FAMILY THERAPY IN TREATING COGNITIVE DISTORTION OF JUVENILE OFFENDERS

Rusni A. Ghani Rohany Nasir Wan Shahrazad Wan Sulaiman Fatimah Yusooff

ABSTRAK

Kajian kuasai-eksperimental ini dijalankan bertujuan untuk mengukur kesan terapi keluarga ke atas herotan kognitif pesalah remaja. Subjek kajian terdiri daripada 18 orang pesalah jenayah remaja yang menerima perintah bon berkelakuan baik berserta perintah tambahan bengkel interaktif sebagai kumpulan rawatan dan 18 orang pesalah remaja yang menerima perintah bon berkelakuan baik tanpa perintah tambahan bengkel interaktif sebagai kumpulan kawalan. Herotan kognitif diukur menggunakan soal selidik laporan kendiri Cognitive Distortion Scale (CDS). Subjek rawatan diberikan enam sesi terapi keluarga dalam jangka masa 2 - 3 bulan selama 50 ke 90 minit bagi setiap sesi. Ujian SPANOVA digunakan untuk mengukur kesan terapi keluarga ke atas pesalah remaja. Hasil kajian menunjukkan terapi keluarga berkesan secara signifikan untuk mengurangkan herotan kognitif pesalah remaja.

INTRODUCTION

The 21st century was greeted with concern when exposure after exposure was made about adolescent crimes in local newspapers. They are involved in fights, staged riots, committed thefts, burglaries, and robberies, organized and participated in illegal motorcycle races, bullied, outraged modesty, raped and even committed murder. They are not criminals or fugitives, but these are recent scenario of the young people which are increasingly terrifying. Each month and year there are always news about teenagers with criminal behavior.

The major factors that influence the development of delinquent behavior are the individual factor of neuron development and the social process throughout adolescence (Bronfrenbrenner, 1979; Moffitt, 1993; Liabo & Richardson, 2007; Carroll et al., 2009; Wilmshurst, 2009) and the interactive environmental factor such as interaction with family members, peers, school, friends and community (Bronfrenbrenner, 1979; Alexander & Parsons, 2003; Flannery et al., 2005; Liabo & Richardson, 2007).

Delinquent adolescents not only experience behaviour problems but also cognitive distortion problems (Nas et al., 2005; Larden et al., 2006; Vugt et al., 2008; Barriga et al., 2008; Barriga et al., 2009). Therefore, an effective rehabilitation intervention is highly required and is very important in addressing the delinquency problems (Radtke, 2007) because: a) delinquent juveniles are at risk to repeat their offences (Moffitt, 1993; Gullotta & Adams, 2005), b) they commit light offences first followed by more serious offences (Levitt, 1998), c) the tendency to repeat the offence that has been committed turns juvenile offenders into adult offenders (Lab & Whitehead, 1988; Farrington, 1989; Gullotta & Adams, 2005), d) involvement in serious offences can result in their experiencing anti-social behavior as adults (Lanctot et al., 2007), and e) although the number of chronic juvenile offenders is few, but they commit almost all types of crimes (Gullotta & Adams, 2005).

Family involvement in the rehabilitation of delinquent's behavior has been proven to be effective (Druckman, 1979; Farrington & Welsh, 1999; Magnelli, 2000; Calhoun et al., 2001; Becker et al., 2002; Ryan & Yang, 2005) and becomes more effective (Headman, 2003) because it can reduce the risk factor and increases protective factor. Through family therapy, family functioning can be enhanced through cognitive and behavioral changes in the family itself and can reduce problem behavior (Lee & Olejnik, 1981; Kadish et al., 1999; Saedah, 2004). Thus it is important to focus on improving family functioning so that the risk can be reduced as a key strategy to prevent and rehabilitate delinquent behavior (Wodarski & Wodarski, 1998; Kumpfer, 1999; Headman, 2003).

