

Influence of Cognitive-Behavioral Group Therapy on Reducing Anger and Impulsive Behavior in Street Children in Tehran

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ABSTRACT

The present research aims to investigate the influence of group cognitive-therapy on reducing anger and impulsive behavior in street children. The research methodology was experimental with a pretest-posttest design and a control group. The statistical population of the research included all street children in Tehran City who were kept in rehabilitation centers in Tehran City in 2014 from September to November. To this end, 60 street children who had higher scores in Hershfild et al (1969) questionnaire and Nelson et al's children aggression questionnaire (2000) were selected by means of simple random sampling. In the next stage, they were divided into two groups each containing 30 children, one as a control group and the other as an experiment group. Group cognitive behavioral therapy method was implemented on experiment group in 8 sessions each lasting 60-75 minutes. In the end, both groups were evaluated again by means of the questionnaires. Data were analyzed by means of multivariate covariance analysis. Results showed that cognitive-behavioral group therapy reduces anger and impulsive behavior in street children ($p < 0.01$). The results showed that group cognition-therapy is an appropriate method for reducing impulsive behavior and aggression in children. This method is proposed to be used in rehabilitation centers for keeping street children.

KEYWORDS: group cognitive-behavioral therapy, aggression and impulsive behavior

INTRODUCTION

As urban life is developed, poverty and other social problems like street children are also expanded (Teu et al, 1999). The fact of not having a family causes many astray and anti-social behaviors for such children (Hang and Menk, 2001). Need for social support and absence of support causes many psychological and social problems like aggression and impulsive behaviors (Craig & Hodsom, 2000). One of the main emotions in children is anger, which is produced as a result of confronting with barriers. Violence is the extreme form of aggression and it is defined as an intentional action for causing serious physical or psychological harm to others (Larmash et al, 1999; as quoted from Tabrizi and Rahmati, 2002). In fact, aggression is a compatibility response to threats and inspires strong and aggressive behaviors and feelings which allow us to fight and defend ourselves if attacked. Therefore, it can be said that a small amount of aggression is necessary for survival (Baptiste ando, translated by Foruzesh, 2004). Individuals find themselves in disappearance danger when they face frustrations. Sense of disappearance draws individuals to aggression even if it is not a real danger (Hamed, 2002). Moreover, individuals with high levels of aggression have usually less abilities to control their impulses and impulsive behaviors are more common in such people. An impulse is a serious desire for doing an action in response to a mental or external stimulant (Brooker, 1989; as quoted from Ekhtiari et al, 2008). Impulsive behavior is a human personality trait. It embraces a wide range of behaviors which are not the same as compulsive behaviors in which the individual is aware of the presence of behavior and its aim is not acquisition of pleasure but generally avoiding an anxiety. Furthermore, it is different from behaviors which are resulted from inability to judge and make decisions and the individual in fact is in judgment disorder stage (Muller et al, 2014). It also contains a wide range of actions with slight thinking and are immature and fail to have an appropriate planning and have high levels of risk (Muller et al, 2001). Men and boys express more behaviors which are related to aggression and criminal act and impulsive behavior. The results show that motivational forms indicate stronger sexual differences (Cross et al, 2011). High riskiness endangers physical and psychological health and prevents them from appropriate social function. Drug abuse, criminal act, pathological obsession, arson, drinking too much alcohol and aggression, pathological gambling, driving while drunk and risky sexual behaviors are samples of these behaviors (Ekhtiari and Behzadi, 2001). Although friendship between street children and their peers in streets can increase their social support, but social deviations of such friends may increase psychological disorders in them (Bao et al, 2000). In social education of a child, control of aggression and impulses is very important and if a child struggles with many undesirable emotions, he or she will become an individual with antisocial personality and will suffer from other acute psychological disorders.

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Street children who receive the minimum support from their society are among the most vulnerable groups. Many studies showed that teaching life skills like anger management skills, group training and teaching problem-solving skill are effective in anger control (Haning et al, 1996). Many studies have verified the influence of group cognitive-therapy on aggression (Ghasem Zadeh and Jani, 2013; Sadeghi, 2008; Amjadi, 2006; Askarnia, 2001; Bradbori and Clark, 2009; Jernestin et al, 2007), on turmoil and behavioral problems (Malek et al, 2013; Abolghasemi et al, 2007; Zare et al, 2007), on impulsive behavior reduction (Haddadi et al, 2010 and Kazemi et al, 2011) and social panic (Kalager et al, 2004). Akbari et al (2008) showed that cognitive-behavioral therapy has a positive impact on anger and impulsive behavior. Haddadi et al (2010) showed that this method has a significant impact on subscales of impulsive behavior. In a meta-analysis, cognitive-behavioral therapy of anger in children and teenagers was reviewed. This study reviewed 40 research reports on anger and aggression. Results showed that cognitive-behavioral techniques play role in reduction of aggression (Sokhodoloski et al, 2003). There is no doubt that presence of violence and impulsive behaviors in society can have serious physical and psychological impacts on individuals. When spread, it can cause deep harms to social relations. On the other hand, psychological therapy can show its role in reducing anger and impulsive behaviors. This can contribute a lot to development of such treatments. It seems that it is necessary to conduct studies on the influence of cognitive-behavioral therapy on impulsive behavior in street children. Therefore, the author tried to conduct a research in this regard. To this end, the present research aims to investigate the influence of group cognitive-behavioral therapy on reducing anger and impulsive behavior in street children in Tehran.

