

Investigating the effectiveness of Acceptance and Commitment Therapy(ACT) on Functioning of Family with Children suffering from Mental Retardation

Delaram Badiiee ^a, Rezvan Sadat Jazayeri ^b, Ahmad Ahmadi ^c, Fatemeh Bahrami ^d

^a *Master in Psychology, Isfahan University, Isfahan, Iran.*

^b *Assistant Professor in Psychology, Isfahan University, Isfahan, Iran.*

^c *Professor in Psychology, Isfahan University, Isfahan, Iran.*

^d *Professor in Psychology, Isfahan University, Isfahan, Iran.*

Abstract

The purpose of the present study was to investigate the effect of Acceptance and Commitment Therapy (ACT) on function of families with children suffering from mental retardation. The method of this study was quasi-experimental with a pre-test post-test design with a control group. The sample of the study included all the mothers with children suffering from mental retardation in Isfahan. Convenience sampling was used and 40 individuals were selected and assigned to the experimental and control groups randomly. The participants of the experimental group were exposed to Acceptance and Commitment Therapy(ACT) sessions for 8 sessions of 90 minutes. The control group received no intervention. The instrument of this study included Bloom's Family Functioning Scale. ANCOVA analysis was used to analyze the data. The findings of the study showed that Acceptance and Commitment Therapy(ACT) was effective on function of families ($P < 0.0001$). It is better that for increase function of family use of Acceptance and Commitment Therapy(ACT).

Keywords: Acceptance and Commitment Therapy, Functioning of Family, Mental Retardation, Children

Introduction:

Mental retardation (MR) is a genetic disorder manifested in significantly below average overall intellectual functioning and deficits in adaptive behavior. Mental retardation is a particular state of functioning that begins in childhood and is characterized by decreased intelligence and adaptive skills and also is the most common developmental disorder (Bregman, 1991). MR retardation in young children is often missed by clinicians. The condition is present in 2 to 3 percent of the population, either as an isolated finding or as part of a syndrome or broader disorder (Daily, Ardinger & Holmes, 2000).

Causes of mental retardation are numerous and include genetic and environmental factors. In at least 30 to 50 percent of cases, physicians are unable to determine etiology despite thorough evaluation (Baird & Sadovnick, 1985). Diagnosis is highly dependent on a comprehensive personal and family medical history, a complete physical examination and a careful developmental assessment of the child. These will guide appropriate evaluations and referrals to provide genetic counseling, resources for the family and early intervention programs for the child (Rutter, 2006).

Diseases and disabilities such as mental retardation are among the acute problems of human society in the present era. Many families carry heavy emotional burdens due to having such children. Parents face high medical and educational costs, the exacerbation of marital disputes, fear of having children again, feeling of guilt and isolationism. Members of these families need help and consultation to solve their problems and reduce emotional stress. Children with physical and mental disorders affect the mental health of parents (Baker, 2007, as cited in Khakpoor & Mehrafarid, 2012). Children suffering from mental retardation and their parents not only affect each other, but also affect other members of the family (Khakpoor & Mehrafarid, 2012).

Theoretical basis of research:

Functioning of family

Children suffering from mental retardation sometimes disrupt the mental health of families and can severely damage their family functioning (Hewison, 1997, as cited in Khakpoor & Mehrafarid, 2012). Family functioning is a set of tasks, roles and expectations that the family members have in confrontation with each other (Najarian, 1995).

Families with children suffering from mental retardation are also responsible for educating and taking care of these children in addition to their responsibilities about other children, the family and the aforementioned roles (Jahangir, 2012 as cited in Badiiee, 2014). Evidence shows that there is a relationship between the intensity and frequency of behavioural problems in children suffering from mental retardation and mental problems and stress in parents such as stress and anxiety (Duvdevany & Abboud, 2003).

Acceptance and Commitment Therapy (ACT)

In Acceptance and Commitment Therapy (ACT), it is assumed that humans find their feelings, emotions, or internal thoughts irritating and continually try to change these internal experiences or get rid of them. These efforts are ineffective in controlling and, in contrast, led to the exacerbation of feelings, emotions and thoughts the individual initially tried to avoid (Hayes, Strosahl & Wilson, 2004).