The decline in moral evaluation is the element that is closely related to cognitive distortion, and this condition occurs among young criminal offenders (Nas et al., 2005) and not to non-offenders (Vugt et al., 2008). Cognitive functional problems occur in terms of understanding the concepts, paying attention, problems in memory and motor skills (Lueger & Gill, 1990). Barriga et al., (2000; in Nasir et al., 2010) defines cognitive distortion as an inaccurate way of attending to or conferring meaning to experiences. In his rational emotive behavior therapy, Ellis (1977) refered to cognitive distortion as rationalizing attitudes, thoughts or beliefs concerning one's own or others' social behavior. An individual with cognitive distortion perceives things, people and experiences in a distorted manner. As such, a juvenile delinquent whose cognitions are distorted may defend his delinquent or anti-social behavior as acceptable and rational (Nasir et al., 2010).

As a result of cognitive distortion, juvenile offenders are inclined to exhibit immature judgment (Eisenberg et al., 1987) as cognitive distortion is not only negatively correlated with moral judgment and empathy skills (Barriga et al., 2009) but also acts as a mediatorin the relationship of moral assessment and anti-social behavior (Barriga et al., 2000). Cognitive distortion is also associated with delinquent behavior (Nas et al., 2005) whether the behavior is associated with overt verbal or physical aggressive behaviour, and it is also related withcovert behavior (Barriga et al., 2008).

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Maturity in judgment, cognitive distortion, and low empathizing ability contribute to committing of crimes (Larden et al., 2006). Therefore, the approach that takes into account the cognitive and behavioral issues should be considered in treating the delinquents.

RESEARCH METHODOLOGY

Sampling and Procedure

This study employs a quasi-experimental pre and post test design for unequal groups involving 36 young offenders. The samples were selected using purposive sampling procedure. The treatment group consisted of 18 young offenders who were ordered good behavior bond and interactive workshops while the control group consisted of 18 young offenders who were ordered to be only on good behavior bond. The treatment group was given six family therapy sessions lasting 2 to 3 months' with 50 to 90 minutes per session whereas the control group received the usual intervention in the form of good behavior bond orders.

Research Instrument

This study used the Cognitive Distortions Scale (CDS) constructed by Brière (2000) designed to measure five domains of cognitive distortions namely Self-Criticism (SC), Self-Blame (SB), Helplessness (HLP), Hopelessness (HOP) and Preoccupation With Danger (PWD). This scale contains 40 items with the distribution of eight items for each domain. Each item is measured using 5-point Likert scale ranging from 1 (never) to 5 (very often). The total score obtained is within the range of 40 to 200. The higher scores obtained indicated higher cognitive distortion. The reliability of the CDS Malay version was 0.97 (Nor Shafrin, 2006). The actual study was carried out by two observations which showed consistent reliability coefficients of the CDS pre-test with $\alpha = 0.92$ and post-test value of $\alpha = 0.96$.

Treatment

The treatment in this study applied the integrated approach of structural, cognitive behavior, functional family therapy and the Islamic family intervention therapy approach. This treatment used clinical functional family therapy framework. The religious and spiritual (Miller, 2003) technique used were mainly prayers (solat), Quran reading, Prayers with an Imam in mosques or 'surau', reading religious books, zikir and self-introspection. Islamic spiritual values were also emphasized (Walsh, 2009) such as proper behavior and relationship with parents, being respectful of one's parents, and asking for forgiveness from parents. This treatment also applied several important theories and concepts of structural family therapy

(Minuchin, 1974) in the understanding of family organization such as subsystem, boundary, hierarchy and other techniques such as joining and enactment apart from cognitive behavior approach such as parenting skills training and other cognitive behavior techniques. Behavioral techniques (Skinner, 2005) used involved the exposure of family members to communication exercises, problem solving strategies, *quid pro quo*, payoff and homework (Alexander, 2002; Beck, 2005; Dattilio, 2010). Effectiveness was increased through the integration of eclectic therapy techniques, the integration of theory and common factors (Norcross & Newman, 2003).

