: (1) for the participants to come to some ‘big picture’ understanding of how negative beliefs fit together; (2) for participants to become familiar with logical errors and logical analysis; (3) for participants to become familiar with the irrational belief of Emotional Control; (4) for participants to know themselves responsible for being irrational over their emotions.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: making a master list of beliefs; (3) exercise: start the master list of beliefs; (4) lecture B: cognitive maps; (5) exercise: making cognitive maps; (6) Lecture C: Logical errors and logical analysis; explaining the fifth irrational belief which is Emotional Control; (7) exercise: participants were asked to talk about problems which others are responsible for. Then, the facilitator explained how to control emotions; (8) homework for next session, which consisted of the following activities: (a) continue with vertical arrows; (b) classify any new beliefs discovered; (c) complete master list of beliefs, and add new beliefs to it; (d) do logical analysis.

The members were on time at this session. One of the members was absent. She had already informed the facilitator. After reviewing homework assignments and lectures, members participated in exercises. The participants were asked to talk about problems which others are responsible for. Then the facilitator explained how to control their emotions.

One of the members seemed sad. She felt that one of her relatives was responsible for all her problems. The facilitator asked members to help her by providing comments.

This member gave her own comments too. Later, she seemed convinced that others were not responsible for her problems. She was encouraged to do more exercises for changing her irrational beliefs to rational ones.

At this session, the facilitator role played. Also, she asked members to do role playing in the group themselves. Two members role played, and showed how to have emotional control. The members still were active and enthusiastic to participate more. After lectures and exercises, homework assignments were given to the members of the group.

Session Six: This session was held on 10th of December 2009. There were 5 goals for session six: (1) for participants to accept the idea that beliefs are not immutable, that predominant cultural beliefs change over the course of human history, and that individuals also change their beliefs over the course of time; (2) for participants to accept that it is possible to consider their beliefs objectively; (3) for participants to learn how to do exercise for changing irrational beliefs; (4) for participants to become familiar with the irrational belief of Concern about Future Problems; (5) for participants to understand that anxiety is the consequence of irrational cognitions.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: do you believe in Father Christmas (in Iran, Amoo Nowrooz)? Beliefs can be changed; (3) exercise: in small groups making lists of beliefs which have changed in human history and in the participants' own lives; (4) lecture B: testing beliefs, the Loch Ness Monster analogy, objective (judge and jury) analysis and standard analysis; (5) exercise: objective analysis and standard analysis; (6) Lecture C: explaining the sixth irrational belief which is "Concern about Future Problems"; (7) participants produced a list of problems which make them anxious, and then they were helped to replace the negative feeling with a positive one; (8) homework for next session

which consisted of the following activities: (a) complete master list of beliefs; (b) complete objective analysis of beliefs identified to date.

The session began on time. After reviewing the homework assignments from the previous session, members asked the facilitator to tell more about her experiences in counseling. They paid careful attention to the details of these experiences. As in the 12-14 year old group, the facilitator felt excited in telling her experiences. Nonetheless, she felt more convenient in telling the stories to the members of this group, because they were observed to have a more realistic interpretation from the stories. While the facilitator told one of her experiences, the members looked more quiet, concentrated, and listening.

The members of the group gave feedback on the facilitator's experiences in counseling. From this feedback, she observed how the group members paid attention to the details of each story and interpreted them. After lectures and exercises, homework assignments were given to the members of the group.

Session Seven: This session was held on 15th of December 2009. The goals of session seven were as follows: (1) for participants to understand that beliefs can be evaluated according to a number of criteria; (2) for participants to rate successfully the beliefs on their master list of beliefs according to these criteria; (3) for participants to become familiar with the irrational belief of Avoiding Problems; (4) for participants to take responsibility over their behaviors.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: utility analysis; (3) exercise: utility analysis; (4) lecture B: consistency analysis; (5) exercise: consistency analysis; (6) Lecture C: explaining the seventh irrational belief which is "Avoiding Problems"; (7) exercise: participants were asked to produce a list of problems and say why they avoid these problems. Then the

facilitator challenged them; (8) homework for next session which consisted of completing utility analysis and consistency analysis for all beliefs on the master list of beliefs.

