

Family Functioning, Self-Esteem, Self-Concept and Cognitive Distortion Among Juvenile Delinquents

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Abstract: Adolescents' social and psychological problems relating to juvenile delinquents revolve around factors such as personality and cognitive constructs and family dynamics. The objectives of this study were to ascertain the background characteristics of juvenile delinquents and to determine relationships between family functioning, self-concept, self-esteem and cognitive distortion. Participants were 316 males and females between 12-18 years old from six rehabilitation and correctional centers in Malaysia. A set of questionnaires comprising background characteristics, Family Adaptability and Cohesion Evaluation Scales (FACES III), Rosenberg Self-Esteem Scale (RSES), Tennessee Self-Concept (TSC) and Cognitive Distortion Scale (CDS) was used to collect data. Data were analyzed using descriptive statistics and Pearson correlation. Results showed that >30% of the participants had committed violent offences and there were correlations between family functioning, self-concept, self-esteem and cognitive distortions. Family involvement and family counselling are suggested for effective treatment of delinquents and for the prevention of recidivism.

Key words: Family functioning, self-esteem, self-concept, cognitive distortion, juvenile delinquents, Malaysia

INTRODUCTION

There has been a growing concern over the steady rise in crimes involving juveniles during the last few years in Malaysia particularly in the urban areas. In the past months, the public had been shocked by reports of youth behaving badly from assaulting classmates on camera to rape, drug abuse, robbery and even murder.

There were 6,048 crimes by juvenile offenders in 2006 compared to 5,114 in 2007 and 2,394 crimes in 2006 compared to 1,662 in 2007 and these were categorized as violent crimes such as rape, molest and armed robbery.

The rising statistics of juvenile delinquency is a serious concern across the globe. In the United States, an adolescent is arrested for committing violent criminal acts every 2 h (Daley and Onwuegbuzie, 2004). Kim and Kim (2005) studied that the nature and extent of delinquent behavior among adolescents is becoming a social issue in Southern Korea. Even though, the incidence of delinquency among Korean adolescents is relatively and not high compared to that of adolescents in Western countries, delinquent behavior among Korean adolescents has become increasingly more violent and remains a serious social problem facing Korean society (Kim and Kim, 2008).

Any discussion on adolescents' social and psychological problems and issues relating to juvenile delinquents would usually revolve around factors and causes such as peers, school systems, media, community and families. Among all these factors, family seems to be the main focus. Family plays a very important role especially in positive development, identity formation and self-concept. Emotional support from family as suggested by Lau and Kwok (2000) has significant effect on adjustment and positive mental health. As such, researchers have linked the family and the family environment to various mental health issues (Wille *et al.*, 2008; Dale *et al.*, 2009; Graham, 2009; Sawatzky *et al.*, 2010; Ta *et al.*, 2010). Family characteristics remain a big influence on adolescents' development (Lin *et al.*, 2008) and the relationship between parental availability and control and late adolescents' adjustment has been well established (Alegre and Benson, 2010).

Houston and Barton (2005) defined juvenile delinquents as any individual between the age of 7 and 18 years old that had committed criminal act. Juvenile delinquents usually come from dysfunctional family background and their delinquent behaviors are introduced by their own families (Quinn and Sutphen, 1994; Thompson *et al.*, 2007). Delinquent behavior

develops and is maintained within the family social context (Loeber *et al.*, 1998). Bischof *et al.* (1995) found that juvenile delinquents with sexual criminal behavior compared to non-delinquent adolescents were lower in terms of their perception of their family cohesion. Similarly, Kim and Kim (2008)'s findings indicated that delinquent adolescents showed more dysfunctional parental partner dynamics, poorer family functioning and higher levels of family violence compared to non-delinquent adolescents. What they found in Korea were consistent with those reported in other countries. Jr Huey *et al.* (2000)'s study indicated that family relationship such as family functioning, family cohesion and parental control were predictors to lower delinquent behavior among juvenile delinquents. Clark and Shields (1997) on the other hand, found that good communication was related to lower delinquent behavior. Indeed, family, particularly family functioning was significantly related to delinquent behavior (Fortin, 2003; Perren and Hornung, 2005; Wiium and Wold, 2006; Smith and Hall, 2008).

