

Parental marital quality and family environment as predictors of delinquency amongst selected secondary school students in Malaysia

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Abstract

The aim of this study was to determine whether constructs of parental marital quality and family environment are predictors to delinquent behavior among secondary school students in Malaysia. A total of 200 adolescents were purposively identified from 20 secondary schools, where they were then categorized to delinquent and non-delinquent based on a self-reported instrument. Parents (father or mother) of the selected students assessed their marital quality via Dyadic Adjustment Scale, while Family Environment Scale was used to measure the family environment as perceived by the students. Pearson product-moment correlation coefficient concluded that there were significant correlations between parental dyadic satisfaction, parental marital quality, family cohesion, expressiveness, conflict, relationship dimensions, achievement orientation and active-recreational orientation with students' behavior. However, the final regression model indicated by binary logistic regression analysis showed that only family cohesion, conflict, family members' expressiveness, achievement orientation, and parental dyadic satisfaction were statistical significant predictors. Family conflict was found to be the strongest predictor of students' delinquent behavior, followed by family cohesion, family members' achievement orientation, parental dyadic satisfaction and family members' expressiveness. Hence, the results of this study confirmed the significant impact of parental marital quality and family environment factors on their children's behavior.

Keywords: Adolescents, Delinquent, Delinquency, Family Environment, Parental Marital Quality

Introduction

Today's children will be the caretakers of tomorrow's world. Unfortunately, one of the major social problems in Malaysian schools is the reported increased number of students involved in delinquency annually. This hence drew the attention of authorities such as the Malaysian Ministry of Education, Malaysian Royal Police Force, parents and educators on the importance of addressing this epidemic. The Malaysian Ministry of Education had also put up warning to schools that the district police will be assigned to handle students involved in delinquency especially bullies and gangsters. The Ministry had also set up a hotline for parents, educators and students to call-in to report cases of bully, extortion, fighting and gangsterism (Surin & Ng, 2005).

According to the most recent Royal Malaysian Police statistics, students' involvement in crimes had increased from 1,409 in 2009 to 1,947 in 2010, causing the crime index involving youths to increase by 38% (The Star, July 2011). According to the Chairman of Malaysian Crime Prevention Foundation, youths are increasingly involved in violent and property crimes like physical aggression, rape cases, snatch thefts and robberies. Hence, this Foundation has planned to focus primarily on youths between ages 15 to 25 through activities and programs under a campaign called "Youth Unite Against Crime".

A Pulau Penang assemblyman reported in Parliament (2010) that the number of secondary students involved in gangsterism at Bukit Mertajam (Pulau Pinang) in the year 2005 were 32, followed by 56 in 2006, 49 in 2007, 81 in 2008 and 60 in 2009 (Bernama, 2010). Data on the number of juveniles arrested for various crimes from The Royal Malaysian Police Headquarters in 2006 were 7,971, which was an increase of 1975 juveniles from 2005. These juveniles were arrested for crimes such as crimes against persons and properties committed by the arrested juveniles include bullying, school gangsterism, murders, robberies, thefts, drug peddling and abuse, molests and rapes, drunk-driving, illicit sex, newborn baby 'dumping' and murder, and illegal motorcycle racing.

A cross-sectional survey on violence-related behaviors among 4500 secondary school students from a state in Malaysia found that 27% of students had been involved in physical fights, 6.6% had been injured in fights, and 5.9% had carried weapons. In addition, adolescents who carried weapons to school also smoked, used drugs, felt sad or hopeless and played truant (Lee, Chen, Lee & Kaur, 2007). Loh (2005), president of NUTP (National Union of the Teaching Profession (Peninsular Malaysia) reported that 66.5% students in the Klang Valley experienced being bullied.

