



Comparing the Effectiveness of Acceptance and Commitment Therapy and Reality Therapy on Parent-Child Relationship

Fatemeh Vahid¹ , Mohammad Esmail Ebrahimi^{2*} , Rasool Kord Noghabi³ 

¹ PhD Student, Department of Psychology, Sanandaj Branch, Islamic Azad University, Sanandaj, Iran

² Assistant Professor, Department of Psychology, Faculty of Humanities, Hamedan Branch, Islamic Azad University, Hamedan, Iran

³ Professor, Department of Psychology, Faculty of Economic and Social Sciences, Bu-Ali Sina University, Hamadan, Iran

***Corresponding author:**

Mohammad Esmail Ebrahimi,
Department of Psychology, Faculty of
Humanities, Hamedan Branch, Islamic
Azad University, Hamedan, Iran.
Tel: 09127849470
Email: mse58_2007@yahoo.com

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Abstract

Background and Objective: Adolescence is a unique period of transition that is associated with physical, psychological, and social changes. In addition to these changes, the discovery of identity is also considered one of the most important features of this period. As a result, the need for independence grows, prompting individuals to explore their self-concept and values, which in turn leads to changes within the family that trigger further transformations. In parent-child relationships, this research was conducted with the aim of comparing the effectiveness of acceptance and commitment therapy (ACT) and reality therapy (RT) in a group setting on the parent-child relationship in teenage students.

Materials and Methods: The research method was quasi-experimental with a pretest-posttest design and a control group. The research population included all male secondary school students of the 2nd district of Hamadan city who were studying in the academic year 2022-2023. From these, 3 groups of 20 people each were selected by multi-stage cluster sampling method and randomly divided into experimental and control groups. The samples completed the Parent-Child Relationship Survey by Fine, Moreland, and Scobel (1983) in two pre-post sessions. The participants in the experimental groups underwent treatment using the ACT and RT methods in eight 60-minute sessions each week, while the control group did not receive any training. The data were statistically analyzed in SPSS software (version 23) using the analysis of covariance test at a significant level of $p < 0.05$.

Results: The findings indicated that the average post-test score for the group undergoing the ACT-based treatment for the father-child relationship was 20.5 points higher than that of the control group ($i-j=20.5$, $sig=0.034$). Additionally, the mean post-test score for the group receiving RT for the parent-child relationship surpassed the control group by 42.9 points ($i-j=42.9$, $sig=0.0001$).

Conclusions: The results of this study suggest that both ACT and RT contributed to enhancing the father-child relationship.

Keywords: Acceptance and commitment, Reality therapy, Parent child relationship, Students

Background

Adolescence is a unique period of transition that is associated with physical, psychological, and social changes. In addition to these changes, the discovery of identity is considered one of the most important features of this period [1]. As teenagers gradually progress in this age period, their needs change compared to those of childhood, their need for independence increases, and they seek to build their self-concept and values, which will also lead to changes in the family [2]. Entering this course challenges teenagers and parents. Adolescents may perceive their parents as stricter and more controlling than before and consider their parents irresponsible

and unruly, and this makes them and their parents face challenges on how to reorganize their responsibilities and adjust their family relationships [3]. At first, parents cannot understand why their teen likes to run away from family activities to be with friends, and they become very anxious about their teen's behavior. They see a deep gap between themselves and their teenager and feel threatened [4]. If these conflicts are too much, it is considered a danger to the well-being and psychosocial adaptation of teenagers, the teenager imagines that his parents do not understand him and his needs, and this will reduce the closeness between him and his parents [5].

A review of the research literature shows that the family and the parent-child relationship have a strong influence on the mental health of adolescents. These relationships can be considered the field of social microbiology in which important others provide their own feedback in a way that supports the psycho-social development of the young generation, especially in the transition from childhood to adolescence and from adolescence to early adulthood [6].

In fact, intimacy, emotional relationships, and emotional support, along with parental supervision and guidance, are related to reducing the possibility of risky behaviors in teenagers [7], and strong differences in the family cause emotional and behavioral problems in teenagers. Studies conducted in this field have pointed out challenges and solutions, most of which are focused on parenting methods and their effects on adolescent behavior management [8]. However, there is no clear answer for parents to know how to overcome the challenges of this age, and there is very limited qualitative research on identifying the needs of adolescents in relation to their parents. In this sense, parents are not aware of the deep needs of teenagers, and this issue can be a factor in family disputes in this age period [9].

