

A survey of effectiveness of cognitive therapy on anger management of mothers of mentally retarded children

By

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Abstract

The present study is an attempt to survey the effects of cognitive therapy on anger management among mothers of mentally retarded children. Using experimental design framework, 30 mothers of mentally retarded mothers in Esfarayen City were selected and grouped in control and experiment groups. Study population was comprised of 100 mothers. The study is a pretest-posttest design with control group. To measure aggression of the participants, Siegel Multidimensional Anger Questionnaire was used. An eight 120min session intervention was administered on the experiment group over a 2 months period. The collected data were analyzed using covariance analysis and the results showed that group cognitive therapy and anger management training improved the participants' performance in managing their aggression. It can be concluded, therefore, that cognitive therapy is an effective intervention to improve anger management of mothers of mentally retarded children.

Keywords: cognitive therapy, anger management, mothers of mentally retarded children

1. Introduction

Emotions are mental, biological, purposeful, and social phenomena, which appear in different individuals under similar situations. They are considerably subject to cultural and educational condition and demand specific physiological responses (Riv, translated by Seyed Mohammadi, 2004).

One of the emotions that imposes notable effects on peoples' lives is aggression (Hashemian, Shafiabadi, and Sudani, 2008). Aggression is, at the same time, satisfying and destructive. It activates the internal system and prepares us to encounter potential threats around (Tailer and Novako, 2005). Along with advantageous functions in life, aggression can bring in negative and destructive effects whether personal or social (Kianipour, Etemadi, Dolatabadi, Hajihassahni, 2012). When one is angry, they try to destroy or remove the cause of their anger. Even when it is not expressed and concealed, anger builds up enmity inside the individual and manipulates one's performance in inter-personal and social settings, decreases one's capability to adaptability with others, achieving the goals, and success in family and professional lives (Beshkar, 2008). Many authors believe that expressing anger, on the other hand, may create family, inter-personal, and occupational contrast, lead to negative assessment of the individual, development of negative self-image, and low self-confidence (Kalamari and Wiemy, 2003).

As recommended by researchers, anger is one of the emotions that parents usually experience in the process of upbringing their children (Klark, Noak, Doiry, 2002; Jones et al., 1992; Sadler and Hens, 2001). Expressing anger may be from the parent to the child or from the child to the parent; uncontrolled anger from parent to child is closely related with children mistreatment by their parents and family conflicts (Kalamari and Pini, 2003).

Taking into account negative and destructive personal and social consequences of anger as a negative emotion, the issue of anger management appears to be critical. Majority of studies on anger management are based on Naoko's anger theory who used cognitive model to explain his theory (Naoko, 1975, 1994). The first emotional reaction of the parents who learn, for the first time, that their child is mentally retarded is denial and being shocked. It takes a while for the parents to prepare themselves emotionally and physically to accept such children. Hajan and Moris (2007) believed that mentally retarded children enjoy the best way of life within the circle of family; however, some families do not have the capacity to take care of seriously mentally retarded children.

Parents of such children experience more contrast and conflicts and less positive interaction with their children (Stoneman et al., 1998); therefore, behavioral problems are more common in these families (Guss and Givingly, 1987).

Relationship between the parent and the child is one of the most critical elements of social life with important role in psychological health of the both sides. Temporal and emotional specifications and educational methods of the parents have to do with cognitive, emotional or behavioral development of the child. Experience of anger is notably under the influence of learning and it can easily be transferred from one member of family to others (Berk, translated by Seyed Mohammadi, 2004). In fact, a child of usually angry parents can be more easily aroused, and on the other hand, by controlling and lessening their anger, parents can help their children to control their anger too (Smith, 2004). In addition, anger control skills can help parents to control their anger and put up with their children (Akten and During, 1992).

In a study on 240 mothers of mentally retarded children, Comings, Billy, Rai (1996) (quoted from Aghamohamadian, Rajabi, and Narimani; 2007) showed that depression is more common among the participants and they found it harder to control their anger in dealing with their child.