One of the members was absent at this session. Others came on time. After reviewing the homework assignments, the facilitator felt that some of the members were anxious about something during the lecture. Therefore, in conversation, she paid attention to this issue and asked the members to say more about their feelings. Some of the members stated that they felt anxious about the future problems, and that, they prefer to avoid them.

Due to this situation the facilitator tried to explain how people think that they should avoid problems, and how to change this way of thinking. The members took part actively in the conversation. One of them was quiet. The facilitator tried to know the reason for her silence. Later, she found that this member preferred to listen to others' concerns, and to compare these concerns with her own issues. She became engaged in conversation later.

The members seemed confident in the session. They cited their concerns about future problems. Other members tried to give comments on these concerns, and the facilitator helped the group members to change those beliefs which make them anxious about future problems. Comparing this group with the 12-14 year old group, the members were observed to be more anxious about future problems.

The facilitator tried to use her previous experiences in counseling. She explained how her clients had the same irrational beliefs, and how they changed these kinds of beliefs to rational ones. After lectures and exercises, homework assignments were given to the members of the group. Due to the need of the members, they were asked to do more homework assignments on this issue.

Session Eight: This session was held on 17th of December 2009. The goals of this session were as follows: (1) for participants to be able to apply the logical analysis procedure to their beliefs; (2) for participants to be able to construct hierarchies of situations associated with core beliefs; (3) for participants to be able to generate counters to their negative beliefs; (4) for participants to become familiar with the irrational belief of Relying on Others; (5) for participants to reduce their dependency.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: logical analysis; (3) exercise: logical analysis; (4) lecture B: hierarchy construction; (5) exercise: generate at least one hierarchy; (6) lecture C: countering; (7) exercise: start to develop counters; (8) Lecture D: explaining the eighth irrational belief which is “Relying on Others”; (9) exercise: participants were asked to produce a list of occasions in which they are dependent to others. Then, they were asked to think that others do not accompany them in these occasions. Then, think about their negative feelings, and change these unhealthy feelings to healthy ones; (10) homework for next session which consisted of the following activities: (a) completing logical analysis, especially on beliefs that are still true, and all conditional and absolute schemas; (b) develop counters for all beliefs on master list; (c) develop evidence for your counters; (d) complete hierarchies for all core beliefs and transfer to index cards, one scheme per card, including negative thoughts and counters.

The members were on time at this session. Just one of them came a few minutes later. Homework assignments were reviewed. The members had paid more attention to these assignments. They were observed to be less anxious over their future problems. Therefore, the facilitator emphasized that doing exercises was an important element in

change, especially changing irrational beliefs to rational ones. The members were observed to be more hopeful about the future.

The facilitator role played, and also 2 members role played at this session. Other members commented on the role playing. Some members had irrational thinking on what happened in the role playing. The facilitator asked all members to provide their comments about these irrational statements. Then, she gave her own comments.

Since members participate in discussions, the group ended a few minutes later. At these final settings members were observed to be more engaged in asking questions, and taking part in discussions. Nonetheless, they had to pay attention to the limited time. After lectures and exercises, homework assignments were given to the members of the group.

Session Nine: This session was held on 22nd of December 2009. There are two main content areas in session nine: perceptual shift and voluntary cortical inhibition. The goals for the perceptual shift section are that: (1) participants understand that a set of information can be seen in multiple ways as demonstrated by the ambiguous figures; (2) participants understand that perceptual shifting is partly an act of will, partly looking at the detail of the information; (3) participants learn to generate components for perceptual shifting: the counters, the broad category of evidence supporting the counter and some items of detailed evidence supporting the counter. The goal for the voluntary cortical inhibition section is that, the participants understand the procedure for voluntary cortical inhibition sufficiently to do it at home, and have experienced it at least briefly; (4) participants understand the procedure of self-punishment, self-reward, and are able to do it independently; (5) participants devise a workable plan for themselves that encourages them to continue practicing the techniques, and approaches they have learnt during the program;

- (6) participants become familiar with the irrational belief of Helplessness about Changing;
- (7) participants become hopeful to changes in their lives.