Previous research: Nearly, all theories of delinquency are consistent in their views that family directly or indirectly contributes to delinquent behavior (Cox *et al.*, 2003; Houston and Barton 2005; Sims and Preston, 2006). Many researchers in their discussions on issues related to juvenile delinquency do not separate those issues from family factors (Coughlin and Vuchinich, 1996; Fortin, 2003; Perren and Hornung, 2005; Wiium and Wold, 2006; Smith and Hall, 2008).

Self-concept and self-esteem are both important personality constructs that develop and grow out of life experiences. Self-concept refers to how a person describes himself (cognitive dimension) while self-esteem refers to how a person evaluates himself (emotional dimension). Vermeiren *et al.* (2004) asserted that relationship between self-concept and self-esteem in adolescents' anti-social behavior had been investigated for many decades and remains considerable controversy. Research on 365 Australian adolescent boys and girls found that the more serious their delinquent behaviours are the more negative their self-concepts (Levy, 1997). Family has a big influence on the development of self-concept due to its direct contact with an individual (McClun and Merrell, 1998). Besides the family, other factors outside the family such as school and peers may also influence self-concept (Harter, 1999).

McNelis *et al.* (2000) conducted a longitudinal study on factors related to self-concept on 106 children with asthma aged 8-13 years. They found that children with the poorest self-concept were those who had less satisfaction with family relationships, a more negative attitude toward their illness and used more negative coping behaviors.

Ho *et al.* (2008)'s findings showed that a better self-concept was correlated with enhanced family functioning. A study by Brown *et al.* (2009) on 50 children together with their parents from European American middle class families found both direct and interactive influences of family dynamics and child characteristics on children's self-concept development.

Besides self-concept, self-esteem is also strongly related to family functioning. Elfhag (2010) considered self-esteem as important in many aspects of life. It is very important to study self-esteem because there is a link between self-esteem and some very serious behavioral problems such as violence (Boden *et al.*, 2007).

Past studies reported associations between low self-esteem and a range of measures of violent behavior (Ellickson and McGuigan, 2000; Toombs *et al.*, 2000; Hollister-Wagner *et al.*, 2001) and parents are important for the development of their children's self-esteem (Sieving and Zirbel-Donisch, 1990). Since the formation of self-esteem takes place in the family, family functioning and parent-child relation had been of interest to many researches (Kernis *et al.*, 2000; McCormick and Kennedy, 2000). High self-esteem has also been linked to academic achievement (Filozof *et al.*, 1998) while low self-esteem is closely linked to depression (Lin *et al.*, 2008). Studies have also shown that dysfunctional family functioning can be a hindrance to positive and high self-esteem in adolescents. Lau and Kwok (2000) indicated that dysfunctional family environments are related to low self-esteem.

In his study on Chinese adolescents, Shek (2002) discovered that family functioning was significantly related to existential well-being, self-esteem and sense of mastery.

Lanz *et al.* (1999) found that family functioning was related to global self-worth and Preechawong *et al.* (2007)'s study found that family functioning had a direct relationship with adolescents' self-esteem. Preechawong's study supported the findings of previous studies (Mandara and Murray, 2000; McNelis *et al.*, 2000). Garber *et al.* (1997) said that adolescents who perceived their parents as being emotionally supportive such as giving them affection and encouragement may see themselves as worthy which in turn will decrease their risk of experiencing depressed mood. Similarly, Trumpeter *et al.* (2008)'s investigation revealed that perceived emotional and cognitive empathy of both parents was associated with higher levels of self-esteem and adjusted narcissism and lower levels of depression and maladjusted narcissism.

