

Original Article

The effectiveness of group choice theory and reality therapy training on reducing aggression among female

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(Received: 24 Oct 2016; Revised: 8 Nov2016; Accepted: 1 Dec 2016)

Introduction: Nowadays aggression is one of the major problems that have been seen in several levels and dimensions around the world. The present study investigated the effect of group choice theory and reality therapy training on the reduction of aggression among female high school students.

Methods: The study employed a quasi-experimental method and a pretest- posttest with control group design. The sample population included all female high school students in academic year 2015-2016. 34 participants who achieve scored higher on BPAQ were randomly selected and assigned into one experimental and one control group, 17 in each group. Experimental group received eight sessions of 90 minutes training and control group received no intervention. Data were analyzed through ANCOVA test.

Results: Findings showed that group reality therapy training, significantly decreased aggression scores in experimental group ($p < 0.05$).

Conclusion: This study confirmed the effect of group choice theory and reality therapy on the reduction of aggression among high school aggressive female students.

Declaration of Interest: None.

Key words: Group training, Choice theory, Reality therapy, Aggression.

Introduction

Nowadays violence and aggression are among the major issues that have been seen in several levels and dimensions (1). Aggression was introduced as one of the most important problems of youth period and readiness for developing aggressive behaviors (2). Aggression is any behavior toward another person that may cause harm. Also, aggression can be considered as a consequence of the relationship between hostile thoughts, feelings and aggressive behavior. Human aggression occurs when *the balance between momentum and internal control breaches* (3). *Aggression expresses in different ways; sometimes it is suppress as anger and sometimes it is focused on persons and objects* (4). During the human

development process, from birth to death, the most aggressive behavior appears during youth period (5). The probability of an appearance of aggression increases because of simultaneity between cognitive changes and puberty and it's hormonal and physiological changes. Aggression can have some deleterious consequences on individuals such as negative phantasm among peers and teachers, peers rejection, academic failure, drug consumption, interpersonal problems with family and youth crimes (6). During puberty, adolescent is encountering many cognitive, hormonal and physical changes. Although these changes prepare individuals to enter the society, but these changes provide the possibility of occurrence of selfishness and sense of being unique based on the past experiments and the

environmental properties (7). Therefore, adolescent tends to become egocentric and act carelessly towards laws (8).

Aggressive behaviors in adolescents have close relationship with adult antisocial behavior and development of cardiovascular disease in future (9-10). Aggression by itself lead to non-adaptive responses from environment, because aggressive behaviors prevent individual from learning the essential skills require for effective problem solving and provide the conditions for continuity of aggression and its problems (7). Therefore, examining aggression with the aim of inhibition and prediction is vital (11). One of the inhibition and prediction methods of aggression is group therapy. The person observes his/her interaction with others and this lead to development of his/her insight. Choice theory and reality therapy have long history in group therapy. Maybe this is because of the supportive and procrptic nature of the of reality therapy (12).

Choice theory is based on the belief that human choices are conducted instinctively based on his/her global needs such as, survival, freedom, love, belongingness, pleasure and powe (13). Human nature and behavior demands to fulfill its basic and universal needs. Also, it is believed that all human behaviors are conducted by internal factors (14). All of human behaviors functions and is chosen in a way to satisfy his/her needs. Human tends to satisfy his/her needs instinctively. In other word, tangible incentives for all of human behaviors are having good feeling as much as possible (15). The quality world or the "picture album" is one the elements proposed by the Choice Theory. The quality world consists of people, objects and beliefs that will enable individuals to satisfy their needs and make them feel better. The behavior and choices of human is an effort to shape parallel and align experiments with the quality world. The quality world is an album of intellectual pictures about what she/he wishes from birth to death (16). Basic needs of human are satisfied with the pictures of quality world. These needs are formed by human choices in

order to make a quality world or are in an imbalance condition (17).