At this session, the following activities were done: (1) review of homework from previous session; (2) lecture A: perceptual shift; (3) exercise: filling out perceptual shift forms; (4) lecture B: voluntary cortical inhibition; (5) exercise: voluntary cortical inhibition in large group; (6) Lecture C: self-punishment, self-reward; (7) exercise: self-punishment, self-reward; (8) lecture D: techniques for maintenance; (9) exercise: developing a maintenance plan; (10) Lecture E: explaining the ninth irrational belief which is “Helplessness about Changing”; (11) exercise: participants were asked to produce a list of occasions which they think cannot be changed, and write down their reasons. Then, the facilitator challenged them; (12) homework for next session which consisted of doing either perceptual shift or voluntary cortical inhibition for at least half an hour each day; perceptual shift all beliefs, and voluntary cortical inhibition 2-3 times at least.

All of the members were present at this session. The facilitator reminded them that the next session would be the last one. Although all members were glad that they had learnt new skills and had changed their irrational beliefs, none of them wanted the group to end. The facilitator was happy. She had some problems in entering the site and getting approval. Therefore, in the final sessions she felt that she was going to finish her job. On the other hand, the facilitator had enjoyed the groups so much. Dealing with adolescents was a pleasure for her.

One of the members asked whether it was possible for the facilitator to hold more sessions in the future. Her response was positive. The session ended a few minutes later, after homework assignments for the next session had been handed out.

Session Ten: This session was held on 24th of December 2009. There were 4 goals of this session: (1) for participants to become familiar with the irrational belief of Perfectionism; (2) for participants to understand that there are various ways of solving a problem, not just one way; (3) to review the participants' plans for maintaining the gains they made in therapy; (4) to obtain feedback on the program from the participants.

This session consisted of the following activities: (1) review of homework from previous session; (2) explaining the tenth irrational belief which is "Perfectionism"; (3) exercise: participants were asked to produce a list of problems in which they considered just one way of solving them. Then, they were asked to write down several ways of solving these problems, and then, they were helped to choose the more rational one; (4) review of the program; (5) termination function. The researcher asked the participants to get their ideas about the program, and answer some questions.

This was the last session for the 18-20 year old group. All of the members were present, and on time. After a review of homework assignments, lecture, and exercise, the program and also the participants' plans for maintaining the gains made in therapy were reviewed. The facilitator asked the participants to give their ideas about the program, and answer some questions. Members gave feedback on what they learnt in this group.

Although all members were glad that they had learnt new skills and had changed their irrational beliefs, none of them wanted the group to end. Some members were observed to be sad. Nonetheless, they appreciated the time spent in the group. The facilitator gave her final words and said that this group counseling was an excellent experience in her life. Then the evaluation questions were given to the members (Appendices K and L).

After the therapeutic sessions ended, the Jones' Irrational Beliefs Test was administered as post-test. At the end of the experiment, the researcher presented gifts to all of the participants.

Appendix K

Evaluation Questions (English Translation)

Appendix L

Evaluation Questions (Persian Translation)

۱- فکر می‌کنید کدام جنبه از برنامه شناخت درمانی گروهی خوب بود؟

۲- کدام قسمت از برنامه شناخت درمانی گروهی را دوست داشتید؟

۳- کدام جنبه از برنامه مفید و کدام جنبه بی‌فایده بود؟

۴- کدام قسمت مشکل بود؟

۵- به نظر شما کدام جنبه‌های برنامه باید تغییر کند و پیشنهادهای شما برای تغییر چیست؟

Appendix M
Interview Questions (English Translation)

A. Questions of the Interview Before Group Counseling

1- Why do you want to take part in this group counseling? (for participants)

2- Why are you interested in your daughter's participation in this group? (for parents)

B. Questions of the Interview After Group Counseling

1- How did you learn from the group? (for participants)

2- How was the impact of group counseling on your daughter?

Appendix N

Interview Questions (Persian Translation)

الف- سوالات مصاحبه قبل از مشاوره گروهی:

۱- چرا می‌خواهید در این مشاوره گروهی شرکت کنید؟ (برای شرکت کنندگان)

۲- چرا علاقه مندید دخترتان در این گروه شرکت کند؟ (برای والدین)

ب- سوالات مصاحبه پس از مشاوره گروهی:

۱- چگونه از گروه آموختید؟ (برای شرکت کنندگان)

۲- تاثیر مشاوره گروهی بر دخترتان چگونه بود؟ (برای والدین)

Appendix O
Interview Transcript

Part 1: Interview with Participants before Group Counseling

Question	Participant	Response
Why do you want to take part in this group counseling?	1	<i>I am interested in psychology. I think this group counseling is a good place to talk freely without fear.</i>
	2	<i>It was my wish to take part in a group like this, but I found nowhere. I like to know myself better.</i>