On the other hand, the mere fact of having a mentally retarded children is enough to degrade arousal threshold of the parents and other members of the family, which in turn, degrades adaptability capacity of the family members in and outside the family. This may result in family breakdown and to avoid this proper and timely interventions are needed.

Along with anger management, another variable of the study is cognitive therapy. Cognitive theory has its roots in the hypothesis that the way people interpret their experiences has notable effect on their emotions and actions and their psychological performance in general (Saduk, 2005).

Cognitive therapy is a way to solve cognitive errors and perceive matters as they are; proper perception of things can help us to develop proper behavior. Cognitive therapy helps us to think right and perceive right so that it can be considered as a logic that helps family to achieve right perception of issues.

Weight and power of cognitive therapy in solving behavioral problems on one hand, and intensity of psychological pressures in families with mentally retarded child along with paucity of studies in this field on the other hand convinced the authors to conduct the present study. In light of this, the present study is aimed at using group cognitive therapy to help mothers of mentally retarded children to manager better their anger.

2. Methodology

The study design is experimental with pretest/posttest and control and experiment groups. Study population was comprised of all mothers of mentally retarded children registered in Esfaraieen Shahid Dastgheib School (100 students).

The participants were selected randomly so that after making arrangement with the authorities of the schools, mothers of all the students were invited to an introduction meeting to learn about cognitive therapy and the study plan. Sigl's Multidimensional anger Questionnaire was administered among the patents and they were asked to fill out the questionnaire by spending enough time and carefully studying and choosing the items that best described them. Afterward, all the completely filled out questionnaires were examined and based on a pretest 30 participants how obtained higher t1 points were selected among 100 candidates. Afterward, the 30 participants were grouped in experiment and control groups of 15. The experiment group received trainings about cognitive therapy and its effect on anger management and the control group received no training. The intervention was eight sessions (120min) held in the school. The participants in the sessions were sit in circle so that they could see each other and the therapist throughout the sessions. The training materials were presented on a whiteboard. The first session was introduction session to the concept of cognitive therapy and anger management (learning to manage aggression, developing self-control on thoughts and actions, determining and naming different emotions, definition of anger, determining intensity of anger, and receiving support and feedback from others). The second session was about how to analyze the pattern of anger and distinguishing anger from the emotions that trigger the anger. The third session dealt with signs of anger (physical, emotional, behavioral, and cognitive signs), which tell the person that they are becoming angry. Session four was dedicated to introduction to plans to control anger and how to use specific strategies such as leaving the place and calming down. Session five and six was on the pattern *abcd* as a cognitive reconstruction problem and halting the thoughts which can replace *abcd* pattern. Where, *A = Activating Event* is an activator event; *B = Belief System* represents our beliefs about the activator event; *C = Consequences*, represents challenging irrational beliefs and how to deal with them through adopting more logical or rational viewpoints toward the activator event. *D = Dispute*, refers to a very important step in the anger management process.

We need to examine our beliefs and expectations. Are they unrealistic or irrational? If so, what may be an alternative and calmer way to relate to the situation? By "disputing" those knee-jerk beliefs about the situation, we can take a more rational and balanced approach, which can help us control our anger. Session seven was dedicated to topics regarding the outcomes of anger and its effect on the children and family; and eventually session eight was on the ways of self-rewarding/punishing and also preserving approaches. The posttest was conducted at the end of eighth session and the control group received the same test without receiving any psychiatric treatment. Descriptive statistics were used to organize the quantitative information from the questionnaire. It is notable that during intervention course, the control group participated in 6 open discussion sessions with presence of the therapist, which were mainly on irrelevant matters. Through this, the effect of therapist's presence was controlled. In addition, literacy level of the participants was checks- i.e. all the participants had high school diploma or lower degrees.

