

Cognitive Behavioural Group Counselling in Reducing Anger and Aggression among Male Prison Inmates in Malaysia

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Abstract

This study aims to examine the effectiveness of cognitive behavioural group counselling in reducing anger and aggression among male prison inmates (hereinafter referred to as inmates) in Malaysia. This quasi-experimental study used a pre-test and post-test research design with a comparison group. A total of 80 male inmates participated in this study. The participants were assigned into experimental group (N=40) and control group (N=40) through purposive sampling. The experimental group received eight sessions of group counselling while the control groups were placed on a waiting list. The State-Trait Anger Expression Inventory-2 (STAXI-2) was used to measure anger and the Aggression Questionnaire (AQ) was used to measure aggression. The results using analysis of covariance (ANCOVA) showed that both the anger and aggression were significantly reduced among the inmates in the experimental group compared with the control group. The implications of the findings and suggestions for future research are discussed.

Keywords: anger, aggression, prison, inmates, cognitive behavioural group counselling

1. Introduction

Anger, an integral part of our daily lives, is one of the universal emotion that exists in all individual, even in the young ones and not just the adults. According to Kassinove and Tafrate (2006), most adults will experience anger episodes every single day. Anger can motivate behaviour and be useful in the pursuit of goals or the exercise of self-protection and assertion. Anger may also become problematic to the individual and instigate the reason for seeking therapeutic help. Many emotions such as anger, fear, sadness and guilt are not inherently problematic but become so, because of their intensity, frequency and most importantly their behavioural effect. These emotions are normal emotions which are functional for the individual but have the capacity to cause behaviours such as aggression, avoidance and withdrawal symptoms which becomes a source of distress to the individual and others (Howells & Day, 2003).

Anger will not arise in an individual if there is no reason or triggers that cause a person to feel angry. People become angry when they face defeats or when someone attack their personality, or treat them unfairly, or blame someone's unjustified action on them, or keep them from getting what they want and violate their cultural norms (Mabry & Kiecolt, 2005). Furthermore, anger is caused by frustration and stress, experienced due to the rapid pace of technology and the increasing of socio-economic status (Orloff, 2009). Those individuals with high levels of anger have also been shown to exhibit biases in their appraisals of situations, blaming others for bad events, and judging that the behaviour was intentional (Hazebroek, Howells, & Day, 2001).

Anger is associated with a wide variety of negative behaviours that often have negative psychosocial and interpersonal consequences. Individual weaknesses in addressing the growth of anger can be seen as a result of the occurrence of aggression and raising of crimes. The expression of anger can take many forms including violence, self-harm, more commonly physical and verbal aggression such as spouse abuse, child abuse, road rage, murder (Del Vecchio & O'Leary, 2004) bullying (Solberg & Olweus, 2003) and rape (Kellaway, 2009). Similarly, Kamaluddin, Md. Shariff, Othman, Ismail and Mat Saat (2014), conducted a study on the psychological traits of a murderer, discovered that anger was the common cause for the most expressive murders in Malaysia compared

to frustration, hostility, and other volatile emotions. In addition, Tafrate, Kassino and Dundin (2002), suggested that individuals with high levels of anger were almost twice as likely to engage in some type of negative verbal response, three times more likely to act physically aggressive, and three times more likely to use substances. Thus, it can be said that the behavioural consequences of anger can be a burden for families, friends, workers and the wider community.

Anger is not only linked to negative psychosocial consequences but also increased vulnerability to illness such as an increased risk of stroke, pain, hypertension and coronary heart disease (Del Vecchio & O'Leary, 2004; Thomas, 2005; Chida & Steptoe, 2009). Furthermore, anger can also increase mental health problems and psychopathology (Posternak & Zimmerman, 2002). For example anger can lead to post traumatic stress disorder, depression, intermittent explosive disorder, personality disorder (Trull, Useda, Conforti, & Doan, 1997; Franklin, Posternak, & Zimmerman, 2002; Sahin, Batigun, & Koc, 2011).