Iranian parents and teenagers are not exempt from this issue as they also face such problems in their relationships that can affect their mental health. The parent-adolescent relationship is crucial for the mental health of adolescents, highlighting the need to enhance this relationship to reduce tension and conflicts between parents and their children. Additionally, the foundation of any preventive or interventional measures lies in accurately identifying the relevant problems and existing needs; therefore, the current study aims to improve the parent-child relationship through education and the implementation of psychological treatments.

Among various treatment approaches, education focused on adaptation, skills, and treatment is the most important method for children and adolescents, alongside medication. One effective therapeutic intervention aimed at enhancing adolescents' mental flexibility, improving the adaptation of parents, and parent-child relationships is Acceptance and Commitment Therapy (ACT).

Treatment based on ACT, as one of the newly emerging treatments of the third wave, uses a combination of mindfulness along with behavioral principles and a person's correct perception of his personal values in order to increase the psychological flexibility of the person. The main components of this treatment include six core processes that lead to psychological flexibility [10]. What is important in ACT is to achieve a general process called the improvement of the parent-child relationship, helping

individuals become aware of their thoughts and emotions, stay grounded in the present, and engage in behaviors aligned with their values, thereby promoting commitment to those values [11]. This therapy seems to be suitable for Iranian parents due to its combination with Eastern techniques [12]. Previous studies have shown that this treatment improves symptoms and parent-child communication in children and adolescents [13], regulates emotions [14], increases mindfulness, reduces conflicts between parents and adolescents [15], alleviates psychological distress [16], and enhances parental psychological well-being [17].

This study investigates the effectiveness of ACT on the parent-child relationship with an emphasis on metaphor and simile of experimental exercises to free oneself from verbal content and create more connection with the continuity of experience in the present. In this treatment, instead of making a change in cognition and conflict with them, the effort is to improve the psychological relationship of the person with his feelings and thoughts [18], which ultimately leads to the improvement of relationships with others. Among the various beneficial third-wave treatment approaches is Reality Therapy (RT), a counseling and psychotherapy method developed by Glaser [19]. Reality Therapy is grounded in an educational theory that encompasses both prevention and treatment [20]. This theory serves various functions across settings such as home, school, and medical facilities [21]. The primary objective of RT is to help individuals transform their unsuccessful identities and develop responsible behaviors, as these behaviors can lead to discomfort and anxiety, adversely affecting parent-child relationships [22]. According to Glaser, people are more motivated by internal stimuli than by external stimuli [23].

All behaviors exhibited by an individual are aimed at fulfilling five essential needs. The emergence of any contradictory behavior in a person represents their attempt to manage their perceptions and take control of their life. This suggests that anxiety, depression, and aggression stem from the individual's choices. By making incorrect and unintentional choices, individuals may inadvertently seek to cope with anger and loneliness while seeking support from others [24]. Consequently, it can be concluded that both of these therapeutic approaches are part of the third wave due to their strong emphasis on action rather than thought, as well as their focus on moral values and strategic planning. However, the key distinction lies in the fact that unlike Reality Therapy—which views the primary issue as the attempt to control others and places emphasis on interpersonal relationships [24]—ACT considers the root of problems to be internal, aiming to address and manage unpleasant thoughts

and feelings rather than suppressing or controlling them at all costs [25]. Furthermore, in terms of their theoretical frameworks, RT dedicates much of its training to teaching individuals how to fulfill their five needs responsibly and independently of others [24], while ACT encourages individuals to engage in effective, value-driven behaviors by focusing on values and using fault, acceptance, and mindfulness [25]. This raises a question for researchers regarding which approach is more effective in addressing the problems deemed as the study's dependent variable. Therefore, this study seeks to determine whether there is a difference in the effectiveness of ACT and RT on the parent-child relationship of male students in secondary high school.

Objectives

This research was conducted with the aim of comparing the effectiveness of ACT and RT in a group setting on the parent-child relationship in teenage students.