In relation to the marriage institution of Malaysia, the latest statistics compilation from the Malaysia Department of Statistics (2011) reported 110,612 cases of divorce or permanently separated couples in the year 1991. This figure rose to 125,520 in 2000, with an increase of 14,908 cases in one decade. And in 2010, there were 166,973 cases. This is an alarming figure of

41,453 increased cases (178%) in the second decade. These statistics proved the fact that more Malaysians are indeed exiting marriages over the last two decades.

In addition to the divorce rates, the Royal Malaysia Police received 3,264 reports of domestic violence in 2006; 3,093 cases in 2005 and 3,101 cases in 2004. Statistics from the LPPKN also indicated that in the year 2003, there were 492 cases of family disputes, 165 cases of reported domestic violence, 20 adolescents ran away from home and 761 single mothers. From January 2004 to July 2004, there were 115 reported cases of domestic violence and 32 adolescents who had run away from home.

The increasing rate of adolescent delinquency in this country has intensified the search by Malaysian academicians for predictors and interventions for such violent behavior among adolescents and adults. However, despite this developing interest, there is still not enough local literature that specifically examines correlation or predictors of adolescent violence with family functioning.

Hence, based on above statistical observations between juvenile crimes and divorced rates, this study aimed to examine the conceptual links between parents' marital quality, family environment and adolescents' behaviors. Past research had indicated several direct and indirect factors related to students' development such as parental marital quality, family environment, academic background, and peer group influence. Parents have a natural and special emotional connection with their children. This follows that parents have autonomy to watch over their children and to discipline them in comparison to unrelated people as they are the most important influence in an adolescent's development.

Literature Review

The marital subsystem plays a central role in providing cohesion and stability for the entire family. The quality of a marriage is a powerful factor determining the dynamics of the family, which affects the behaviors of adolescents in schools and society (Feldman, Wentzel, Weinberger, & Munson, 1990). It has been hypothesized in previous studies that there is positive correlation between marital disharmony and children adjustment problems in the course of the parent-child relationship (Grych & Fincham, 1990 as cited in Burman & Erel, 1993). As such, the quality of marriages can have a pervasive effect on family environment as well as on individual outcomes of its members.

David and Murphy (2004) supported Acock and Demo (1994) that problematic children are not only from divorced families; but in fact many are actually from dysfunctional or distorted (conflict) not divorced or intact families. These children are exposed to their parents' marital conflicts, incompatible personality, relationship dissatisfaction and even violence, and would most frequently have negative personality traits such as aggressiveness,

impulsivity, negative attitude toward school or academic achievement, experience peer rejection and exposure to delinquent.

Studies conducted by Cui, Conger, and Donnellan (2007), and Davies and Windle (2001) reported that marital dissatisfaction and adolescent delinquency were linked primarily through their respective associations with marital conflict (indicates lower dyadic cohesion & consensus). And that increases or decreases in marital distress and conflict predicted corresponding increases or decreases in adolescent adjustment problems over time. Study conducted to examine the link between parental divorce and marital conflict on offspring conflict by Cui, Fincham, and Pasley (2008) reported from structural equation modeling confirmed that parents' marital conflict, rather than parental divorce, was associated with offspring conflict behavior. Cummings and Davies (2010) also agreed that parents' destructive marital conflict does have an impact on their children's externalizing problems.

Shek (2000) also reported similar findings among Chinese parents and children in Hong Kong. He reported that there was both a direct and indirect paths for the linkages between parental marital quality and well-being and adolescent psychological well-being, particularly, self-esteem and hopelessness. In 1997, Shek who did a pioneer study on the relationship between the family environment and adolescent psychological well-being, school adjustment, and problem behavior, concluded that adolescents' perception of parenting style, family functioning, and parent-adolescent conflict were significantly related to psychological well-being (general psychiatric morbidity, life satisfaction, purpose in life, hopelessness, and self esteem), school adjustment (perceived academic performance and school conduct), and problem behavior (smoking and psychotropic drug abuse). This study concluded that a more positive perception of family functioning is related to better adolescent adjustment. These two studies by Shek (2000, 1997) suggested that family factors and parental marital quality played an important role in influencing the psychosocial adjustment, particularly the positive mental health of Chinese adolescents.