The negative emotion of anger as a contributing factor in various crimes is well-established among the offenders showing a higher level of anger than the non-offending population (Spielberger, 1991). The study has confirmed that a high level of anger and aggression exists in the prison setting (Howells et al., 2002; Homel & Thomson, 2005). According to Zamble and Porporino (1990) inmates reported two episodes of anger per week during the initial stages of their imprisonment. The frequency of anger they experienced increased, the longer they were in prison. This showed in the finding that anger is a stable and present feature of long-term imprisonment appears to be robust (Bonta & Gendreau, 1990). Dealing with anger becomes a part of prison custodial care contributing to problematic institutional behaviour such as adjustment problems, discipline issues, aggression and violence (Howells et al., 2005).

Therefore, a special treatment for anger and aggression should be developed so that it not only benefits the inmates but also the prison community and society as well. The inmates should be given an opportunity to improve themselves. They should be entitled to fair treatment or rehabilitation without any bias or discrimination on the basis of their disruptive emotions and behaviour. One of the best interventions to reduce or control anger and aggression was through group counselling or group therapy (DiGiuseppe & Tafrate, 2003).

DiGiuseppe and Tafrate (2003) through their meta analysis study, found that anger treatment group is an effective treatment for adults. Results from 50 studies showed that subject experiments who received treatment were in control of their anger better than those without treatment. Furthermore, simultaneously it also results in a reduction of negative behaviour such as aggression. Cognitive behavioural group interventions for anger management is one of the leading methods used in the correctional setting (Howells, 1998; Howells et al., 2005). Group therapy on anger management has been running in prisons since the late 1980s (Law, 1997). The goals of the anger management group are to reduce violence within the prison and to reduce aggression and criminal behaviour following their release into society (Hunter, 1993). Similarly, in the United Kingdom, the prison service has developed a national anger management package (Towl, 1995), which is used on inmates with temper control difficulties. Its main aims are to heighten the awareness of the process of the individual becoming angry, to increase awareness of self-monitoring of one's own behaviour, to learn the benefits of controlling anger and to enhance their knowledge and skills in managing their anger (Keen, 2000).

Cognitive behavioural approaches for the inmates have received empirical support for the effectiveness in reducing behavioural problems and improved coping in diverse correctional populations including offenders, substance abusers, sex offenders and juvenile offenders (Reilly & Shopshire, 2000; Ireland, 2004; Milkman & Wanberg, 2007; Moster, Wnuk, & Jeglic, 2008; Hammer, 2010). For instance, Ireland (2004) examined the effectiveness of cognitive behavioural therapy for anger management group with young male offenders. The treatment group showed significant improvements both in observed angry behaviours and self-reported angry behaviours, thoughts, and feelings following completion of the intervention. However, no differences were observed in the control group. On the other hand, Chan (2009) investigated the effectiveness of anger management cognitive behavioural group intervention on male minor criminal offenders, showed that the intervention is effective in reducing anger, hostility, physical and total of aggression among the treatment group.

Following the study conducted by Akbari, Abolghasemi, Taghizadeh and Dastaran (2012) on male prisoners, showed that there were significant differences between the experimental and the control groups on aggression and crime after intervention. This indicated that cognitive behavioural on anger management has a significant impact on reducing levels of aggression. Meanwhile, McLoughlin (2000), conducted the study to examine the effect of cognitive behavioural intervention on 30 senior male substance abusers. The results indicated that there were statistically significant improvements on anger, violent and assaultive behaviour by the experimental group. Between group analysis, there were significant intervention effects. The intervention group can increase their

control over anger whilst maintaining abstinence.

Cognitive behavioural group intervention is not only beneficial to correctional or rehabilitation settings but also to other settings such as community and mental health. For example Tang (2001), conducted the programme based on cognitive behavioural approach, to clients with mental health problem. The programme was offered by outpatient mental health occupational therapy service of a community general hospital. 64 clients participated in the said study. The results showed a significant reduction in the overall experience of intense anger, improvement in cognitive and behavioural coping mechanism and significant improvement in anger control after the treatment. Most respondents found that the programme were very helpful to them. The pace of the programme and the variety of learning activities were identified as core areas for improvement. Overall, the results showed the programme had a positive impact on anger management.