Acceptance and Commitment Therapy (ACT) includes six central processes that lead to psychological flexibility. These six processes include: Acceptance versus avoidance, diffusion versus cognitive diffusion, self as a concept versus conceptualized self, contact with present moment versus overcome past

and conceptualized future, stipulation of values versus lack of stipulation of values, and their relationship with commitment versus passivity(Hayes & Smit, 2004).

Thus, families play significant roles in defining the roles and responsibilities of members, understanding the assigned roles, assigning fair and reasonable tasks and roles, planning for conducting the tasks, defining roles and boundaries for members, legislating to establish order in the family, supporting each other in times of crisis, having proper relationship, mutual trust and accountability. So this study is due for investigate the effectiveness Acceptance and Commitment Therapy(ACT) for Functioning of Family with Children suffering from Mental Retardation.

The hypothesis of this study is as follows:

-ACT is effective in increasing the function of families of mothers with children suffering from mental retardation.

Research Background

Hayes et al (2004) say that these efforts are ineffective in controlling and, in contrast, led to the exacerbation of feelings, emotions and thoughts the individual initially tried to avoid.

Gharaei Ardakani et al(2014) investigate the effectiveness of acceptance and commitment therapy on mental health in women with chronic pain, and pose ACT is effective on mental health.

Badiee(2014) posed the ACT is Effective on functioning family with children suffering from mental retardation.

Research methodology

The population, sample and sampling

The method of this study was with a pre-test and post-test and a control group. The population of this study included all the mothers of children suffering from mental retardation in 2013-2014 in Isfahan city(In IRAN). The sample of this study included 40 mothers with children suffering from mental retardation who were selected through convenience sampling. They were assigned to the experimental and control groups randomly. First, announcements of the summary of the topic of this research were exhibited in Soroush School for the children suffering from mental retardation located in District 4, Isfahan. Forty mothers volunteered among whom 20 were assigned to the experimental group and 20 were assigned to the control group. The experimental group participated in 8 sessions of 90 minutes and the control group received no intervention. ANCOVA was used to analyze the data. For gathering the data, from bellow instrument was used.

Research tools

Bloom's Family Functioning Scale: This scale was developed by Bloom for assessing the family functioning internal system. This test has 75 questions and descriptive phrases about family characteristics. He categorized them in 15 significantly independent areas in addition to factor analysis. These dimensions include: Correlation(cohesion) is the instrument and self-expression in the family system, conflict, intellectual-cultural tendencies, active recreational tendencies, religious deboning, organization and personal and family discipline, family socialization, external locus of control, family ideal, disconnection, liberalism family style, unrestrained family style, authoritarian family style, stress and lack of independence of members.

This test is a self-descriptive instrument. The subject should select from among four choices, i.e., Always, Usually, Sometimes, or Never, and receive 4, 3, 2, or 1 respectively. Thus, the subjects will obtain a total score from 75 to 300; each of the 15 dimensions also receive a score with a range from 5 to 20. In this test, 34 items are scored reversely and the remaining are scored normally. The items related to each sub-scale are after each other, i.e., the first 5 items are related to correlation, the next 5 items are related to self-expression, etc. In general, a high score on each of the 15 dimensions of this test indicates improper function of families in that dimension (Badiie, 2014). A summary of group consultation sessions is presented below:

Table1. Summary of consultation sessions

The format of Acceptance and Commitment Therapy in the form of group workshops for families with children with specific needs (Mehr Doosti, 2011)

Session 1	<i>Establishing communication and introducing members/brief explanation of therapeutic orientation and therapy</i>
Session 2	<i>The description strategies used by the visitors and their ineffectiveness, decreasing the dependence of visitors on used strategies/developing a tendency to get rid of ineffective strategies</i>
Session 3	<i>Introducing control as a problem, common ways to control thoughts and feelings, and expressing the adverse effects of applying them</i>
Session 4	<i>Instructing the limitations of language in understanding direct experiences, educating self-awareness, weakening the amalgamation of the self and language</i>
Session 5	<i>Weakening the dependence to the conceptualized self, developing awareness of the watching self, distinction between the conceptualized self and the watching self</i>
Session 6	<i>Awareness and acceptance, instructing mindfulness</i>
Session 7	<i>Understanding the importance of value-based life, understanding the performance of goals in developing a healthy life, developing a framework of values in the main life domains</i>
Session 8	<i>Presenting a summary of the issues discussed in the previous sessions and removing the ambiguities of families, applying skills/summarizing and concluding</i>

The Analysis of Data

We have used Descriptive statistics and inferential statistics such as ANCOVA.