The human requirements need to be in a way in which satisfy him/her main needs and bring him/her an acceptable degree of satisfaction in order to be in balance and mental health. The mental health can function appropriately when individual can meet his/her basic needs. When there is a conflict between what is ideal (quality world) and what individual can achieve, the behavior functions in a way to fulfill his/her needs. From this perspective we can say that the behavior is targeted and the target is to reduce the distance between what the human expect and what he/she is achieving (18). Glasser believes that youth choose the aggressive behavior, because they think this help them to fulfill their wishes.

Beside the principles of choice theory, reality therapy provides tools for facilitating behavioral change through WDEP evaluation system for the therapists (18). In this system, W is the abbreviation of wish, in this stage the wishes of patient are recognized. D is the abbreviation of doing, in this stage current action and behaviors of patient are recognized. E is the abbreviation of evaluation and in fact the effectiveness of actions and behaviors of patient are recognized. P is the abbreviation of plan and evaluates the patient plan to get his/her wishes (19). The questions adjusted with WDEP therapy framework are: 1. What do you want? 2. What did you do to get it? 3. Are these works effective? 4. What is your plan now? (18). Glassar choice theory is described as the most comprehensive developed psychology of internal control (20-21).

Considering the physical, psychological and social outcomes of adolescent aggression, implementing effective medical and educational interventions to reduce these problems are very important. Reducing aggression in high school adolescents can make them more stable in terms of personality to enter higher academic levels and provide the adaption with family and community. On the other hand, reducing aggression in adolescents reduces the risk of delinquency, school failure, escape from home, and reducing their lack of accountability

According to our knowledge, little studies have been done on the effectiveness of the treatment of reality therapy on the reduction of aggression. Although in some studies the effect of responsibility have been investigated, all aspects of the reality therapy such as the recognition of needs and the proper way of satisfying them, the destructive and constructive behaviors, internal control, and the WDEP evaluation system have not been addressed yet. Thus, the aim of this study is to investigate the effectiveness of group choice theory and reality therapy training on reducing the aggression among female students in Tehran.

Method

Quasi-experimental design including pre-test and post-test with a control group were utilized for this study .The sample population of study included all female second grade high school students in Tehran. Initially, district 13 selected among all 22 districts in Tehran. The governmental high school was chosen through convenience sampling. Other schools also were taken under study in the lack of samples for replacement. After necessary permissions (with the written consent forms for the students and parents), students were asked to fill out Buss & Perry aggression questionnaire. The inclusion criteria included aggression score higher than the mean of all students, age range between 15-17 years old.. The exclusion criteria included not participating in other

treatment programs, not having psychiatry disorder and not using any medications.

Among students with upper score than mean in aggression, 34 person were chosen based on simple random sampling method and organized into two experimental and control group, 17 person in experimental and 17 person in control group. The group choice theory and reality therapy training was performed on the experimental group in 90-minute sessions during 8 weeks, while the control group received no intervention. These sessions were only for high schools students. It means that parents and teachers did not participate in the sessions. At the end of the day, both groups were evaluated with the post-test. Also, because of compliance with ethical issues, the same intervention was continued after research ending for the control group.

Buss & Perry aggression questionnaire (BPAQ)

The 29-item Aggression Questionnaire (Buss & Perry) was used. The sub-scales are including physical aggression, verbal aggression, anger and hostility. The test-retest reliability was $r= 0.80$, and its internal consistency was $\alpha= 0.89$ (22). The questionnaire was translated by Sanaei and its psychometric features investigated by Pooravari and her colleagues. Reliabilities (Cronbach α) in their study were 0.87 for overall aggression, 0.72 for physical, 0.52 for verbal, 0.57 for anger, and 0.68 for hostility. The test-retest coefficient in the whole examination was 0.72 (23).

Table 1. The summary of the training sessions.

Meetings	Concepts and themes were taught
First	Relations with participants, introducing the program and its underlying logic, introducing the group's leader, members and rules of the group, set goals. The pre-test was conducted at the beginning of the sessions.
Second	Training the five main needs, prioritize needs and identify the neglected needs, challenging participants about their needs and how to satisfy them
Third	Understanding the difference between the desired and the real world, the individual values
Fourth	The introduction of general behavior and training four components of the overall behavior: think, act, feel and physiology, focusing on the training and education emotion and emotion regulation.
Fifth	Responsibility education, responsible and effective manner and its different from irresponsible and ineffective behavior, investigating the compatibility and contradictory of participants needs with others
Sixth	Presentation and discussion of internal and external control with teaching ten principles of the Choice Theory and destructive behaviors and replacing the constructive actions.