Lawson (2009), conducted a programme evaluation for the South of Market Mental Health's anger management intervention. The population consisted of community mental health clients. This intervention evaluation was designed to assess the effectiveness of the anger management intervention with the community's mental health population and employed a quasi-experimental, pre-treatment, post-treatment with follow up design. Results from 39 participants who attended four separate anger management groups suggested that anger management is effective within a community's mental health population in reducing anger and physical aggression.

A survey conducted by Towl and Bailey (1993) in England and Wales showed that anger management interventions were the fourth most common types of group intervention in prisons. Although various treatment programmes and activities were being implemented to rehabilitate inmates, however group counselling intervention that emphasised on anger and aggressive recovery is not yet fully implemented in Malaysian Prisons. Besides, there were few qualified counsellors or psychologists in prisons to conduct group counselling. Moreover, very little research has been conducted to examine the effectiveness of group intervention in Malaysian correctional institutions (Mariamdarani & Ishak, 2014) especially on anger and aggression compared with the western countries, due to the difficulty in gaining access to the research population. Up until now, most studies focused on social and psychological factors of anger and aggression among children and adolescent, college or university students and community samples. Thus, this study aims to examine the effectiveness of cognitive behavioural group counselling on anger and aggression among male prison inmates in Malaysia.

2. Methods

2.1 Research Design

This study was conducted by using a quasi-experimental study with a pre-test and post-test control group design. Two rounds of data collection were conducted. Inventories were administered to both the experimental and control groups before and after the group counselling sessions. The main independent variable for this study was the cognitive behavioural group counselling. The dependent variables were anger and aggression.

2.2 Participants and Procedures

The participants for the experimental research study were selected among male inmates from two prisons in Peninsular Malaysia. All inmates who participated, had committed a variety of law offenses. The age of the participants ranged from 22 to 61 years, with a mean age of 35.38 (SD=8.92), and they were categorised as adult inmates.

In order to proceed, firstly, the administrative permission and ethical clearance from the prison authority was obtained. The prisons were selected by the Malaysian Prison Department as they fit the researchers pre-determined criteria of the inmates profiles that match the purpose of the research. All the participants were also referred by prison officers. The inclusion criteria for this study were based on the following: i) participants should have a sufficient grasp of the Malay language and Malay writing, ii) participants were allocated based on their date of referral and their release date to ensure that all suitable inmates completed the research study and iii) participants should be stable in terms of mental state (complete the measure and understands the content of intervention).

After consultation with the prison officers, the researcher met with nominated participants and explained the study in more detail. Written and signed consent from the participants were obtained prior to their participation in the said research study. During the first stage, a total of 220 male inmates went through a pre selection process to determine their anger experience and aggression. The participants have to complete the State-Trait Anger Expression Inventory-2 (STAXI-2) and Aggression Questionnaire (AQ) tools provided. In the second stages, 80 participants were selected to participate in the experimental study based on the highest scores of STAXI-2 and AQ at baseline. The participants then were assigned into experimental group (N=40) and control group (N=40)

through purposive sampling. Before the treatment begin, the researcher explained about the research component and future counselling activities to both groups. The experimental group received eight sessions of cognitive behavioural group counselling. The researcher conducted the group counselling sessions. The intervention were based on a cognitive behavioural therapy manual for anger management (Reilly & Shopshire, 2002) and had been modified to suit the cultural needs of the Malaysian inmates. Two counselling sessions were conducted in a week and each session lasted for two hours.

The sessions of the treatment were constructed as follows:

Session 1: Introduction and rapport building

Session 2: Overview of anger and aggression

Session 3: Events and cues of anger, and The aggression cycle

Session 4: Anger control plans

Session 5: Cognitive restructuring

Session 6: Assertiveness training

Session 7: Conflict resolution model

Session 8: Review and termination

Meanwhile, the control group did not receive any treatment during the study. They represented those who had been placed on a waiting list for the group counselling. The group was given instructions not to participate the group counselling sessions until the sessions for the experimental group finished. After the experimental group completed the group counselling sessions, all the groups (both the experimental group and control group) were given the post-test by using the same tools. After the post-test, the researcher started to conduct the counselling sessions with the control group similar to what was conducted for the experimental group.