Research hypotheses

Cognitive-behavioral therapy reduces aggression and impulsive behavior in street children in Tehran.

METHODOLOGY

Since this research tries to investigate the role of group cognitive-behavioral therapy on reducing anger and impulsive behavior in street children, it is an experimental research with a pretest-posttest design and a control group. The statistical population of the research included all street children in Tehran who were kept in rehabilitation centers in 2014 during a four-month period from September to November. 60 children were selected by means of simple random sampling and were put randomly in two experiments and control groups each containing 30 people. The experiment group received 8 sessions of therapy each lasting 60-75 minutes but the control group did not receive any intervention. As a posttest, both groups received Nilson's aggression test and impulsive behavior test again.

Research instrument

Children's aggression questionnaire: this is a self-reporting questionnaire designed by Nilson et al (2000). This scale is designed for age group 6-16 and includes primary school level to high school. The questionnaire contains 39 questions and 4 subscales: frustration, physical aggression, and communications with peers and communications with power references. All questions were based on Likert scale. Minimum score of a particular respondent was 39 and maximum score was 156. This test was conducted on 1604 students for investigation of validity and reliability by Muhammad Mojedidian. The results of retest coefficient ranged from 0.65 to 0.75, internal consistency results ranged from 0.85 to 0.86 and validity coefficients of the four subscales were equal to 0.93.

Impulsive behavior questionnaire: impulsive behavior scale was designed by Hershfield et al (1965). This instrument contained 19 items which were designed for simple implementation of the research by right-wrong answers. For any item, the reverse form was also presented. In any case, one of the items can be used and the other 19 items can be used as parallel form. When the response is consistent with the answer sheet, 1 score is considered for him or her. In items which lack parentheses, the proper choice is given score 1 while in items in parentheses, the wrong answer received score 1. The final score lies between 0 and 19. For normalization, impulsive behavior scale was conducted on 127 students of grades 5 and 6 in primary schools. Average score was equal to 8.24 and reliability of retest method was equal to 0.85.

Group cognitive-behavioral therapy training program: this program included 8 sessions lasting 60-90 minutes. These sessions were as follows: first session: introduction, definition of aggression, diaphragmatic breathing, second session: investigation of assignments of the previous session: diaphragmatic breathing and rehearsal of several group members in front of other members and investigation of anger cycle, anger stages, before anger and survey ad summation., third session: investigation of assignments of the previous session: rehearsing relaxation and diaphragmatic breathing in class, dissection of anger cycle, dissection of pre-anger stage, fourth session: rehearsing tension removal and relaxation and diaphragmatic breathing, cognitive challenges, thought features which produce anger. Seventh session: assertiveness skill, eighth session: problem-solving skill (prevention from anger), definition of problem, private expressions and brain storming.

Findings

In this section, we first provide a descriptive analysis. Then, we deal with relationship between research variables:

Table 1: demographic features of sample (N=60)

feature	frequency	percentage
gender		
boy	34	58.7
girl	26	43.3
age		
10	14	23.3
11	14	23.3
12	32	53.3
education		
grade 2	15	26.7
Grade 3	20	23.3
Grade 4	20	23.3
Grade 5	5	6.7

As it can be seen in table 1, total sample size was 60 people. Boys constituted more of the sample size (58.7%), 12-years-old children were the majority of the sample (53.3%) and majority of education level belonged to grades 3 and 4 (66.6% totally).

Table 2. mean and standard deviation of pretest and posttest in experiment and control groups for aggression and impulsive behavior

resource	Pretest		Posttest	
	Mean	SD	mean	SD
Experiment (group with only impulsive behavior)	11.40	2.22	6.93	2.18
Without cognitive-behavioral method (group with only impulsive behavior)	11.06	1.53	11.13	1.45
With cognitive-behavioral therapy (group with only aggression)	106.60	10.65	93.53	17.11
Without cognitive-behavioral therapy (group with only aggression)	106.60	7.56	107.60	7.64

As it can be seen in table 2, mean value of all scores of posttest in the experiment groups is lower than scores of posttest in control group for both variables.