Further, results of Koydemir-Ozden and Demir (2009)'s study indicated that parental acceptance/involvement predicted self-esteem; perceived parental

strictness/supervision predicted fear of negative evaluation and perceived parental psychological autonomy predicted self-esteem.

According to Barriga *et al.* (2000) juvenile delinquents showed higher cognitive distortions and problem behavior than non-delinquent. Cognitive distortions are inaccurate ways of attending to or conferring meaning on experiences (Barriga *et al.*, 2000) or rationalizing thoughts or beliefs concerning one's own or others' social behavior (Ellis, 1977). The concept of cognitive distortions originated from Beck (1976)'s 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 with cognitive distortion may rationalize his delinquent or anti-social behavior as acceptable and rational.

Koydemir-Ozden and Demir (2009) found a negative correlation between cognitive distortion and self-esteem. Negative thinking (cognitive distortion) mediates the effect of self-esteem on depressive symptoms (Peden *et al.*, 2000; Charoensuk, 2007). Harter and Whitesell (1996) also found that negative attribution style and low self-esteem were associated with depressive symptoms and clinical depression across age, gender and sample type. Results from a study by Krotenberg found that the three variables, self-esteem, cognitive distortion and depression were correlated. Self-esteem was negatively correlated with cognitive distortion while depression and cognitive distortion were positively correlated.

A review of the literature does not seem to point to a direct link between cognitive distortion and family functioning. However, studies on different populations indicated a relationship between cognitive distortion and depression (Crocker, 1991; Marton *et al.*, 1993; Shroeder, 1994; Maxwell *et al.*, 1998) and depression and family functioning (Keitner and Miller, 1990; Summerville *et al.*, 1994; Donnelly, 1999; Lau and Kwok, 2000; Marcotte *et al.*, 2002; Saeki *et al.*, 2002; Koyama *et al.*, 2004; Lin *et al.*, 2008; Au *et al.*, 2009; Sarmiento and Cardemil, 2009). Since cognitive distortion and depression are related and depression is related to family functioning, it is therefore quite likely that family functioning is also directly or indirectly related to cognitive distortion.

Members of the Malaysian public have every reason to be concerned about juveniles involvement in criminal behavior because adolescents' continued criminality jeopardize stable employment, career and living options as adults, strain the resources of the legal and justice systems, burden victims and their families and increase

costs for medical and social services (Unruh *et al.*, 2009). In Malaysia as noted earlier, adolescents had become increasingly more violent and are becoming a serious social problem. Since delinquent behavior develops and is maintained within the family social context (Loeber *et al.*, 1998) and an understanding of the relationships between family functioning, self-esteem, self-concept and cognitive distortion's of the juvenile delinquents would provide a clear picture of their psychological aspects, it is pertinent that a study is conducted to find out the demographic characteristics and the relationships between the four variables, family functioning, self-concept, self-esteem and cognitive distortion. The purposes of this study were to ascertain the demographic characteristics which include the kinds of offence committed by the juvenile delinquents and to determine the relationships between family functioning, self-esteem, self-concept and cognitive distortion among Malaysian juvenile delinquents.

MATERIALS AND METHODS

Sample and procedure: Participants for this study were 316 juvenile delinquents (164 male and 152 female) from six correctional and rehabilitation centers in Malaysia whose age ranged from 12-18 years old. They were randomly selected by the centers to participate in this study. Permissions from the respective correctional/rehabilitation centers were obtained prior to the research. Written consents from the participants were also obtained.

The researchers personally went to the rehabilitation and correctional centers to distribute the questionnaires. They were grouped together in a meeting room in each center where the objectives of the study were explained and instructions concerning the questionnaires were read to them. The participants who were not able to read or write were assisted by research assistants (who had been briefed not to influence them in any way) to fill up the questionnaires for them.