Families in this study were assisted through integrated approach involving three main phases of functional family therapy intervention model (Sexton & Alexander, 2005; Carr, 2006). The first phase was the phase of participation and increasing the motivation. During this phase, the relationship building process between the counselor and family members continued to be a priority and at the same time involved the validation process on the client's perspective and the restructuring (reframing) in giving meaning (Breuk et al., 2006). The phase of changing behavior was the second phase in which the counselor identified risk factors as targets of the change and plan for implementation of changes, taking into account the uniqueness of individuals, families and functional relationship between them. Intervention during this time was focused on the risk factors such as communication skills, negotiation, problem solving, parenting training, and conflict management. As the spiritual and religious practices include prayers and individual experiences (Miller, 2003), the combination of family therapy intervention focused on the patterns of behavior (Carr, 2006). Generalization phase was the final phase which aimed to ensure that families can maintain the changes that took place with the support of the community. The main objective of this phase was to ensure that families used the power, strength and skills to reduce dependency on counselors and prepared themselves to face future possibilities in order to prevent relapse.

For the groups that were not balanced pre-post tests were used. The control and the experimental groups were formed using purposive sampling. Four dependent variables were measured namely delinquent behavior, family functioning, cognitive distortion and depression. The experimental group was given family therapy (X) while the control group did not get any treatment (the treatment/family therapy was given to the control group only after data processing was completed). Pre-test (O1) and post-test (O2) were done to both groups in order to measure the dependent variables (delinquent behavior, family functioning, cognitive distortion and depression). The post-test was conducted 2 to 3 months after the pre-test.

RESULTS

The effectiveness of family interventions on cognitive distortions was measured by a 2 X 2 two-way mixed-design ANOVA or SPANOVA (*split*

plot ANOVA test). Times (pretest and posttest) were repeated measures on one independent variable and groups (treatment group and control group) on the other independent variable. The effectiveness of family therapy can be seen through three questions: 1) Does cognitive distortion change with time? 2) Is the treatment group more effective than the control group? and, 3) Are there differential changes in cognitive distortion scores for the treatment and control group?

A preliminary test was conducted in order to ascertain the cognitive distortion characteristics and to ascertain the similarities in the characteristics of the experimental and the control groups. The pre-test indicated that there were no significant differences for self-critic scale [t (23.30) = 0.43, p > 0.05], self-blame scale [t (34) = 0.97, p > 0.05], helplessness scale [t (24.751) = -1.32, p > 0.05], and hopelessness scale [t (27.47) = -1.93, p > 0.05] for both the control and the experimental groups. However, there were significant differences [t (18.954) = -2.85, p \leq 0.05] for thinking of danger scale whereby the experimental group (mean = 44.67) was lower compared to that of the control group (mean = 54.44).

The SPANOVA test results on self-critic scores in Table 1 showed that a significant time*group interaction was present [F (1.34) = 22.971, $p \le 0.05$]. In addition, the main effect for time was significant, [F (1.34) = 42.715, $p \le 0.05$] and the main effect for group was not significant, [F (1.34) = 3.007, p > 0.05]. The results showed that there were differential changes in self-critic scores for the treatment and control group. Upon examination of the data, it appeared that treatment group showed the most improvement in self-critic scores over time. Thus, the combination of time and family therapy intervention has reduced the mean score of self-critic in treatment subjects.

Result of self blame scores showed that a significant time*group interaction was present, [F (1.34) = 20.032, $p \le 0.05$ and the significant main effect for time was [F (1.34) = 37.941, $p \le 0.05$]. But there was no significant main effect of group on self blame, [F (1.34) = 3.675, p > 0.05]. This finding indicated that there were differential changes in self blame scores for the treatment and control group. Upon examination of the data, it appeared that group treatment showed the most improvement in self blame scores over time. Thus, the combination of time and family therapy intervention has reduced the mean score of self blame in treatment subjects more effectively than the control subjects.

The results of helplessness scores showed that there was a significant main effect for time, [F (1.34) = 43.855, $p \le 0.05$] and significant effect for group [F (1.34) = 7.152, $p \le 0.05$]. No significant effect of time*group interaction was present, [F (1.34) = 1.53, p > 0.05]. The results showed that treatment group was more effective than control group. The family therapy interventions were effective in reducing helplessness of treatment group compared with the control group.

The hopelessness scores showed a significant main effect for time, $[F (1.34) = 17.455, p \le 0.05]$ and main effect for group $[F (1.34) = 7.866, p \le 0.05]$

 \leq 0.05]. But there was no significant effect for time*group, [F (1.34) = .048, p > 0.05]. This result proves that treatment group was more effective than the control group. Hence, family therapy was effective in reducing hopelessness of the treatment group.