Research Findings

First hypothesis: ACT is effective in increasing the function of families of mothers with children suffering from mental retardation.

Table2: Kalmogorov–Smiranov Test for family Functioning scores

variable	Mean	Standard Deviation	K_S_Z	Sig
Family Functioning	115/82	34/54	1/11	0/1

As you can see, P in the Kalmogorov–Smiranov Table is greater than 0.05, thus, the data is distributed normally.

Table3: Leven test investigating the homogeneity of variances in experimental and control groups

Variable	F	Degree of Freedom1	Degree of Freedom2	Sig
Family functioning	1/44	1	38	0/23

As you can see, P in the Leven Table is greater than 0.05, thus, the variances are homogeneous.

Table4: the mean and standard deviation of the scores on the pre-test and post-test of family functioning

Variable	Group	Quantity	Pre-test Mean and Standard deviation	Post-test Mean and Standard deviation
Family Functioning	Experimental	20	110.85 (34.66)	114.8 (34.65)
	Control	20	114.99 (35.86)	116.85 (35.30)

As you can see from the above table, the mean of family functioning scores on the post-test of the experimental group has increased in comparison to the pre-test, but, the family functioning scores on the post-test of the control group has not increased.

Table5: The results of covariance analysis related to family functioning in experimental and control groups on the post-test

Variable	Sum of squares	Degree of Freedom	Mean square	F	Sig	Chi Eta
Family functioning	42/72	1	42/72	14/14	0/001	0/28

As you can see in the above table, after removing the effect of pre-test on the dependent variable and regarding the calculated F Coefficient, it can be seen that there is a difference between the adjusted mean scores of family functioning of subjects depending on their groups (experimental and control) on the post-test phase ($P < 0.001$, $F = 14.14$). Thus, the hypothesis was confirmed. Thus, ACT has been effective in increasing the family functioning of the experimental group on the post-test. This effect in the post-test phase was 0.28.

Conclusion:

By regarding the results of statistical analyses, the hypothesis of the study was confirmed. The results of this study was in line with the findings of Gharaei Ardakani et al(2014). There is no doubt that moving in the framework of values is an essential issue. Indeed, family functioning is desirable when it is in the framework of values. Family functioning can be judged with the success of families in achieving or not achieving, and moving or not moving in the direction of values. Families with children suffering from mental retardation are not exceptions to this rule. Functioning of such families are sometimes faced with shortcomings due to their problems. This takes their ability to move in the direction of values. ACT helps to improve the functioning of these families by focusing on clarification and stipulation of values, identification of the barriers and developing a sense of commitment.

ACT helps these families to distinguish between realities and internal events, and base operation and performance on realities more. The focus of this approach on rupture and no amalgamation can improve the efficiency and functioning of individuals. Regarding families with children suffering from mental retardation, this therapy helps them to distinguish between reality and internal events and act based on realities. In addition to individuals, this rupture can improve the functioning of families.

The effective factor in family condition is the functioning of families. Functioning is the behaviours of family members. Improving the behaviour of family members can improve the functioning of families. In the conducted therapy, mothers found out that they should accept their feelings, thoughts, memories, desires and physical pains and behave commensurate with situations to his benefit and in the direction of his values. The behaviour of families improves simultaneously with the change in the attitude of families. As said before, family functioning depends on the behaviour of family members. Many families with children with specific needs are involved with problems that sometimes intensifies due to lack of awareness of how to deal with them. For example, such families are unaware of how to behave with their children or the parents sometimes have some disputes. These issues decrease the family functioning. In ACT, families are helped to identify the barriers and instructed to solve these problems by methods like problem-solving approach and parenting. This can improve the family functioning.

Practical suggestions:

The results have shown that ACT affects on the Functioning of Family. So we have some suggestions as bellow:

-Attending therapy sessions provide the opportunity to get familiar with people with similar problems and use their experiences, changes and methods to solve problems.

-In these sessions, members observed the change and success of other members and tried to solve their problems and improve their functioning regarding the experience of other members.

To maintain and retain functioning of Family, it is better that ACT to be used. Also its suggested to use systems like workshop, and training for family with Children suffering from Mental Retardation.

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