Part 2: Interview with Participants after Group Counseling

Question	Participant	Response
<p>How did you learn from the group?</p>	<p>1</p>	<p><i>I learnt so much. I never thought that the way of our thinking caused disturbance, rather than events. I did not know about my irrational beliefs. Now, I have found that by improving the way of my thinking, I can have a better life and be less disturbed.</i></p>
	<p>2</p>	<p><i>Because of my irrational beliefs, I could not communicate well to others, specially my siblings. In this group counseling, I became aware that I disturbed myself in the past so much. Now, I do not disturb myself anymore, because I learnt how to think rationally, and how relate well to others.</i></p>

Part 3: Interview with Parents before Group Counseling

Question	Parent	Response
<p>Why are you interested in your daughter's participation in this group?</p>	<p>1</p>	<p><i>I would like my daughter to be a member of this group counseling. She needs to learn new behaviors. I prefer her to learn from a counseling group, rather than from me or her father.</i></p>
	<p>2</p>	<p><i>I am so happy that my daughter was selected to be in the counseling group. I never thought that such a group would be available here in Malaysia for our children. This is a very good opportunity to have you (the facilitator) here, as an experienced counselor.</i></p>

Part 4: Interview with Parents after Group Counseling

Question	Parent	Response
<p>How was the impact of group counseling on your daughter?</p>	<p>1</p>	<p><i>When the group was in process, I observed some changes in my daughter's behavior. After the counseling sessions got finished, these changes were more observed. I think these sessions have been so much effective. I wish the researcher could arrange psychological public speech for parents as well.</i></p>
	<p>2</p>	<p><i>From the first session of this group counseling, my daughter is behaving differently. She does not get angry over things. She communicates calmly, and seems less disturbed. I think that we (parents) need these kinds of counseling programs ourselves.</i></p>

Appendix P

A Brief Explanation of the Threats to Internal and External Validity

Threats to Internal Validity

According to Creswell (2008), threats to internal validity are problems that threaten our abilities to draw correct cause and effect inferences that arise, because of the experimental procedures or the experiences of the participants. Some of these threats are related to the participants of the research. They are as follows:

- 1- History: Time passes between the beginning of the experiment and the end, and events may occur between the pre-test and post-test that influence the outcome.
- 2- Maturation: Individuals develop or change during the experiment, and these changes may affect their scores between the pre-test and post-test.
- 3- Regression: When researchers select individuals for a group based on extreme scores, they will naturally do better (or worse) on the post-test than the pre-test regardless of the treatment.
- 4- Selection: People factors may introduce threats that influence the outcome.
- 5- Mortality: When individuals drop out during the experiment for any number of reasons, drawing conclusions from scores may be difficult.
- 6- Interactions with selection: Several of the threats mentioned thus far can interact with the selection of participants.

Some of the threats are related to the treatment used in the study. They are as follows:

- 1- Diffusion of treatments: When the experimental and control groups can communicate with each other, the control group may learn from the experimental group information about the treatment.

- 2- Compensatory equalization: When only the experimental group receives a treatment, an inequality exists that may threaten the validity of the study.
- 3- Compensatory rivalry: If you publicly announce assignments to the control and experimental groups, the control group feels that it is the underdog.
- 4- Resentful demoralization: When a control group is used, individuals in this group may become resentful and demoralized, because they perceive that they receive a less desirable treatment than other groups.

Some of the threats are related to the threats that occur during an experiment. They are as follows:

- 1- Testing: Participants may become familiar with the outcome measures and remember responses for later testing.
- 2- Instrumentation: Between the administration of a pre-test and a post-test the instrument may change.

Threats to External Validity

According to Creswell (2008), threats to external validity are problems that threaten our ability to draw correct inferences from the sample data to other persons, settings, and past and future situations. These are as follows:

- 1- Interaction of selection and treatment: It involves the inability to generalize beyond the groups in the experiment such as other racial, social, geographical, age, gender, or personality groups.
- 2- Interaction of setting and treatment: This threat arises from the inability to generalize from the setting where the experiment occurred to another setting.

3- Interaction of history and treatment: This threat develops when the researcher tries to generalize findings to past and future situations.