In India, Anant and Raguram (2005) reiterated that even in the Indian family environment, marital relationship of the parents is the key aspect of family functioning, affecting adolescent adjustment, even more so in the Indian culture where divorce is a social stigma and hence, children are exposed to the consequences of marital conflicts and family dysfunction until they leave home for studies or marriage.

Aufseeser, Jekielek and Brown (2006) reported that children with close and positive relationship with their family members (cohesiveness) and has parental monitoring are less likely to be involved in delinquent behaviors in school. Matherne and Thomas (2001) also reported a significant relationship between delinquency and family cohesion in their assessment of the family environment. However, Shader (2001) reported that family conflict is one of the risk factors for delinquency amongst male adolescents aged 12 to 14.

Meanwhile Jewell and Kevin (2003) compared the family environments of adolescents with conduct disorder concluded that conduct disorder youths reported lower levels of family cohesion, expressiveness, enmeshment, and higher levels of conflict. Gorman-Smith, Tolan, Zeli, and Huesmann (1996) found that violent delinquent male adolescent group reported poorer family discipline, less family cohesion and less family involvement than non-violent group. These results were also consistent across ethnic groups (African American & Latino). In a parental respond of the Family Environment Scale (FES) and independent home observation study (Slee, 1996); parents with a conduct disorder child had reported less cohesion, expressiveness, independence, an active-recreational focus and organization.

Kim and Kim (2007) developed a short and reliable Family Dynamic Environment Scale (FDES) which is also culturally sensitive to assess the family dynamics and family functions of Korean population, with the objective to detect the potential risk factors for delinquent behavior amongst Korean adolescents related to a dysfunctional family dynamic environment. The final version of the scale through factor analysis where five factors were extracted included family cohesion.

Kitzmann's study on the effects of marital conflict on family interaction (2000) agreed with Feldman, Wentzel, Weinberger and Munson (1990) who related parental marital satisfaction to family environment that mothers' marital satisfaction was related to overall family functioning, whereas fathers' satisfaction was related to sons' school achievement. In particular, when both parents agreed they were happily married, their sons were significantly more restrained, less distressed, and made greater progress in school than did their classmates.

From the extensive literature review above, comparison of the contribution and importance of different aspects of parents' marital quality and family environment have not been studied simultaneously in the local context and in a comprehensive model. This showed that in Malaysia and perhaps even Asia that there is a need for better conceptual links between parents' marital quality, family environment and adolescents' behaviors as it is still not clear how much and what aspects of parents' marital quality and family environment have on students' behavior. Moreover, if the society is well-informed about the causes of adolescents' behaviors, then we will be better able to hypothesize how parental marital quality and family environment might interfere with adolescents' behaviors.

Hence, the research objective for this study was to investigate possible cause-and-effect relationships between parental marital quality (i.e. dyadic consensus, dyadic cohesion and dyadic satisfaction) and family environment (i.e. relationship, personal growth and system maintenance) with students' behavior (delinquency & non-delinquency).

With this objective, this study aimed to provide helpful findings on juvenile delinquency to help parents, schools, and government in prevention programs or counseling activities for secondary school students. Additionally,

this study also aimed to educate students on the consequences of their behaviors and problems, creating self-awareness and also self-improvement. Moreover, this study would also provide information for the future generations and the whole Malaysian society regarding the importance of marriage as a basic element in society to build a home and to develop a country. Good marriages will help in raising responsible children who will help in the nation's future development.