2.3 Instruments

Two instruments have been used in this study to measure anger and aggression. All instruments were translated into the Malay language using Brislin (1976) back translation technique.

The State-Trait Anger Expression Inventory-2 (STAXI-2; Spielberger, 1999) was used to measure anger. The STAXI-2, a self-report measure which used a 4-point rating scale to assess both the intensity of anger at a particular time and the frequency with which anger is experienced, expressed and controlled. It consisted of 57 items. This instrument comprised of 6 scales namely, state anger, trait anger, anger expression-out, anger expression-in, anger control-out and anger control-in. State anger consists of three subscales namely feeling angry, feel like expressing anger verbally and feel like expressing anger physically. Trait anger consists of two subscales namely angry temperament and angry reaction. The STAXI-2 also includes an anger expression index which provides an overall measure of the expression and control of anger. The scale has been widely used to measure anger in offender populations (Dalton, Blain, & Bezier, 1998; Slaton, Kern, & Curlette, 2000) and has been shown to have acceptable alpha and test-retest reliability and validity (Spielberger, 1991). Spielberger (1999) reported Cronbach's alpha coefficients for the STAXI-2 scales ranging from 0.73-0.93. For the purpose of this present study, only STAXI-2 scales scores were selected. The Cronbach's alpha coefficients of the STAXI-2 interpretation for the scales of state anger, trait anger, anger expression-out, anger expression-in, anger control-out and anger control-in were 0.92, 0.81, 0.75, 0.60, 0.80 and 0.81, respectively.

The Aggression Questionnaire (AQ; Buss & Perry, 1992) is a self-report measure which uses 5 point rating scales to measure aggression. This questionnaire consisted of 29 items. The Aggression Questionnaire consists of four subscales namely anger, physical aggression, verbal aggression, and hostility. The internal consistency for the four subscales and total score range from 0.72 (verbal aggression) to 0.89 (total AQ score). The retest reliability for the AQ over a nine weeks period is also satisfactory (correlations ranged from 0.72 for anger to 0.80 for physical aggression and for the total score; Buss & Perry, 1992). In the present study, only total AQ score was selected. The internal consistency of total AQ for the inmates as measured by Cronbach's alpha coefficient were 0.87 and one item has been removed due to its low value reliability.

3. Results

Tables 1 and 2 as shown below, are the results of the pre-test and post test scores on STAXI-2 scales and AQ. As seen in Table 1, the results showed that there were no differences in the mean of pre-test for all STAXI-2 scales scores in both the experimental group and control group. Meanwhile, the mean of post-test in the experimental group showed a significant decrease in the state anger, trait anger, anger expression-out, and anger expression-in

compared to the control group. The mean of post-test in the experimental group also showed a significant increase in anger control-out and anger control-in compared to the control group. The mean scores in the experimental group were reduced from 39.80 to 28.73 (state anger), from 24.55 to 19.33 (trait anger), from 18.00 to 14.78 (anger expression-out) and from 19.70 to 16.93 (anger expression-in). Furthermore, for the anger control scales, the mean scores were increased from 21.08 to 22.93 (anger control-out) and from 21.13 to 23.73 (anger control-in).

Next, as seen in Table 2, the results showed that there were no differences in the mean of pre-test for AQ scores between the experimental group and the control group. Meanwhile, the mean of post-test in the experimental group showed a great decrease compared to the control group. The mean score for the experimental group were reduced from 89.43 to 72.23 (aggression).

Table 1. Descriptive analysis of STAXI-2 scales scores in the pre-test and post-test in the experimental group and control group

Variables	Group	Mean		SD	
		Pre-test	Post-test	Pre-test	Post-test
State Anger	Experimental	39.80	28.73	9.42	5.36
	Control	37.10	39.60	5.34	8.23
Trait Anger	Experimental	24.55	19.33	4.49	3.25
	Control	23.58	25.73	3.67	6.67
Anger Expression-Out	Experimental	18.00	14.78	3.30	2.52
	Control	17.50	18.68	2.57	3.75
Anger Expression-In	Experimental	19.70	16.93	3.28	3.74
	Control	18.55	18.13	3.62	2.82
Anger Control-Out	Experimental	21.08	22.93	4.08	4.38
	Control	20.88	20.70	3.24	3.24
Anger Control-In	Experimental	21.13	23.73	4.38	4.68
	Control	21.08	21.08	3.95	3.49