Seventh	Introducing the anger and aggression based on choice theory: this is a general behavior that focused on the purpose which is bridging the gap between what I want (quality world) and what I have.
Eighth	An introduction of WDEOP, helping the group to draw up a concrete plan to avoid using and acceding to the external control.

Results

In this study 34 female students with high aggression score have been selected and investigated. Students categorized into the groups of experimental and control. Both groups were homogenous in sex and

educational grade. The pre-test mean was 111.76 and 112.23 respectively for the test and control group. The post-test mean for the experimental group was considerably decreased to 94.29 in comparison with the control group (111.35). The descriptive results of data demonstrate in Table.2.

Table 2. The descriptive indices of experimental and control group in pre-test and post-test

Group	Sample size	Pre-test		Post-test	
		Mean	SD	Mean	SD
Experimental group	17	111.76	6.49	94.29	7.92
Control group	17	112.24	6.43	111.35	8.91

The descriptive Indices in Table 2 shows that there is no significant difference between means and SD of two groups ($p>0.01$).

The results related to the covariance analysis of the effectiveness of reality therapy in adolescents on post-test are presented in table 3.

Table 3. The result of the covariance analysis in the experimental and control group

	Normality of Distribution		Linearity of Relation		Homogeneity of Variances		F Covariance	P	Eta Square	Power
	K-S	Level of Significance	F	Level of Significance	Levin	Level of Significance				
Post-test	0.54	0.93	50.27	0.62	0.11	0.74	38.50	0.001	0.55	1

The result of Table 3 shows that the assumption of normal dispersion is confirmed with Kolmogorov–Smirnov test ($p>0.05$). Assumption of the homogeneity of variances and regression coefficients is confirmed

($p>0.05$). The result of the covariance analysis of effectiveness of group choice theory and reality therapy training demonstrates that this method can significantly decrease the aggression in the students.

Table 4. The descriptive Indices of aggression of experimental and control group in pre-test and post-test

Group		Components			
		Physical aggression	Verbal aggression	Anger	Hostility
Experimental	Pre-test	35.34 ± 4.96	19.71 ± 3.27	27.76 ± 3.27	29.94 ± 4.51
	Post-test	27.78 ± 6.36	16.05 ± 4.88	22.38 ± 5.20	23.66 ± 4.40
control	Pre-test	35.53 ± 4.36	19.71 ± 3.27	27.76 ± 3.38	29.94 ± 4.51
	Post-test	35.41 ± 4.69	19.01 ± 2.89	28.17 ± 3.45	28.76 ± 6.26

The result of table 4 shows that aggression scores in the experimental group are significantly decreased in comparison with

pre-test; however these scores remained almost changeless in control group.

Table 5. The result of the covariance analysis for the aggression components scale

	Statistical Indicators						
	Total Squares	df	Mean Squares	F Covariance	P	Eta Square	Pvalue
Physical aggression	338.55	1	338.55	21.28	0.001	0.51	1
Verbal aggression	114.58	1	114.58	13.11	0.001	0.30	0.94
Anger	220.45	1	220.45	22.86	0.001	0.42	0.99
Hostility	280.36	1	280.36	39.09	0.001	0.56	1

The result of Table 5 shows that there is a considerable difference between the mean score of experimental and control group. So we can conclude that group choice theory and reality therapy training reduces the physical aggression, verbal aggression, anger and hostility.

Discussion

The aim of this study was to investigate the effectiveness of group training of choice theory and reality therapy in reducing aggression among aggressive female high school students. The results of this study showed that teaching choice theory and reality therapy were caused to reduce aggression. There are some studies regarding the effects of reality therapy and choice theory on reducing aggression among students. The results of two studies (24) demonstrated that teaching responsibility was effective in reducing aggression among students. The other study was carried out based on counseling program in reducing aggression with the reality therapy approach. The results of this study were consistent with this study (25). It is worth mentioning that based on our researchers there were no oppose studies in this regard.