Materials and Methods

The research method was quasi-experimental with a pretest-posttest design and a control group. The research population included all male secondary school students of the 2nd district of Hamedan city who were studying in the academic year of 2022-2023. Participants were selected through multi-stage cluster sampling. Based on similar studies, such as the research conducted by Linehan and Dimf et al., 10% of each group was calculated to comprise 20 individuals, who were assigned randomly to three groups. The sample was selected using multi-stage cluster sampling and the sample size was calculated by considering an effect size of 0.40, a confidence level of 0.95, a test power of 0.80, and a dropout rate of 10%. 20 people were randomly assigned to the first experimental group (acceptance and commitment therapy), 20 to the second experimental group (reality therapy), and 20 to the control group. They answered the academic engagement assessment questionnaire in 2 stages. This resulted in 20 participants in the first experimental group (ACT), 20 in the second experimental group (RT Therapy), and 20 in the control group. All participants completed the Parent-Child Relationship Survey in two separate stages. Inclusion criteria were: 1. Male students; 2. Students in the secondary high school; 3. Students from the second district of Hamedan city. Exclusion criteria included having more than two absences, lack of cooperation, failure to complete assigned tasks in class, and unwillingness to continue participating in the research.

The individuals in the ACT group received training during eight 60-minute sessions weekly as a group,

following the treatment protocol established by Hayes et al. [27]. Meanwhile, those in the RT (RT) group participated in eight 60-minute sessions as per the protocol outlined by Glaser et al. [28]. The control group did not receive any training.

The research tool was the Parent-Child Relationship Survey developed by Fine, Moreland, and Scobel in 1983 [29]. This 24-item questionnaire measures the quality of communication between parents and children and has two forms: one for measuring the child's relationship with the mother and the other for measuring the child's relationship with the father. Both forms are the same for father and mother, except for the words "father" and "mother," which are interchangeable. However, there are different factors in parent forms. The components of the father's version include positive emotions, the father's conflict and fusion, communication, and anger, while the components of the mother's version include positive emotions, hatred/role confusion, identity determination, and communication. The questionnaire is scored on a 7-point Likert scale. Items 9, 13, and 14 are reverse scored, and then the scores for the options are summed and divided by the number of options for each factor to calculate the mean for each subscale. The total score is the average sum of the subscales [30]. In the research conducted by Fine, Moreland, and Scobel [29], the validity and reliability of the parent-child relationship scale were demonstrated, with alpha coefficients ranging from 0.89 to 0.94 for the subscales related to fathers, an overall alpha of 0.96, and coefficients from 0.61 to 0.94 for the subscales related to the mother. The total alpha showed an excellent internal consistency of 0.96. These alpha coefficients were obtained by the creators of the scale by implementing the questionnaire on 241 subjects. In the research conducted by Irani [31], the final coefficient calculated for the father's form was equal to 0.93, and for the mother's form was 0.92, which indicated good internal consistency. By distinguishing between children of divorced families and children of healthy families, this questionnaire has well-known group validity and good predictive validity.

Acceptance and Commitment Therapy

In the present study, a therapy protocol was developed based on the method of Hayes et al. (2006) [27]. This program was implemented by the therapist in eight 60-minute sessions over 8 weeks.

Reality Therapy

In the present study, a therapeutic protocol was

developed based on the method of Glaser et al.'s protocol [28]. This program was implemented by the

therapist in eight 60-minute sessions for 8 weeks.

Table 1. Subjects of acceptance and commitment training sessions [27]

Sessions	Content
First session	Establishing a therapeutic relationship, concluding a therapeutic contract, psychological training
Second session	Discussing experiences and evaluating them, efficiency as a measure, generating creative frustration
Third session	Articulating control as a problem, introducing desire as another response, engaging in purposeful actions
Fourth Session	Using cognitive breakdown techniques, interfering with the functioning of problematic language chains, weakening one's alliance with thoughts and emotions
Fifth session	Viewing self as context, undermining self-concept and self-expression as an observer, showing separation between self, inner experiences, and behavior
Sixth session	Applying mental techniques, patterning of leaving the mind, training to see inner experiences as a process
Seventh session	Introducing value, showing the dangers of focusing on results, discovering the practical values of life
Eighth session	Understanding the nature of desire and commitment, determining action patterns in accordance with values

