INTRODUCTION

In recent years adolescents’ involvement in anti-social and criminal behaviors had been the focus of discussions in the local as well as international media. In Malaysia, the topics that usually attract a lot of attention and became the main public concern ranged from violent crimes such as rapes and murders, non-violent crimes such as thefts, and traffic offences such as illegal motor cycle race committed by adolescents.

Throughout their early years adolescents experienced many life events that influenced their individual thoughts, feelings, and behaviors. All of those had significant impacts on them in a negative, positive or a combination of both ways. Delinquent and anti-social behaviors are presumably the results of negative impacts of all sorts of experience that the adolescents had gone through.

Compared to non-delinquents, delinquents showed higher problematic behavior and cognitive distortions (Barriga et al., 2000). Nas et al.’s (2008) study which compared 311 delinquents and 142 non-delinquents found delinquents exhibited more cognitive distortions than non-delinquents. Various researchers had proposed that cognitive distortions are major factors in the understanding, prediction and treatment of antisocial behavior (Liau et al., 1998). Pervan and Hunter (2007) found an association between cognitive distortions with sexual offending behavior. Barriga et al. (2000) defined cognitive distortion as inaccurate ways of attending to or conferring meaning

ABSTRACT

Cognitive distortion as a reliable predictor to juvenile adolescents’ depression is still debatable. Thus, it is the purpose of this study to examine the relationships of the five domains of cognitive distortion: self-critique, self-blame, helplessness, hopelessness, and preoccupation with danger with depression and to ascertain the predictive relationship between the five domains of cognitive distortion with depression. Participants were 30 male delinquent adolescents who participated in a youth development program. A set of questionnaires comprising of demographic background questions, Cognitive Distortion Scale (CDS) and Reynolds Adolescent Depression Scale (RADS) measures the participants’ background, cognitive distortion and depression, respectively. Results from the correlations and multiple regressions indicate positive relationships between all the domains of cognitive distortion and depression. Among the domains, helplessness and preoccupation with danger are significant predictors of depression. Implications to counseling are discussed with emphasis on Cognitive Behavior Therapy (CBT) and family counseling.

Keywords: Cognitive distortion, depression, delinquent, adolescents

Cognitive Distortion as a Predictor towards Depression among Delinquent Adolescents

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Cognitive distortion as a reliable predictor to juvenile adolescents’ depression is still debatable. Thus, it is the purpose of this study to examine the relationships of the five domains of cognitive distortion: self-critique, self-blame, helplessness, hopelessness, and preoccupation with danger with depression and to ascertain the predictive relationship between the five domains of cognitive distortion with depression. Participants were 30 male delinquent adolescents who participated in a youth development program. A set of questionnaires comprising of demographic background questions, Cognitive Distortion Scale (CDS) and Reynolds Adolescent Depression Scale (RADS) measures the participants’ background, cognitive distortion and depression, respectively. Results from the correlations and multiple regressions indicate positive relationships between all the domains of cognitive distortion and depression. Among the domains, helplessness and preoccupation with danger are significant predictors of depression. Implications to counseling are discussed with emphasis on Cognitive Behavior Therapy (CBT) and family counseling.

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on experiences. According to Ellis (1977) and Liau et al. (1998) cognitive distortions are rationalizing attitudes, thoughts or beliefs concerning one’s own or others’ social behavior. Beck (1976) introduced the concept of cognitive distortion in his cognitive theory of depression which suggests a relationship between cognitive distortion and depression. 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. Juvenile delinquents find it acceptable to use cognitive distortions and frequently used them (Barriga et al., 2001; Barriga et al., 2009; Kubik and Hecker, 2005; Barriga et al., 2008). Various researchers have proposed cognitive distortions as major factors in the understanding, predicting, and treating antisocial behavior (Liau et al., 1998). Krotenberg (2003) found relationships between cognitive distortions, self-esteem, and depression. Correlation between cognitive distortions and depression was also found by Nasir et al. (2010) in their study on 316 Malaysian juvenile delinquents.

High rates of depression among adolescents had been reported during the last fifteen years (Marcotte et al., 2006). However, it is difficult to make a precise assessment of the prevalence of depressive symptoms in the adolescent population (Marcotte et al., 2006). Depression among adolescents is indeed serious and according to Hamack et al. (2004) and Repetto et al. (2004) depression is related to suicide, other medical and psychological co-morbidities and a recurrent depression in adulthood. Major depressive disorder is more common in adolescents than asthma and most other chronic medical problems (Jackson and Lurie, 2006). It was estimated that the rate of serious depression among American youth had increased from approximately 2% in the 1960s to almost 25.5% in the 1990s (Johnson, 2010). In Taiwan the prevalence of depression among adolescents is high and the multiple factors of family, peer, school and individuals are associated with depression (Lin et al., 2008). In Singapore the prevalence of depression was found to be 8.6% in adult and 5.7% in the elderly (Ministry of Health, Singapore, 2004). A relatively large proportion of young people tend to be depressed in Hong Kong too (Chou, 2000).