The client received modeling through therapist beside the other group members. The client imitated their properties and behavior that this matter is crucial for treatment. Social learning or development of essential skills community are an important factor treatment; therapist teaches to their patients that transfer his data in various fields of health and mental disorders, suggestions and other consulting of the therapist about life and its problems to others (1). The exclusive feeling intensifies the social

isolation; as most of the people think that only he/she has the problem. Group members felt connected with each other due to the similarities that they shared with each other in group therapy. Some factors such as generality and hope are important because group is looking to find members, community and continue of group work during the first steps of its work.

Although human aggression is a part of the natural instinct, the main cause of aggression is caused by failing to achieve his/her goals in life and dissatisfaction caused by the failure to achieve the objectives. The aggression is particularly more intense when a dissatisfaction is an unjustified and grievance. In other words, aggression occurs when the balance between impulsivity and internal control collide due to incompatibility of the people and not achieving the desired goal in life. In this case, the person understands all life events (whether real or unreal threats) as threatening and is not able to cope with the problems of daily living (12). This especially intensifies among adolescents during the eruption of emotions, feelings of insecurity, social incompatibility and violating the family and community conventional rules.

Glassar mentioned that what we called mental disorder contains few ways the person selected to behave when failed in unsatisfying fundamental genetic needs. The person was helped to identify his neglected needs in the reality therapy. In this way, the person overcomes his ignored needs with self-monitoring and replaces the desirable behaviors rather than destructive behaviors to satisfy his needs. In fact, students confront with themselves and compare their aspirations with their behavior (something that they do to

achieve the demands As one of the aspects of the reality therapy focused on the responsibility, reality therapy can be effective in learning responsible behavior and as a result prevents from aggression (21).

It is necessary to mention that some of the limitations of this study limit the generalizability of the results of the study. Lack of conducting clinical interview, diagnosis of other disorders among the students and lack of study on both sexes are the limitations of this study. Although the results of the study, confirmed the effectiveness of efficacy variable; however the stability of this effectiveness needs to be examined in future studies. Also, including parents and teachers in this therapy will strength the effectiveness of reality therapy and choice theory. Thus, it is recommended the other investigators will create the opportunity of reinforcing changes through training related skills to teachers and parents. The research and clinical function of research achievements is about using reality theory at schools. Some of the meanings include responsibility, needs and satisfying needs and inner control can be thought to students in order to reduce aggression.

Acknowledgments

On behalf of all the authors of the study, we would like to thank the Department of Education in Tehran and all the students who helped us in conducting this research.

References

- 1- Taghvaei D, Badiyi S. Analyzing the effect of teaching responsibility on the basis of reality therapy on reducing the aggression in Arak female students. *European Journal of Experimental Biology*.2014; 4(1):153-159.
- 2- Roberton, T., Daffern, M., & Bucks, R. S. Emotion regulation and aggression. *Aggression and violent behavior*.2012; 17(1): 72-82.
- 3- Lynch RJ, Kistner JA, Stephens HF, David-Ferdon C. Positively Biased Self-Perceptions of Peer Acceptance and Subtypes of Aggression in Children. *Aggressive behavior*. 2016;42(1):82-96. doi:10.1002/ab.21611.
- 4- Webster, GD. Low self-esteem is related to aggression, but especially when controlling for gender: A replication and extension of Donnellan et al. *Representative Research in Social Psychology*.2006; 29: 12-25.
- 5- Ehrenreich SE, Beron KJ, Brinkley DY, Underwood MK. Family Predictors of Continuity and Change in Social and Physical Aggression from Ages 9 – 18. *Aggressive behavior*. 2014;40(5):421-439.
- 6- Sedaghat A, Moradi A, Ahmadian H. The effectiveness of group cognitive - behavioral of anger control on aggression among the aggressive female students. *Journal of Medical Sciences, Islamic Azad University*. 2014; 24 (4): 215-220.
- 7- Attari Y, Haghighi J, Khaneshki Z. The Relationship between the level of emotional stability, community-oriented and aggressive behavior with academic performance between girls and boys of the third grade-guidance in the city of Ahvaz. *Journal of Education and Psychology, University of Shahid Chamran*.2002; 3(9):1-12.
- 8- Kellam S, Ialongo N, Brown H, Laudolff J, Mirsky A, Anthony B, et al. Attention Problems in First Grade and Shy and Aggressive Behaviors as Antecedents to Later Heavy or Inhibited Substance Use. *Problems of Drug Dependence*. 1989; 368-369.
- 9- Shakeri J, JaberQaderi N, Rezaei M, Saidie M, Naleini M, Molodi AS. Status of psychosocial factors in patients with coronary artery disease in Kermanshah. *Journal of Kermanshah University of Medical Sciences Journal*.2012; 16(3):20-27.
- 10- Warner-Czyz AD, Loy BA, Evans C, Wetsel A, Tobey EA. Self-Esteem in Children and Adolescents With Hearing Loss. *Trends in Hearing*. 2015; 19:2331216515572615.
- 11- Malakpour M, Zanganeh, S, Aghababaei S. Psychometric properties of the short form questionnaire Novako anger in the