Demographic questions on age, gender, academic background, family income, place of residence and types of offence were used to get information on the background of the participants. Family Adaptability and Cohesion Evaluation Scales 3rd Edition (FACES III) (Olson *et al.*, 1979) contains 20 items for assessing real family condition and ideal/imaginary family condition. Each item is rated on a 5 point Likert scale ranging from 1 (almost never) to 5 (almost always). The reliability of FACES III for the Malay version was $\alpha = 0.80$. The Rosenberg Self-Esteem Scale (RSES) was used to measure self-esteem. The scale contains 10-items and responses were evaluated on a 4-point scale ranging from 1 (strongly

disagree) to 4 (strongly agree). High scores indicate a high self-esteem. The reliability of the RSES for Malay version was $\alpha = 0.66$. The Tennessee Self-concept Scale (TSCS) developed by Fitts and Warren (2003) which contained 100 items was used to assess the self-concept of the participants. Responses were evaluated on a 5-point scale from 1 (absolutely untrue) to 5 (very true). High scores in this scale indicate a positive self-concept.

The reliability of the scale was $\alpha = 0.80$. The Cognitive Distortion Scale (CDS; Briere, 2000) assesses 5 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 8 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 $\alpha = 0.97$. All instruments were translated into the Malay language using Brislin *et al.* (1973) back translation technique.

RESULTS AND DISCUSSION

Descriptive analysis: Table 1 shows the demographic characteristics of the participants. There were almost an equal number of male (51.9%) and female (48.1%). About 7% of the participants ranged from 12-14 years of age while 92% are grouped in the 15-18 years old. Only 28.1% just managed to finish junior high school (or form 3 in the local context) and majority or >70% did not complete high school education. Most of the subjects were at the lowest socio-economic status as indicated by the fathers' monthly income of <RM1000.00 months⁻¹ (39.2% did not want to disclose their fathers' income/did not know how much their fathers' monthly incomes were). A majority or 65.2% came from the urban areas. Types of offence committed by the participants are shown in Table 2. The more serious criminal offence are those considered as violent: have to do with people; sexual offence and weapons/firearms.

Examples of behavior which were categorised as the offence that have to do with other people are physical attacks and murders; examples of sexual offence are rapes, molestation and sodomy while those categorised as have to do with weapons/firearms are those that involved using or carrying firearms and guns. All in all those involved in violent acts added up to 32.6% which is considered quite big. The figure is quite alarming and this calls for some form of intervention. Other offences such as have to do with objects, broke probationary rule, drugs, gamble,

Table 1: Demographic characteristics of participants

Variables	Groups	Frequency	Percentage
Gender	Male	164	51.90
	Female	152	48.10
Age	12-14	23	7.28
	15-18	292	92.40
	Unknown	1	0.30
	Never	8	2.50
Education	Primary	62	19.60
	Junior high (Form3)	155	49.10
	High school (Form5)	90	28.10
	Unknown	1	0.30
	Below RM1000	130	41.10
Father's income	RM1001-2000	43	13.60
	Above RM2001	19	6.00
	Unknown	124	39.20
	Rural	100	31.60
Place of residence	Urban	206	65.20
	Unknown	10	3.20
Total		316	100.00

Table 2: Types of offence committed by the juvenile delinquents

Types of offence	Frequency	Percentage
Have to do with objects	91	28.2
*Have to do with people	68	21.5
*Sexual offence	17	5.4
Broke probationary rule	37	11.7
Drugs	59	18.7
Gamble	14	4.4
*Weapons/fire arm	18	5.7
Traffic offence	20	6.3
Run away from school	58	18.4
Others	93	29.4

*Violent criminal behavior; some respondents had committed >1 type of offence and some repeated the same offences. Categorization of the offences is based on the standard government categorization done by the Social Welfare Department of Malaysia

traffic offence, run away from school and others are considered as non-violent. Examples of those categorised as others are stealing motorcycles, house break ins, shop break ins and robberies.