Table 2. Description of the reality therapy package

Session	Content
First session	Introduction, determining group rules with the cooperation of members, examining the importance and role of communication skills, familiarizing group members with each other, establishing a relationship based on trust between members, and communicating group rules
Second session	Teaching the concepts and theories of RT, introducing how and why people behave, focusing on the members' awareness and knowledge of themselves and the way this knowledge affects the person and others, identifying strengths and weaknesses and trying to achieve a successful identity, helping members to learn more about themselves and their basic needs (recognizing the 5 main human needs, listing the members' basic needs with their own efforts and checking the importance of meeting these needs)
Third session	Getting feedback from the last meeting, asking for an explanation about the general view of the members related to their current employment and everyday life, examining the reasons for the attitude of the group members about the current life situation, examining people's goals for their lives and determining their purposefulness, introducing behavior and familiarizing members with the four components of general behavior: thinking, feeling, action, and physiology, teaching decision-making skills, and interpreting changes in thoughts, feelings, actions, physiological in time now
Fourth Session	Introducing and defining the four conflicts and forced behaviors, determining the level of access or failure of the group members to use the behavior and action in the present time in order to be employed, and checking how their current behavior can help the members reach their goals and needs
Fifth session	Helping members to recognize their behavior and feelings in the present, showing less importance to the past compared to today's behaviors, emphasizing internal control compared to employment, and introducing members to emotions, such as anxiety and depression, from the perspective of RT and body skill training. Calmness in order to control and regulate emotions to show the importance of planning to do things faster and better, to use time properly, and to teach proper planning to achieve other goals in everyday life
Sixth session	Acquainting members with their responsibilities, helping them accept responsibilities and increase responsibility for their behavior choices and solutions that cause the tendency to despair and decrease happiness in employment, introducing and explaining destructive and constructive behaviors in relationships, and teaching how to live in the moment
Seventh session	Teaching the ten principles and concepts of the selection approach, accepting responsibility for behavior, getting to know the issues of change and commitment, doing a little homework based on increasing self-esteem and valuable self-concept until the next meeting, and getting a written commitment letter from the members in order to implement that and not making any excuses
Eighth session	Getting feedback from previous meetings, reviewing them and summarizing, reviewing and re-emphasizing to accept responsibility by members, helping people to use internal control, facing reality, making moral judgments about the rightness or wrongness of behavior, living in the moment, and ultimately, the process of change that reduces anxiety and increases positive emotions

The data were statistically analyzed in SPSS software (version 23) using analysis of covariance at a significance level of $P < 0.05$.

Results

In this chapter, the statistical status of the respondents is described first, and then the research hypotheses are tested statistically. This research investigated and compared the effectiveness of ACT and RT in a group setting on the parent-child relationship among students. For this purpose, an analysis of covariance was employed. Before conducting the test, the multivariate analysis

of variance was used to confirm that the three groups were equal in the pre-test. Additionally, necessary conditions for performing the covariance analysis were assessed, including data normality, linearity of the relationship between pre-test and post-test variables, homogeneity of variances, homogeneity of covariances, and the assumption of multiple non-collinearities among the dependent variables.

Table 3. Parent-child relationship status of students in pre-test and post-test

Scales	Groups	Number	Pre-test		Post-test	
			M	SD	M	SD
Father-child relationship	Experiment group 1 (ACT)	20	105.8	24.712	123	22.29
Mother-child relationship		20	124.6	27.08	140.8	26.92
Father-child relationship	Experimental group 2 (RT)	20	160.2	29.5	145.4	27.11
Mother-child relationship		20	126.2	14.79	159.25	9.86
Father-child relationship	Control group	20	102.6	23.7	102.5	22.97
Mother-child relationship		20	121.95	25.65	122.55	25.53

Table 4. Multivariate analysis of variance test

Effect	Value	F	df of the hypothesis	df of the significance	Sig	
Group	Lambda Wilkes	0.96	0.31	8	108	0.96

Table 5. Comparison of the subscales of the three groups in the pre-test

Sources change	Dependent variable	Sum of the squares	df	Mean square	F	Sig
Group effect	Father and son relationship	155.733	2	77.867	0.11	0.89
		1843.3	2	92.15	0.17	0.84
Error	Mother and child relationship	38821.2	57	681.074		
		30934.95	57	542.718		
Total	Father and son relationship	698798	60			
		957403	60			
Corrected sum	Mother and child relationship	38976.933	59			
		3119.25	59			