Research Tool

Multidimensional anger Questionnaire was used to assess general anger of the participants (Ganda, 2001; translated by Besharat & Habibzadeh, 2005). The questionnaire is comprised of 38 self-reporting statements. It is designed to measure anger arousal, anger eliciting situation, and hostile attitude or internal and external angers. The statements are designed based on Likerts' five-point scale. As to scoring the responses, each one of the factors can be scored independently or a general score can be obtain for the five factors; point of statements 2, 23, and 25 are inversely counted. People who obtained above mean point are aggressive and those below the mean point were not aggressive. Regarding the Farsi version of the questionnaire, Cronbach's alpha of each subscale for a study group of 180 participants is obtained $r = .79$ for hostile attitude, $r = .94$ for external anger, and $r = .90$ for anger-in. Additionally, the Pearson's correlation coefficient for two sets of points obtained within two weeks interval is obtained $r = .65$ for anger arousal, $r = .82$ for anger eliciting situation, $r = .70$ for hostile attitude, and $r = .86$ for external anger, and $r = .84$ for anger-in; thus, reliability of the questionnaire is confirmed.

3. Findings

Mean and standard deviation of all the variables are listed in Table 1. Clearly, mean point of the experiment group is decreased in posttest, which is not the case for the control group.

Table 1. Mean and standard deviation in control and experimental groups of pre and post tests.

Variable	Pretest				Posttest			
	Control group		Experimental group		Control group		Experimental group	
	SD	Mean	SD	Mean	SD	Mean	SD	Mean
mothers' anger	29/00	20/305	45/00	15/937	29/00	20/305	23/00	10/73
Anger arousal	11/30	2/86	8/36	5/34	7/46	5/08	4/73	2/75
anger eliciting situation	3/56	1/04	8/20	3/22	6/8	5/76	3/11	2/63
Hostile attitudes	4/16	2/52	28/96	12/59	3/10	2/64	10/23	5/41
anger-out	11/73	3/55	15/23	7/38	10/93	7/10	8/56	4/33
anger-out	12/73	4/31	24/30	11/95	9/63	5/67	10/70	5/58

Table 2. z value in the variable of mothers' anger

Variable	N	Mean	SD	Z	Sig
Mother's anger	60	20/13	10/59	1/17	0/128

To analyze the data, covariance analysis was used. The prerequisites of the statistic model are as follows: Normal distribution of the variables with Z value of Kolmogrov Smirnov (KS) between -1.96 and +1.96, normal distribution is ascertained.

Homogeneity and variance of the variables آزمون لون was used to check homogeneity and variances and regarding the variable mothers' anger $F = 10.05$ and $P = 0.12$.

Table 3.

Variable	F ratio	df	df2	Sig
Mother's anger	10/05	1	58	0/12

Regression homogeneity of the variables

Value of F was used to check regression homogeneity; so that in the case of significant F, regression homogeneity is rejected and otherwise is confirmed.

Table 3.

Variable	Cause of variation	Total squares	df	Mean square	F	Sig
Mothers' anger	Group	432/42	1	432/42	20/110	0/67
	Pre-test point	266/09	1	266/09	12/363	0/001
	Pre-test group	696/65	1	696/65	32/349	0/53

In summary, all prerequisites to perform covariance analysis are met.

Covariance analysis result are listed below.

Table 4.

Source	Pre-test		Group	
	F	Sig	F	Sig
Total anger	6/974	0/011	16/199	0/000
Anger-arousal	15/689	0/03	6/769	0/049
anger eliciting situation	29/425	0/000	7/261	0/015
hostile attitude	18/962	0/001	6/514	0/038
anger-out	45/670	0/000	8/973	0/008
anger-in	103/206	0/000	6/863	0/018

The results of covariance analysis showed that there was a significant relationship between education and anger management among the mothers (p value = 0.000, α = 0.05). Therefore, H_0 is not supported and H_1 is supported. The results showed positive and significant effect of the trainings on attenuating the participants' anger. Additionally, the trainings had positive effect on anger arousal, anger-in, anger-out, hostile attitude, and more control over anger-eliciting situations at significant level of (0.015), (0.038), (0.008), (0.018), and (0.049) respectively.