Table 2 shows that some respondents had committed >1 type of offences and some repeated the same offence (it is not within the scope of the present study to determine the exact figures of repeated offence and how many participants committed a combination of offences). Kyvsgaard (2007) referred to the tendency to commit the same type of crime repeatedly as specialization in delinquency. Versatility of delinquent behavior on the other hand is the tendency to commit varieties of offences (Klien, 1984; Gottfredson and Hirschi, 1990).

Inferential analysis: Table 3 shows correlation between family functioning and self-concept, self-esteem and cognitive distortion. There is a positive correlation between family functioning and self-concept ($r = 0.533$, $p < 0.01$). This means that the increase in family functioning was followed by an increase in self-concept and vice versa. There are also significant positive correlation between family functioning and self-esteem

Table 3: Correlation between family functioning, self-concept, self-esteem and cognitive distortion

Correlation	1	2	3	4
Self-concept (1)	1			
Self-esteem (2)	0.483*	1		
Cognitive distortion (3)	-0.330**	0.355**	1	
Family functioning (4)	0.533**	0.131*	-0.198**	1

*p<0.05; **p<0.01

($r = 0.131$, $p < 0.05$) which indicates an increase in family functioning was followed by an increase in self-esteem and vice versa.

Results also showed that there is a negative correlation between family functioning and cognitive distortion ($r = -0.198$, $p < 0.01$). This means that the increase in family functioning was followed by a decrease in cognitive distortion and when there is an increase in cognitive distortion, there is a decrease in family functioning. The relationships between the variables were: self-esteem and self-concept was positive and significant ($r = 0.483$, $p < 0.01$) which means that when self-esteem was high, self-concept was also high, vice versa. There was a negative correlation between self-concept and cognitive distortion ($r = -0.330$, $p < 0.01$) which indicates that when self-concept is high cognitive distortion is low and a low self-concept is followed by a high cognitive distortion. The relationship between and self-esteem with cognitive distortion was negative and significant ($r = -0.355$, $p < 0.01$). In other words it means that a high or positive self-esteem is followed by a low cognitive distortion and a low self-esteem is followed by a high cognitive distortion.

Results from this study support previous studies which showed relationships between family functioning, self-concept and self esteem (Sieving and Zirbel-Donisch, 1990; McClun and Merrell, 1998; Kernis *et al.*, 2000; Lau and Kwok, 2000; McCormick and Kennedy, 2000; McNelis *et al.*, 2000; Brown *et al.*, 2009). It is indeed true that a family that functions well will be able to provide conducive environment for adolescents physical and emotional development, consequently adolescents feel secured, safe and cared for. The family environment would directly or indirectly contribute to positive self-concept and high self-esteem. On the other hand when family is not functioning well, adolescents emotional and physical growth may be hampered and this may lead to a feeling of insecurity and uncared and thus will not be good for positive development of self-concept and self-esteem.

Table 4 shows the correlation between family functioning with 5 dimensions of cognitive distortion that is self-critique, self-blame, helplessness, hopelessness and preoccupation with danger. The results indicated significant negative correlations between family

Table 4: Correlation between family functioning and five dimensions of cognitive distortion

Correlation	1	2	3	4	5	6
Self-critique (1)	1					
Self-blame (2)	0.779*	1				
Helplessness (3)	0.822*	0.780*	1			
Hopelessness (4)	0.831*	0.691*	0.824*	1		
Preoccupation with danger (5)	0.791*	0.731*	0.783*	0.757*	1	
Family functioning (6)	-0.167*	-0.112	-0.201*	-0.201*	-0.172*	1