Table 6. Kolmogorov-Smirnov test to check the normality of the data

Test steps	Scales	Statistical values	ACT	RT	Control group
Pre-test	Father-child relationship	K-S	0.66	0.45	0.92
		Sig	0.77	0.98	0.36
	Mother-child relationship	K-S	0.83	0.66	0.74
		Sig	0.51	0.77	0.64
Post-test	Father-child relationship	K-S	0.51	0.78	0.95
		Sig	0.95	0.58	0.33
	Mother-child relationship	K-S	0.87	0.87	0.72
		Sig	0.44	0.44	0.68

According to the data in Table 4, the value of Wilkes' lambda ($f=0.31$ and $sig=0.96$); therefore, there is no significant difference between the studied groups in the pre-test, allowing us to conclude that the three groups are equal at this stage.

According to the data in Table 5, the test values (f and sig) obtained for each of the variables are as follows: father-child relationship ($f=0.11$ and $sig=0.89$) and mother-child relationship ($f=0.84$ and $sig=0.84$). These values show that the group did not have a significant effect on any of the variables in the pre-test, and the three groups were equal in the pre-test.

A- Examining compliance with the assumptions of covariance analysis test

In this section, the conditions of data normality, linearity of the relationship between variables, equality of variances and equality of covariances, and non-collinearity between dependent variables are examined.

1. Normality of the data: To check the normality of the data, a non-parametric Kolmogorov-Smirnov (K-S) test was used. Table 5 reports the results of the analysis.

According to the K-S and significant values for each of the tests, the data distribution was normal, and the normality of the data was confirmed.

2. Investigating the linearity of the relationship between the variables using a scatter diagram: Using a

scatter diagram, the father-child relationship and the mother-child relationship of three groups have been studied. The analysis revealed a linear relationship between these variables, meeting the necessary prerequisites.

3. Hypothesis of multiple non-collinearities between dependent variables: Pearson's correlation coefficient was used to verify the absence of multiple collinearities between the pre-test data of father-child relationship and mother-child relationship within the three groups.

The pre-test results of the correlation coefficient between the father-child and mother-child relationships among the three groups indicate that there is no linear relationship between the variables prior to the implementation of the intervention.

4. Equality of variances with Levon's test: Levon's test was used to check the condition of equality of variances. The relevant data are presented in Table 7. According to the data in Table 8 and the values of F and significance, the variances of the dependent variables of the three groups are not significantly different from each other, and the condition of equality of variances is confirmed. Due to the existence of presuppositions required for the implementation of covariance analysis, the effectiveness of ACT and RT in a group setting on the parent-child relationship in students is investigated using this test.

Table 7. Correlation coefficient of the pre-test scores of the studied groups

Variables	Father relationship		Mother relationship	
	r	P	R	P
Father-child relationship	1	0	0.46	0.0001
Mother-child relationship	0.46	0.0001	1	0

Table 8. Levene's test to check the equality of variances

Dependent variables	f	Df1	Df2	Sig
Father-child relationship post-test	0.68	2	57	0.51
Mother-child relationship post-test	1.69	2	57	0.21

Table 9. Covariance test

Effect	Value	F	df of the hypothesis	df of the significance	Sig
Group Lambda Wilkes	0.182	18.14	8	108	0.0001

According to the data in Table 9, the value of Wilkes' lambda ($f=18.14$ and $sig=0.0001$) of the group had a significant effect on the dependent variables. As a result, it can be inferred that there is a difference in the effectiveness of the two treatment methods (i.e., ACT and RT) compared to the control group in terms of their impact on the parent-child relationship among students. The comparison of the effects of these methods on each variable of the parent-child relationship was conducted using Scheffé's post hoc test. Table 10 shows the effect of the intervention on each of the dependent variables.

According to the data in Table 10, the statistical values related to the effect of the group on father-child relationship ($f=15.69$ and $sig=0.0001$) and mother-child relationship ($f=13.71$ and $sig=0.0001$) indicate that the group has a significant effect on the dependent variables. It can be inferred that employing group treatment methods based on ACT and RT positively influences the parent-child relationship among students. The impact of each therapy approach has been evaluated through the testing of sub-hypotheses. Both ACT and RT delivered in a group setting affected the parent-child relationship in students.