Table 2. Descriptive analysis of AQ score in the pre-test and post-test in the experimental group and control group

Variable	Group	Mean		SD	
		Pre-test	Post-test	Pre-test	Post-test
Aggression	Experimental	89.43	72.23	12.84	11.74
	Control	89.53	89.28	11.25	16.84

As reported in Table 3, the analysis of covariance (ANCOVA) was used to examine the differences on STAXI-2 scales scores between the experimental group and the control group. The results showed there were significant differences in the pre-test and post-test between the experimental group and the control group on each STAXI-2 scales which the said results showed state anger $F(1,77) = 50.852$, $p < 0.01$, trait anger $F(1,77) = 40.653$, $p < 0.01$, anger expression-out $F(1,77) = 34.022$, $p < 0.01$, anger expression-in $F(1,77) = 6.807$, $p < 0.05$, anger control-out $F(1,77) = 7.215$, $p < 0.01$ and anger control-in $F(1,77) = 10.176$, $p < 0.01$. This means that the

experimental group experienced a significant reduction in state anger, trait anger, anger expression-out, anger expression-in, and a significant increase in anger control-out and anger control-in compared with the control group.

Further analysis was then carried out to examine the differences on AQ score. ANCOVA showed there were significant differences in the pre-test and post-test between the experimental group and the control group on aggression $F(1,77) = 27.655, p < 0.01$ (Table 4). This means that the cognitive behavioural group counselling treatment was effective in reducing aggression among the inmates.

Table 3. ANCOVA analysis of STAXI-2 scales in the pre-test and post-test in the experimental group and control group

Variables	Source	Sum of Squares	df	Mean Square	F	P
State Anger	Group	2436.897	1	2436.897	50.852	.000**
Trait Anger	Group	941.949	1	941.949	40.653	.000**
Anger Expression-Out	Group	325.297	1	325.297	34.022	.000**
Anger Expression-In	Group	58.253	1	58.253	6.807	.011*
Anger Control-Out	Group	91.788	1	91.788	7.215	.009**
Anger Control-In	Group	138.030	1	138.030	10.176	.002**

Note: * $p < 0.05$; ** $p < 0.01$

Table 4. ANCOVA analysis of AQ in the pre-test and post-test in the experimental group and control group

Variable	Source	Sum of Squares	df	Mean Square	F	P
Aggression	Group	5803.192	1	5803.192	27.655	.000**

Note: * $p < 0.05$; ** $p < 0.01$

4. Discussion

As stated earlier, the objective of this study was to examine the effectiveness of cognitive behavioural group counselling on anger and aggression among male prison inmates in Malaysia. Our findings showed that there were significant reduction in state anger, trait anger, anger expression-out and anger expression-in meanwhile, there were significant increase in anger control-out and anger control-in, among the experimental group. The results also showed there were significant reduction in aggression among the experimental group. This result reveals that cognitive behavioural group counselling was effective in reducing anger and aggression among the inmates and may help them to better manage their emotions and behaviour appropriately. This finding supports the results of the previous studies that were carried out by other researchers which showed that cognitive behavioural group intervention would contribute to reducing the level of anger and aggression among the inmates in a correctional setting (Vannoy & Hoyt, 2004; Ireland, 2004; Milkman & Wanberg, 2007; Chan, 2009; Bus, Stefan, & Visu-Petra, 2009; Akbari et al., 2012). As an example Bus et al. (2009), showed that the cognitive behavioural group based on anger management that was implemented in a Romanian maximum security prison was effective. They observed that the participants in the experimental group were more efficient in experiencing a lower level of anger, trait irritability and they tended to express less aggressive behaviour and tried harder to control their anger emotions. These improvement maintained for two months after the intervention ended. Furthermore, meta-analysis studies by Wilson, Bouffard and MacKenzie (2005), examined 20 studies of group oriented cognitive behavioural for offenders and they found that the cognitive behavioural group intervention was very effective for reducing their violent criminal behaviour. In their analysis, the intervention groups also showed recidivism reductions compared to the control groups. According to Akbari et al. (2012) anger management does not mean that the person did not show their anger but it is a way on how to express anger

appropriately or in a healthy way.