Theoretical Background

Two main approaches used to explain the relationship between family environments, parental marital quality and the behavior of adolescents are Bronfenbrenner's ecological system Theory and Bowen's family systems theory. Bronfenbrenner (1979, as cited in Simmons, 2007) stated that the development of an individual has a significant relationship with the environment and the involvement of people surrounding the individual. In 1979, Bronfenbrenner developed Ecological System Theory to explain his socio-cultural view on the development of human being and further focuses on the changing relations between individuals and their living environments. Bronfenbrenner used five environmental systems which consist of rules, norms, roles, and shape of development. The five environmental systems in this theory are the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Each system is interrelated and contributes significantly in developing an innocent child to become a happy or sad adult.

The first environmental system is microsystem which is the immediate environment that an individual stay with and function in. This system will give direct impact to the biological and psychological development of children. Additionally, it also has bi-directional impact to both children and people involved in the child's development. Parents, family members, friends, schools, and teachers are included in this system. Next is the overlapping of two microsystems, which is the mesosystem. It involves linkages and interrelationships between two or more of an individual's microsystems. A related example is the connection between a child's home and his school.

The third environmental system is exosystem. It is an environment for an individual involved indirectly and is exterior to the individual. Examples of environment that can affect the development of an individual are parents' workplace, parents' social networks, and community. Macrosystem is the fourth system that focuses on the larger cultural context. There are many cultural values, law and regulations developed by higher authorities such as Malaysia Government and political laws involved in this system.

The last system in ecological system theory is the chronosystem. This system is about changes of new condition that occur and how it can affect the development of the individual. Crisis such as death of a parent or family members, or physical change during puberty can affect an individual emotionally and hence his behaviors.

Hence, ecological system theory explains children's development by looking at their environmental factors and external influences that are able to provide positive or negative outcome for the children. In Bronfenbrenner's point of view, any break down in a stage of the ecological system will have some effects on children's development such as failure to explore other parts of development in their life. Additionally, he also stressed that the stability of family environment and the relationship between parents and children are important in their development and this cannot be replaced by others. As such, the role of parents cannot be replaced by school teacher. For children growing in the environment without proper guidance, supervision and available love, the possibilities for them to be involved in delinquency are higher. Parental marital quality can affect the involvement of parents and the love available for their children.

Burman and Erel (1993) discussed the "spillover" and "compensatory" models to describe how marital quality affect parent-child relationship which further linked to children's development. The "spillover" model proposed that parents who have better quality parent marital generally spend more time and are more responsible towards their children. They used the compensatory model to explain the impact of poor parental marital quality to their children's development. The model stressed that parents who have unhappy marriage are generally more temperamental and emotionally shattered. They spend less time with their children and these produce a negative parent-child relationship. Hence, children whose parents have poor parental marital quality and non-conducive family environment have higher tendency to be involved in delinquency at school.

Family system theory (Bowen, 1966 as cited in Brown, 1999) defined that family is an emotional unit and each of the family members are deeply emotionally attached with each other. Thinking, emotions and actions are complex and unpredictable units. These are difficult to explain, understand clearly or directly, yet they play an important role in family communication and interaction with each other. Family, work, and social systems of those living in the same environment will affect their behaviors, emotion, and development of one's thought.

Bowen also believed that each family member seeks support, attention and reaction in order to meet other members' expectation or needs in a family system. A child from a home with good parental marital quality or warm family environment will receive support from parents and will further work hard in order to meet his and the parent's expectation. However, a child from a dysfunctional family with busy working single parents generally will feel neglected by the parents and will be involved in delinquency at school in order to attract attention or care from their parents.

Family system theory also indicated that a typical and healthy family system will consist of parental marital subsystem, parent-child subsystem and sibling subsystem. These three subsystems are interdependent of each other. If one of the family members is nervous and unhappy, these kinds of feelings

will affect other family members. The subsequent emotional connectedness of family members will become stressful and cause some family members to behave beyond their normal self, feeling isolated or overwhelmed. Family system theory thus explained how the family environment worsens and resulting in the breakdown of a marriage.