Wiesner and Kim (2006) and Hunt (2008) suggested that depressive symptoms and delinquent behavior among adolescents are common. Major depression is more common among juvenile offenders especially girls than in the general adolescent population (Ryan and Redding, 2004). Marton et al. (1993) found that depressed adolescents had significantly greater cognitive distortion than non-depressed adolescents. In a clinical study conducted by Ginsburg et al. (2009) on 390 adolescents, girls endorsed more negative cognition on three out of four factors. Further, their study showed that maladaptive cognitions were positively related to severity of depression.

Beck’s (1967; 1976) cognitive theory of depression suggests that negative perception of self of depressed children reflect their cognitive distortions of the self. Beck (1967) believed that cognitive distortion places an individual at a risk for depression. Further, negative cognitive errors make a person vulnerable to depression. A relationship between cognitive distortion and depression was found in various researches (Croker, 1991; Marton et al., 1993; Schroeder, 1994; Maxwell et al., 1997). There was also an evidence of a link between cognitive distortion and depression in a Chinese sample in a Hong Kong study (Wong, 2008).

Depression and delinquency are major public health problems which could be costly and a burden to society. They affect multiple groups (Scott et al., 2001; Lynch and Clark, 2006). Depression has been linked to increase mortality, poorer health status, pain, decreased functional and cognitive abilities and anxiety (Chuan et al., 2008; Anstey et al., 2007). Depression was also identified as the best single factor of suicide ideation (Zhang, 1996).
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On one hand, depressed adolescents are at greater risk of developing further episodes of depression later in life (Harrington et al., 1990). On the other, adolescents’ continued criminality jeopardizes stable employment, career and living options as adults, strains the resources of our legal and justice systems, burdens victims and their families, and increases costs for medical and social services (Unruh et al., 2009). Since depression is related to cognitive distortion among juvenile delinquents and adolescents in general, the problems need to be addressed. The purpose of this study is to examine the relationships of the five domains of cognitive distortions: self-critique, self-blame, helplessness, hopelessness, and pre-occupation with danger with depression among a group of delinquent adolescents. It will also ascertain the predictive relationship between the five domains of cognitive distortion with depression.

METHODS

The method of sampling was purposive. Participants for this study were 30 youths who had committed several traffic offences and other offences who volunteered to participate in a youth development camp. They were all males, the youngest was one 16 years old and the eldest were two 20 years old. They were all from Malay ethnic background. The data on the subjects is normal and homogenous based on Levene’s test of normality and homogeneity.

The set of questionnaires were given to the participants when they first arrived at the camp that is, before the development program began. Written consents from them were obtained. A set of questionnaires comprising of the demographic questions, Cognitive Distortion Scale (CDS) and Reynolds Adolescent Depression Scale (RADS) was used to collect the data for this study.

Demographic Questions were used to obtain background information of the participants, which include age, gender, academic background, ethnicity, family income, and place of residence. Cognitive Distortion Scale (CDS) (Briere, 2000) assesses five dimensions of cognitive distortions: self-criticism (SC), self-blame (SB), helplessness (HLP), hopelessness (HOP), and preoccupation with danger (PWD). This scale contains 40 items and each dimension contains eight items. Each item is rated on a 5-point Likert scale, from 1 (never) to 5 (very often). The total score for the CDS is between 40 and 200 and for each dimension the total score is between 8 and 40. High scores indicate high cognitive distortion. The reliability of CDS for the Malay version was α = .97. The Reynolds Adolescent Depression Scale (RADS) (Reynolds and Mazza, 1998) was developed to evaluate the severity of depressive symptoms in adolescents. The RADS consists 30 items with 4-point Likert scale. Responses were evaluated on a 4-point scale ranging from 1 (never) to 4 (always). Possible total scores ranged from 30 to 120. Scores from 30 to 60 indicate that someone was in mid depression, scores from 61 to 90 represent moderate depression, and scores from 91 to 120 indicate severe depression. The reliability of RADS for the Malay version was α = .90. All instruments were translated into Malay language using Brislin et al. (1973) back translation technique.

RESULTS AND DISCUSSION

Table 1 presents the demographic characteristics of this study. The subjects consisted of 30 male delinquent adolescents who participated in a youth development program. Majority of the participants were from rural areas (83%) with the age group of 18 to 20 years old (93%). Most of the participants were at the lowest socioeconomic status as indicated by the parents’ monthly income of less than RM1500 per month (86%). In terms of educational level, 73% of the participants were from junior high and high school.


TABLE 1
Demographic characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 &amp; below</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>18-20</td>
<td>28</td>
<td>93.3</td>
</tr>
<tr>
<td>Parents’ income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RM1000 &amp; below</td>
<td>16</td>
<td>53.3</td>
</tr>
<tr>
<td>RM1001-RM1500</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>RM1501 &amp; above</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Location of residence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>Rural</td>
<td>25</td>
<td>83.3</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never been to school</td>
<td>1</td>
<td>3.33</td>
</tr>
<tr>
<td>Primary education</td>
<td>1</td>
<td>3.33</td>
</tr>
<tr>
<td>Junior high (Form 3)</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>High school (Form 5)</td>
<td>16</td>
<td>53.3</td>
</tr>
<tr>
<td>College</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
<td>6.66</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Results of this study in Table 2 showed that the greater the cognitive distortion the more depressed the juvenile delinquents were and likewise the more depressed the juvenile delinquents the greater the distortion. It was also found that when one dimension of the cognitive distortion was high the overall cognitive distortion and the other four dimensions were also high. Likewise when the overall cognitive distortion increased all the four dimensions also increased. The findings of this study support previous studies by Marton et al. (1993), Maxwell et al. (1997), Croker (1991), Schroeder (1994), Krotenberg (2003), Wong (2008), and Nasir et al. (2010).