Table 3: results of covariance analysis for investigation of the influence of group cognitive-behavioral therapy on reducing aggression and impulsive behavior

Levene's test and regression slope homogeneity F	resource	Sum of squares	df	Mean of squares	02	F
0.11 and 0.46	Group: posttest of impulsive behavior	65.48	1	65.48	0.86	**167.97
	Aggression posttest	1369.10	1	1369.10	0.79	**102.73
1.12	Impulsive behavior pretest, posttest of aggression	13.80	1	13.80	0.57	35.41*
	Impulsive behavior posttest	6.13	1	6.13	0.01	0.460
	Pretest of regression, posttest of impulsive behavior	0.21	11	0.21	0.02	0.54
	Aggression posttest	194.99		194.99	0.36	*14.63
	error	10.13	26	0.39		
		346.47	26	13.32		
	total	3414.00	30			
		324397.00	30			

*P<0.05

As it can be seen in covariance analysis test results, after adjustment of pretest scores, the intervention has a significant influence on respondents because the calculated F value is smaller than 0.05 for both dependent variables (impulsive behavior and aggression posttest) with a degree of freedom equal to 1 (167.97 and 102.73, respectively). Therefore, the third hypothesis is verified and H0 is rejected. Therefore, cognitive-behavioral therapy reduces impulsive behavior and aggression in street children.

DISCUSSION

In this research, cognitive-behavioral group therapy influence on reduction of aggression and impulsive behavior was investigated in street children. The results showed that cognitive-behavioral therapy influences reduction of cognitive-behavioral therapy in street children. Ghasem zadeh and Jani (2013) investigated the influence of cognitive-behavioral group therapy and problem-solving skill on self-regulation of aggression and sense of solitude. The results of his research showed that cognitive-behavioral therapy is effective in respondents' score in aggression and sense of solitude.

Furthermore, the results are consistent with the results of studies conducted by Kazemi et al, 2013; Haddadi et al, 2010; Sadeghi, 2008; Amjadi, 2006; Askarnia, 2001; Bradbery and Clark, 2009; Jernestin et al, 2007). Moreover, the results of the research are consistent with the results of studies which used cognitive-behavioral therapy in treating impulsive behavior. In Weinberg et al research (2004), cognitive-behavioral therapy reduced impulsive behavior. As explanation, it can be said that cognitive-behavioral therapies reduce anger and aggression because they teach individuals to cope with aggression. For instance, relaxation is an efficient method in balancing body when physically bloodshot, or self-expression which teaches individuals to demand other people or reject their unwanted demands. Furthermore, problem-solving skill helps individuals with searching for proper methods for solving problems instead of immersing in sad thoughts. It also teaches techniques which can be used for viewing others' intentions more widely instead of pessimism or sensing others' thoughts or intentions. It also helps increase social skills and trust in others as much as possible and deviate their anger in case of experiencing it, use sense of humor, sports and healthy recreation and avoid aggression and violence. Aggressive individuals suffer tension and different problems continuously and their success and popularity is lower than other people in social situations. An aggressive person is unable to understand others and because he or she cannot establish close emotional relations with others is deprived of an important resource in maintaining his or her psychological health which is the very support of others. The negative viewpoint of an aggressive person and his or her pessimism towards others influences his or her relationship with others and even his or her friends are unable to tolerate his or her aggressive behavior. Therefore, aggressive people tend to do individual works and become more and more isolated and lonesome. In general, cognitive methods can improve aggression and impulsive behavior in children because this kind of treatment adjusts the intensity, period and frequency of anger statement and facilitates non-aggressive responses expression towards inter-individual issues and has a positive and significant influence on controlling emotional and impulsive response to perceived stimulating affairs, reconstruction of cognitive processes and improvement of social skills (Feindler & Weisner, 2006). The present research had some limitations which must be considered in the subsequent studies. For instance, sample size was small and this can restrict generalization of the results. Another limitation was that no follow-up test was conducted due to temporal restriction and this can be regarded in the subsequent studies. Furthermore, another limitation of this research was that sample members were selected out of street girls aged 5-12. This in part makes it difficult to generalize the results to other age groups. Therefore, the future researchers are proposed to use different age groups to reach more exact findings. The results referred to the importance of influence of cognitive-behavioral training on reduction of impulsive behavior and anger in street children. Therefore, it is recommended that this kind of training be used as an effective intervention in counseling centers and centers for keeping criminal children.

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