A) Comparison of ACT and RT in a group setting on the father-child relationship

The data presented in Table 10 indicates that the effect of the treatment group on the father-child

relationship is significant, with values of ($f=15.69$ and $sig=0.0001$). This demonstrates that both ACT and RT, when applied in a group format, have an impact on the father-child relationship. To investigate this effect further, Scheffé's post hoc test was conducted, with the results detailed in Table 11. According to Table 11, the average post-test score for the group receiving ACT is 20.5 points higher than that of the control group. This suggests that ACT influences the father-child relationship ($i-j=20.5$, $sig=0.034$). Meanwhile, the group treated with RT shows a post-test average that is 42.9 points higher than that of the control group, indicating that RT also significantly affects the father-child relationship ($i-j=42.9$, $sig=0.0001$).

The average post-test score for the group receiving RT in a group setting regarding the father-child relationship is 42.9 points higher than that of the control group. This indicates that RT in a group context has a significant impact on the father-child relationship ($i-j=42.9$, $sig=0.0001$).

b) Comparison of acceptance and commitment therapy with reality therapy in a group setting concerning the mother-child relationship

Data from Table 12 indicates a significant effect ($f=13.71$, $sig=0.0001$). This suggests that both ACT and RT in a group setting affect the mother-child relationship. To further analyze this effect, Shefe's post hoc test was conducted, and the findings are presented in Table 12.

Table 10. Summary of the analysis of covariance for intergroup effect

Sources change	Dependent variable	Sum of squares	df	mean square	f	Sig	Effect size
Group effect	Father-child relationship	18416.133	2	9208.067	15.69	0.0001	0.36
	Mother-child relationship	13469.033	2	6764.517	13.71	0.0001	0.33
Error	Father-child relationship	33441.8	57	586.698			
	Mother-child relationship	28003.9	57	491.296			
Total	Father-child relationship	968970	60				
	Mother-child relationship	1232078	60				
Corrected sum	Father-child relationship	51857.933	59				
	Mother-child relationship	41472.933	59				

Table 11. Scheffé's test to compare the effect of ACT on father-child relationship

Group	Control	
ACT	Difference (i-j)	20.5
	Significance level	0.034
RT	Difference (i-j)	42.9
	Significance level	0.0001

Table 12. Scheffé's test to compare the effect of ACT on the mother-child relationship

Group		Control
ACT	Difference (i-j)	18.22
	Significance level	0.041
RT	Difference (i-j)	36.7
	Significance level	0.0001

According to the information presented in Table 12, the average post-test score for the ACT group regarding the mother-child relationship is 18.25 points higher than that of the control group, indicating that ACT has a positive effect on the mother-child relationship ($i-j=18.25$, $sig=0.041$). Additionally, the average post-test score for the group receiving RT in a group setting is 36.7 points higher than the control group, suggesting that RT also significantly impacts the mother-child relationship ($i-j=36.7$, $sig=0.0001$).

Discussion

The results of these findings showed that there was a difference between the experimental group of ACT and the control group in the parent-child relationship, and this difference was statistically significant ($P<0.001$). ACT played a significant role in improving parent-child relationships and greatly increased the skill level of this group.

This finding aligns with the reports by Habibi et al. [32] and Joshenposh et al. [33]. In their study, Quinney and Thompson [34] demonstrated that ACT resulted in a decrease in experiential avoidance, indicating a reduced effort to control internal experiences. This, in turn, leads to greater acceptance of one's thoughts through techniques related to faulting, which has contributed to a reduction in conflicts between mothers and their teenage children. Furthermore, parental anxiety about their children's futures is a significant factor in parent-child conflicts. Since ACT addresses psychopathology stemming from a lack of present-moment focus, its application has enhanced attention to the present, thereby decreasing the level of conflict.

Bakhtiarpour [35] reported that parent-child relationships had an effect on all functional and developmental dimensions of adolescents, especially their academic performance, in such a way that a disturbance in it provides the basis for the occurrence of any disorder in the adolescent's performance.