For preoccupation with danger, only main effect for group was present, [F (1.34) = 844.098, $p \le 0.05$]. There were no significant time effect, [F (1.34) = 3.400, p > 0.05] and time*group interaction effect [F (1.34) = 3.400, p > 0.05] on the preoccupation with danger. This finding indicates that preoccupation with danger was not reduced by time. However, the family therapy intervention effectively reduced preoccupation with danger.

Table 1: SPANOVA analysis on the dependent variables between treatment group and control group

Dependant Variables	Source Variation	Sum of Squares	df	F	Sig
Self Criticism	Time	800.000	(1,34)	42.715	.000
	Group	264.500	(1,34)	3.007	.092
	Time*Group	430.222	(1,34)	22.971	.000
Self Blame	Time	2415.125	(1,34)	37.941	.000
	Group	465.125	(1,34)	3.675	.064
	Time*Group	1275.125	(1,34)	20.032	.000
Helplessness	Time	2485.125	(1,34)	43.855	.000
	Group	1081.125	(1,34)	7.152	.011
	Time*Group	86.681	(1,34)	1.530	.225
Hopelessness	Time	1467.014	(1,34)	17.455	0.00
	Group	1521.681	(1,34)	7.866	.008
	Time*Group	4.014	(1,34)	.048	.828
Preoccupation With Danger	Time	1.125	(1,34)	3.400	.074
	Group	1810.014	(1,34)	8.685	.006
	Time*Group	1.125	(1,34)	3.400	.074

p < .05

In general, the research findings showed that family therapy interventions can reduce all cognitive distortion subscales more effectively among the treatment subjects, either individually or in group compared with control subjects. These findings support the findings of Kolko et al. (2000) who found that family therapy was effective in treating cognitive distortions than other therapies that did not involve the family. The findings of this treatment approach is also in line with previous studies that found that cognitive and behavioral approaches were effective in treating cognitive distortions (Nas et al., 2005; Marquez-Gonzalez et al., 2007; Ginsburg et al., 2009).

DISCUSSION AND CONCLUSION

The findings of this study showed that the combination of structural family therapy, cognitive behavior, functional and Islamic approach had proven to be effective in treating adolescent offenders' cognitive distortions. Family therapy strategies were used with the objective to enhance protective factors and reduce risk factors through the stimulation of family functioning, and these strategies improved effective communication and reduced the negative feelings between family members which can help young offenders to reduce their cognitive distortions.

The results of the current study are supported by other studies on juvenile offenders and cognitive distortion (Eisenberg et al., 1987; Lueger & Gill, 1990; Barriga, et al., 2000; Nas et al., 2005; Larden et al., 2006; Vugt et al., 2008; Barriga et al., 2008; Barriga et al., 2009; Nasir et al., 2010). Therefore, family therapy decreases delinquent behavior through the change of cognitive and family behavior. Indeed family therapy is effective in reducing delinquent behavior through changers in the behavior and cognitions of the parents and the adolescents.

Coalition between counselors, parents and teenagers in the early stages of therapy may encourage negative reactions (Nitza, 2002) and success in completing therapy (Robbins et al., 2003). Family co-operation can only be obtained when there is this combination (Ritvo & Glick, 2002). On the other hand, families whose members constantly criticize and blame each other tend to have a very loose family relationship which would cause a lot of family conflicts.

Reframing techniques were used to deal with tension and conflict and to create links and solidarity between parents and children (Minuchin, 1974; Minuchin & Fishman, 1981). When the problem can be addressed, it has a positive effect immediately and reduces conflict between parents and the offender. Parents can become more accepting and understanding of what is happening to their children (Sholevar et al., 2010). Parental support can make the offender feel safe and change their negative thinking to positive thinking. Consequently, a person who has positive thinking has less tendencies to blame others, being labeled the wrong way or has negative assumptions (Nas et al., 2005) because irregularities can prevent the accuracy of facts and conclusions of the assessment experience (Willson & Branch, 2006). This helps them become more motivated to cooperate in the treatment process (Thompson et al., 2007). Positive emotions become the key to the success of the treatment given (Sexton & Schuster, 2008) and making more functional thought patterns with more accurate assumptions of meaning (Brière, 2000).

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