*p<0.01

functioning and self-critique ($r = -0.167$, $p < 0.01$), helplessness ($r = -0.201$, $p < 0.01$), hopelessness ($r = -0.202$, $p < 0.01$) and preoccupation with danger ($r = -0.172$, $p < 0.01$). However, there was no significant correlation between family functioning and self-blame ($r = -0.112$, $p < 0.01$). Although, the association between family functioning and depression is well established (Marcotte *et al.*, 2002; Saeki, 2002; Koyama *et al.*, 2004; Lin *et al.*, 2008; Au *et al.*, 2009; Sarmiento and Cardemil, 2009), this study did not include depression as a variable. The result of this study nevertheless indicate significant relationship between family functioning and the overall cognitive distortion and family functioning and all dimensions of cognitive distortion except self-blame. Previous studies also showed relationship between cognitive distortion and depression (Shroeder, 1994; Maxwell *et al.*, 1998). It is quite likely therefore that participants in this study who scored high on cognitive distortion could also show symptoms of depression.

The negative correlation between self-esteem and cognitive distortion was explained by Nasir *et al.* (2010a) in terms of the role cognitive distortion plays in this context. Juvenile delinquents' cognitive distortions could play the roles of psychological defense mechanisms to having low self-esteem. The negative correlation between cognitive distortion and self-esteem can also be interpreted in that juvenile delinquents who had low cognitive distortion were most likely to have high self-esteem. Nasir *et al.* (2010b) suggests that, eliminating distortions and negative thought may actually improve self-esteem, hence explains the negative correlation. Further results of this study also shows that when family functioning is high cognitive distortion is low. Hence, improving family functioning will reduce cognitive distortion.

The escalating number of juvenile delinquents especially those involved in violent behavior is alarming. Generally speaking, delinquent adolescents are at higher risk of committing future crimes (Doren *et al.*, 1996; Bullis *et al.*, 2002) and they are also at risk of not becoming healthy and productive adults (Unruh *et al.*, 2009). Thus without proper intervention, they could

graduate into full blown criminals in their adulthood. Moreover, proper intervention could also prevent recidivism.

A review of the literature shows the importance of family in the treatment process of the delinquents. The main strategy in the treatment of delinquent behavior is by promoting family functioning through behavioral approach (Kumpfer, 1999; Headman, 2003) or any other counseling approaches. Basically, family members especially both parents should be actively involved in bringing about changers so that the family would become fully functioning which will ultimately prevent delinquencies and recidivism and in promoting healthy environment for every member of the family. Magnelli (2000) showed that there was a positive increase in family functioning and a reduction in recidivism after treatment.

CONCLUSION

The present study revealed involvement of quite a number of juvenile delinquents in violent criminal behaviors and relationships between family functioning, self-concept, self-esteem and cognitive distortion.

RECOMMENDATIONS

Findings from the present study showed that when family functioning is high, self-concept and self esteem are also positive or high. This suggests active participation and involvement of the family in order to promote healthy self-concept and high self-esteem and to prevent delinquency. Generally, family is important in nurturing self-esteem and self-concept among the delinquents. Henderson *et al.* (2006) suggest that the intervention for clinically referred adolescents should target both the individual adolescents and his/her family. This suggestion is also applicable to the juvenile delinquents.

To ensure the effectiveness of the intervention, families should also be involved because families have a lot of influence on children and adolescents especially so in eastern countries such as Malaysia where family relationships are close knitted. Family involvement and family counseling are suggested for effective treatment of the delinquents and for the prevention of recidivism.

The rehabilitation and correction centers for juvenile delinquents should conduct regular group counseling sessions to help the juveniles express their emotions and their thoughts and to encourage group support, understanding and empathy. Cognitive behavior therapy is also suggested in dealing with cognitive distortion. Specifically, cognitive behavior therapy will be able to

help rid the irrational thinking patterns and learn strategies to challenge those thoughts and thereby develop more positive attitudes and behavior. Parents should be encouraged to make regular visits to the centers so as to bring together the parents and the juvenile delinquents. This way the juvenile delinquents would always feel that they are part of the family even though they are away from home. Communications between the juvenile delinquents and the parents should be encouraged. The centers could also arrange family counseling for the family during the family visits to the centers.

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