- Esfahan city. Journal of Cognitive and Behavioral Sciences.2012; 1(2):25-35.
- 12- Sadock BJ, Sadock VA. Kaplan and Sadock's synopsis of psychiatry: Behavioral sciences/clinical psychiatry: Lippincott Williams & Wilkins;2011.
- 13- Duba, JD, Graham M, Brizman M, Minatrea N. Introducing the " Basic Needs Genogram" in Reality Therapy-based Marriage and Family Counseling. International Journal of Reality Therapy. 2009; 2:15–19.
- 14- Faber AW, Patterson DR, Bremer M. Repeated Use of Immersive Virtual Reality Therapy to Control Pain during Wound Dressing Changes in Pediatric and Adult Burn Patients. Journal of burn care & research: official publication of the American Burn Association. 2013;34(5):563-568.
- 15- Lohse KR, Hilderman CGE, Cheung KL, Tatla S, Van der Loos HFM. Virtual Reality Therapy for Adults Post-Stroke: A Systematic Review and Meta-Analysis Exploring Virtual Environments and Commercial Games in Therapy. Quinn TJ, ed. *PLoS ONE*. 2014;9(3):e93318.
- 16- Wubbolding RE. Reality therapy. Washington, DC: American Psychological Association;2010.
- 17- Wubbolding R.E., Brickell J, Imhof L., Kim R, Lojk L., Al-Rashidi B. Reality therapy: A global perspective. International Journal for the advancement of counselling.2004; 26(3): 219-228.
- 18- Wubbolding RE. Reality therapy/Choice theory. *Counseling and psychotherapy: Theories and interventions*.2011; 1:263-285.
- 19- Law FM, Guo GJ. Who is in charge of your recovery? The effectiveness of reality therapy for female drug offenders in Taiwan. International journal of offender therapy and comparative criminology.2014; 58(6): 672-696.
- 20- Jahromi MK, Mosallanejad L. The Impact of Reality Therapy on Metacognition, Stress and Hope in Addicts. *Global Journal of Health Science*. 2014;6(6):281-287.
- 21- Glasser W. Choice theory. Translated by Sahebi Ali. Tehran: Ayeh Sokhan;2013.
- 22- Mohammadi N. A preliminary study on the psychometric indices buss-Perry Aggression Questionnaire. Journal of Social Sciences and Humanities Shiraz University.2006; 25(4):30-35.
- 23- Pooravari M, Habibi M, Salehi S. (in press) Investigation the Psychometric Properties of Buss and Perry Aggression Questionnaire: In Non-Clinical Group.
- 24- Mstary Farahani Y. The effect of teaching responsibility with reality therapy on aggression in male adolescents in Saveh. Master's thesis, Allameh Tabatabaei University;2012.
- 25- Lee Sk. A study on a counseling program for Decrease of Aggression through Reality Therapy. International Journal of Reality Therapy.2011; 2(2):401-410.