It can be said that after undergoing group counselling, subjects become more aware of their anger and aggression and they were able to control their negative emotions and behaviour by using the techniques provided. The cognitive behavioural group counselling usually offers training on cognitive and behavioural, and enables members to use these techniques in their real life situation. In treating anger and aggression, psychological training such as cognitive restructuring, conflict resolution model, time out and relaxation techniques, which were used in the manual of cognitive behavioural can play an important role in achieving the goal. As an example, cognitive restructuring technique is a tool that helps clients to reduce negative and irrational beliefs about a situation by structuring the minds. It is based on the cognitive behavioural theory that our attitudes are determined by what we tell ourselves, and therefore, that positive self-talk can create a positive mood and reduce our anger and aggression. The intervention focuses heavily on the relationship between thoughts, feelings and behaviours. This is in line with Edmondson and Conger (1996) which stated that cognitive behavioural therapy initiates changes in cognition that affect the behaviour. Other than that, the conflict resolution model is an assertive device for resolving conflicts with others. It consists of a series of problem-solving steps that, when followed, minimise the potential for anger escalation. In the session, it also focuses on the group members' role playing real-life situations by using the assertiveness in conflict resolution model.

Besides that, members were taught by the group leader to monitor their anger and aggression on an anger meter and to identify the physical, behavioural, emotional and cognitive cues that indicated the escalation of their anger. An escalation of anger could be controlled by monitoring these cues and by developing and using cognitive behavioural techniques. In addition, homework and exercise were also given to members. The use of homework was significantly and positively related to the intervention outcome (Mitrani, 2010). According to Schmitz (2005), cognitive behavioural approach to lower or reduce anger usually requires group members to complete homework assignments related to the group discussions. Through the homework and exercise, hopefully, it will help them to change how they think and communicate. Furthermore, the group counselling sessions offers understanding and support which foster the members' willingness to explore problems they have brought with them to the group (Corey, 2012). As they practice these emotions and behaviours in the group, members receive encouragement and learn how to bring their new insight into their life outside the group experience.

Therefore, it is hoped that many key personnel or parties will benefit from the outcome of this study. Through this study, it can help the Correctional Authorities to understand the level of anger and aggression among inmates and identify the appropriate steps in prevention and recovery. Besides, Correctional Authorities can use the manual of cognitive behavioural group counselling as an additional treatment module in prisons. It can be adapted and practised in all prisons in Malaysia because currently there are no specific intervention for managing anger and aggression. Besides that, this intervention is also beneficial and can be applied in a variety of institutions such as drug rehabilitation centres, hospitals, schools and universities in dealing with anger and aggression. This study may also provide benefits to the inmates who suffers from anger and aggression. They will be more aware of their level and cues of anger and aggression. Various techniques for managing anger aggression were taught to the inmates so that they can apply suitable techniques that work best for them in prison and also outside the prison when they are released and returning to the society. It is also important in helping to reduce violent criminal recidivism rate after their prison release. In addition, the study would also contribute to the body of knowledge of the relevant disciplines particularly in the field of counselling psychology, forensic psychology, criminology and psychiatry.

Whilst the results are very promising, however, there are several limitation in this study. Firstly, there are no follow-up with the inmates after the end of the treatment due to time limitation. Thus, this study cannot confirm the extent to which intervention effects persists following the termination of treatment. Therefore, future study should have a long term follow-up to evaluate the progress and to assess the maintenance of their emotions and behaviours. The second limitation is that the group intervention was done during a time constraint due to a very tight schedules. It is limited to explore more depth about their issues that lead to their negative emotions and behaviours. It is suggested that future studies should consider extending the length of intervention.

5. Conclusion

Overall, the results and findings of this study can be used by others to show that one of the approaches to anger management skills training, which is cognitive behavioural group counselling, as a valued tool used in reducing anger and aggression. The findings also can serve as a stepping-stone for further future studies. Finally, it can be concluded that cognitive behavioural group counselling has a significant impact and can be used effectively to reduce anger and aggression among the inmates.

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