The regression model showed that helplessness and preoccupation with danger predicted significantly depression with 34% variance, $R^2 = .34$, $F(5,268)=27.28$, $p<.001$. The linear equation that can be formulated is:

$$Y=51.44+.634(\text{helplessness}) +.854(\text{preoccupation with danger})$$

Helplessness was a significant predictor with Beta=.304, $t=2.79$, $p<.01$. Similarly, preoccupation with danger also was a significant predictor with Beta=.399, $t=4.21$, $p<.001$. The results are shown in Table 3.

Further results showed that helplessness and preoccupation with danger dimensions of cognitive distortion were predictors of depression. Other domains, namely self-critique, self-blame and hopelessness did not reach significance as predictors of depression.

Adolescents’ depression is a complex and pressing mental health problem. Since cognitive distortion is a significant predictor of depression, the main focus of counseling should be on reconstructing and changing of cognitions from distortion or maladaptive to normal and adaptive. Counseling using Cognitive Behavior Therapy is suggested which focuses on changing cognitions and building skills such as problem solving and communication. Specifically, cognitive behavior therapy will be able to help rid the irrational thinking patterns and learn strategies to challenge those thoughts and thereby have a positive feedback effect on the depressed juvenile delinquents mood. The literature reviewed by Larner (2009) suggests an integrative treatment approach that includes individual psychological treatment like CBT, medication where required and family therapy. An examination on psychological treatment outcome studies for depressed youth conducted since 1998 discovered the efficacy of CBT in the treatment of childhood and adolescent depression (David-Ferdon and Kaslow, 2008). Based on their study, Konner et al. (2009) suggests a brief group based CBT program for depression.

In eastern countries like Malaysia, families are generally quite traditional in the sense that families are relatively close knitted and parents play important roles in children’s and adolescents’ lives in all ethnic groups. As such, it is suggested that family counseling be included in the intervention programs for the rehabilitation
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TABLE 2
Correlation matrix between self-critique, self-blame, helplessness, hopelessness, preoccupation with danger and depression

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-critique (1)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>self-blame (2)</td>
<td>.779**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>helplessness (3)</td>
<td>.822**</td>
<td>.780**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hopelessness (4)</td>
<td>.831**</td>
<td>.691**</td>
<td>.824**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>preoccupation with danger (5)</td>
<td>.791**</td>
<td>.731**</td>
<td>.783**</td>
<td>.757**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>depression (6)</td>
<td>.473**</td>
<td>.442</td>
<td>.495**</td>
<td>.405**</td>
<td>.525**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**p<0.001

TABLE 3
Multiple regression analysis between self-critique, self-blame, helplessness, hopelessness, preoccupation with danger and depression

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>51.442</td>
<td>2.530</td>
<td></td>
<td>20.335**</td>
</tr>
<tr>
<td>self-critique</td>
<td>-.003</td>
<td>.223</td>
<td>-.001</td>
<td>-.012</td>
</tr>
<tr>
<td>self-blame</td>
<td>.127</td>
<td>.189</td>
<td>.059</td>
<td>.673</td>
</tr>
<tr>
<td>helplessness</td>
<td>.634</td>
<td>.227</td>
<td>.304</td>
<td>2.790**</td>
</tr>
<tr>
<td>hopelessness</td>
<td>-.315</td>
<td>.194</td>
<td>-.167</td>
<td>-1.622</td>
</tr>
<tr>
<td>preoccupation with danger</td>
<td>.854</td>
<td>.203</td>
<td>.399</td>
<td>4.206**</td>
</tr>
</tbody>
</table>

**p<0.001

of the delinquents. The focus of family therapy is psycho-education and enhancing communication between parents and adolescents to address relationship and communication issues. Feeny et al. (2009) suggested, future work with adolescents should carefully explore patterns of family environment and interaction.

Limitations of the current study should be noted. First the sampling method was purposive and the participants included were those who participated in the developmental camp. Second, the number of participants was small. Having said that, it is not possible to generalize the findings to the population of juvenile delinquents in the country. Future work should consider making a comparative study of juvenile delinquents in the correction and rehabilitation centers in the country with non-juvenile delinquents.

CONCLUSION
The results of this study support findings of previous studies which indicated positive correlation between the two variables, cognitive distortion, and depression. Further, helplessness and preoccupation with danger dimensions of cognitive distortion were strong predictors of depression. Depressed adolescents are at greater risk of developing into depressed adults, hence counseling with cognitive behavior therapy approach will help rid the irrational thinking patterns and build strategies to challenge those thoughts for positive feedback effect on the depressed delinquents’ adolescents.
REFERENCES


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