Nowrozi et al. [36] also found in their research that the ACT approach improves interpersonal relationships and problem-solving by enhancing levels of acceptance and functional commitment between individuals and clarifying communication values. Additionally, Rezapourmirsaleh et al. [37] conducted a study titled "Evaluation of the Effectiveness of Acceptance and Commitment-Based Interventions on Parent-Child Conflict

Resolution Strategies Among Mothers of Students with Learning Disabilities." Their findings indicated that the acceptance and commitment intervention positively and significantly improved conflict resolution strategies for mothers of children with learning disabilities.

In discussing the results of this study, it can be concluded that ACT, through its focus on problem management, can positively influence the conflict resolution strategies between parents and children. Parents often face high stress from negative feedback regarding their child's academic performance, while many students experience anxiety in learning due to societal biases and communication issues. This leads to feelings of insecurity, resistance to accepting authority, and behavior that is aggressive or rebellious, which may stem from a lack of acceptance from their parents. Thus, fostering a warm, supportive, and non-confrontational relationship—particularly from mothers—while effectively addressing their children's issues can help alleviate behavioral problems in these children.

Since parent-child conflict resolution strategies taken by parents to resolve conflicts with their children are influenced by their beliefs and behaviors, ACT introduces parents of teenagers to concepts like acceptance, flexibility, and a positive outlook. It encourages them to communicate effectively, considering both their children's strengths and weaknesses. Additionally, it guides them away from rigid black-and-white thinking, promoting acceptance of their child's challenges and flaws [27]. By altering how parents respond to issues such as academic struggles, disorganization, excessive attention-seeking, and stress, the therapy reduces conflict and teaches parents to engage more constructively with their children. This includes moving away from extreme reactions, ruminations, active and passive avoidance, and other unhelpful responses, thereby fostering a more supportive dynamic [26].

Based on the findings of this research, it can be concluded that an intervention based on acceptance and commitment can be used to resolve parent-child conflict in teenage children. Therefore, it is recommended that relevant organizations, including welfare and education departments, develop formal educational programs that teach acceptance and commitment skills specifically to mothers.

The findings indicate a significant difference in the parent-child relationship between the experimental group that received RT and the control group, with this difference being statistically significant ($P < 0.001$). In fact, RT has proven to be highly effective in enhancing parent-child relationships and has significantly improved the relevant skills within the experimental group. These results align with the research conducted by Paighan et al. [38] and Esmailzadeh [39].

One of the reasons RT positively impacts parent-child relationships is its focus on teaching communication skills through fostering respectful conversation, trust, and avoiding controlling behaviors that can harm relationships [24]. Additionally, Yadalhi Saber et al. [40] note that learning choice theory during RT enhances teenagers' sense of responsibility, which, in turn, reduces the burden of responsibility on parents, enabling them to spend higher quality time improving their relationships with their teenagers.

In explaining the current findings, it can be asserted that RT is based on the belief that individuals possess the ability to make choices and can meet their fundamental needs, including social attachment (love), personal growth, empowerment, freedom, and the need for survival, along with self-correction of their mistakes in fulfilling these needs. This sense of control is developed through learning; when learning does not occur, psychological issues may arise, leading to the ineffective fulfillment of these needs through repeated poor choices. Therefore, it is essential to teach individuals how to take control of their choices and accept responsibility for them [39].

Limitations of the research: This study has several limitations, including time constraints, the continuity of follow-up, and the long-term transfer of skills related to performance improvement. Furthermore, the results can only be generalized to teenagers who received a specific percentage of treatment. Additionally, the sample consisted solely of male adolescents, which restricts the generalizability of the findings to teenage boys.

Application of research: To more accurately assess the effectiveness of this approach, future studies should utilize control designs and random assignment, as well as consider different subgroups. It is also recommended that the effectiveness of this approach be compared with other methods. A longer follow-up period should be implemented, and the effectiveness of this approach should be studied in different diseases.

Conclusions

The findings of this research indicate that both ACT and RT led to the improvement of the father-child relationship.

Compliance with ethical guidelines

The current research is derived from the doctoral thesis of the first author in the field of psychology and has been approved by the specialized research council of Islamic Azad University, Sanandaj branch (IR.IAU.B.SD).REC.1401.096).

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Authors' contributions

This study was carried out in collaboration with all authors. All authors read and approved the final manuscript.

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Conflicts of Interest

The authors reported no conflict of interest.

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