4. Discussion and conclusion

The recent years have witnessed more attention to anger as one of the main problems of interpersonal relationships (Coup and Lendberg, 1992; Nolo Shoaski and Frachlekeh, 1992). On the other hand, as recommended by studies, parents of mentally retarded children suffer from many emotional and familial problems (Beckman, 1991); stress, depression, and anger are of the common emotions that these parents experience (Bigner, 1989). Khajepour (1998) showed in a study that depression and neurotic reactions of mothers of mentally retarded children were considerably high, so that mother-child interaction was not as efficient as expected.

In their attempt to find the reasons of anger and its effects on social life of people, a group of researchers have admitted that anger is controllable through improving one's awareness of the situations that leads to anger and also the ways to control and manage anger.

We tried to improved anger management of the participant mothers through an 8 session group cognitive therapy program. The results showed significant differences between the experiment and control groups regarding the indicators and extent of anger management. That is, the intervention resulted in considerable reduction of anger in mothers of mentally retarded children.

The results are consistent with studies that have concluded that cognitive therapy interventions are positively effective in anger management. For instance, Acton and Divering (1992) observed that implementation of anger management program improved parents-children relationship, attenuates physical aggressions and aggression of the parents. Ketz and Nemlini studied the effects of anger management on the parents. Their study was comprised of opportunities to practice in simulated situations. The practices includes self-improvement, self-training, control, self-observation, taking deep

breath in anger-eliciting situation, and introduction to psychological signs and functions of anger-arousal factor. The results indicated that anger and misbehavior were reduced among the parents after the intervention (Ketz and Nemlini, 2004).

Shokouhi Yekta et al. (2008) concluded after training anger management to mothers of educable feeble-minded mentally retarded children over eight 120min sessions that the participants had better performance in controlling their anger. The intervention improved using anger control approaches. In addition, the study showed that the parents had better performance concerning therapeutic interventions from different aspects including anger-arousal, anger-out, anger-in, hostile attitude, and anger eliciting situation indices. Moreover, Rahimi Ahmadabadi et al. (2014) reported significant effects of behavioral cognitive program on controlling anger-in and anger-out among brain injured patients. Shokouhi Yekta et al. (2008) also confirmed the effect of trainings on the elements of anger; although, they concluded that the effect of the training on anger-out was not significant. Following Noako to explain their result, they argued that emotional anger is a natural reaction and there might be no direct relationship between levels of anger and aggressive responses. In general, the results indicated effectiveness of group cognitive therapy on attenuating anger among mothers of mentally retarded children. To elaborate on the findings, according to Ellis, majority of emotional problems of people and pertinent behaviors are rooted in their irrational expression with themselves when they encounter with unwanted situations. People who react irrationally to painful events of their lives may find any trivial matter a disaster and say to themselves that the events are so painful that they cannot stand them (Seif, 2008).

Cognition theory is based on the essential attachment of the elements of thoughts, feelings, and behavior. The main goal of the therapist is to increase awareness about early aggressive preliminary arousal and training self-control skills and eventually lessening probability of aggressive behaviors (Shakibaei et al., 2004).

Cognitive interventions implemented throughout the present study and other similar works were effective in cutting the participants' anger from several viewpoints. For one thing, familiarization with the biological and cognitive bases of anger and the type of reactions that angry people demonstrate help the participants to improve their self-awareness. The self-awareness, in turn, leads to reduction of anger. For another, training strategies to control anger is a proper replacement for irrational and abnormal behaviors.

Along with the notable results that the present study achieved regarding group cognitive therapy on the participants, limitations of the study should not be forgotten. The sample group was selected from specific age and cultural group for instance; in addition, the sample group was small and the intervention time was short. Additionally, there was no follow up assessment and, therefore, generalization of the results is not easy. Doubtlessly, however, future works can find new results in this area. It is recommended, therefore, that future works can evaluate value of the intervention method by removing the limitations mentioned. The main aim should be improvement in emotional and behavioral status and anger management in the families.

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