Bowen believed that any change occurring in one of the subsystem can affect the whole family system. As such, an unhappy parental marital quality resulting in a separation can also affect the relationship between the child and parents. This can result in decrease cohesiveness and cooperation among family members. Some parents will tend to be violent or depressed after separation, often resulting in either abuse or neglect of their children. All these behaviors can have an impact on the children and consequently resulting in some kind of behavioral problem such as running-away from home, involvement in delinquency at school, and eventually alcoholism, depression or suicides.

As a conclusion, family system and ecological system theories stress the importance of parental marital quality and family environment and how all the subsystems affect each other in the whole family system.

Present Study

The purpose of this study was to answer two basic research questions linking parental marital quality and family environment with behavior of secondary school students in Malaysia. Firstly, how are different aspects of parental marital quality (i.e. dyadic consensus, dyadic cohesion and dyadic satisfaction) and family environment (i.e. relationship, personal growth and system maintenance) associated with students' behavior (2 levels: delinquent & non-delinquent)? Secondly, which dimensions of parental marital quality (i.e. dyadic consensus, dyadic cohesion and dyadic satisfaction) and family environment (i.e. relationship, personal growth and system maintenance) predict students' delinquent behavior?

Sampling Frame, Samples and Procedure

According to Cohen (1977, 2002), a sample size of 134 is required for a moderate effect size with power of .80 at the .05 significance level. Hence, the sample size for this study was set to 200 respondents in order to cover for non-responsive or incomplete questionnaires. The sampling frame for this study was a list of schools identified as high-risks schools by the Education Department in the state of Selangor and the Federal Territory of Kuala Lumpur. Five schools were randomly clustered from each state.

10 Form Four delinquents and 10 non-delinquents were identified by each school discipline teachers based on the respective school's merit and demerit system. The delinquent acts identified by the schools are absenteeism, gangsterism, bullying, fighting, cheating, stealing, dishonesty, smoking, alcohol abuse, and drugs consumption. Since each school adopts their own method of recording student's disciplinary problems, the selected delinquent

group of students was again assessed through a 31 items self-reported instrument on the types of delinquent behavior they have committed in over the past eight months.

The selected students were grouped in a classroom or school hall to complete a self-report instrument on the behavior of students and FES guided by the school counselors. Students were then required to take home the DAS instrument and a letter addressed to their parents explaining the objectives of the study, the importance of their cooperation and their contribution towards understanding students' behavior. The school counselors also made phone calls to parents informing and convincing them to cooperate.

Instruments

The verification of the student's delinquent behavior status was assessed based on a six subscales instrument established for the use in sampling school students (Rozumah et al., 2003). The student's delinquent behavior was measured on a four point scale consisting of crime, pornography, vandalism, dishonesty, truancy and other delinquency. Total score of the scale ranges from 31 to 124, with high scores in any category reflecting the frequency of students committing that particular delinquent behavior. This instrument yielded a reliability of .92 in their study. Then the delinquent students were coded as 1 and non-delinquent students were coded as 2.

Parental (father or mother) marital quality was assessed by the Dyadic Adjustment Scale (DAS, Lewis & Spanier, 1979). The dyadic affective-expression subscale was excluded because of its inappropriate usage in the Malaysian culture. A six point scale was used to measure the three subscales consisting of 28 items. The three subscales were 1) dyadic consensus, 2) dyadic cohesion, and 3) dyadic satisfaction. The scale yielded a Cronbach's alpha of .90 in the present study.

Family environment of students was assessed by the Family Environment Scale (FES) developed by Moos and Moos (2002). The scale consisted of 90 true-or-false items categorized into ten subscales of three sets of dimensions: 1) relationship, 2) personal growth, and 3) system maintenance. The scale yielded an internal consistency reliability of .88 in the present study.

Result

Respondents comprised of 107 (53.5%) male and 93 (46.5%) female students. 63 male and 37 female students were identified as delinquents. Based on ethnicity, there were a total of 122 (61%) Malays, 66 (33%) Chinese, 10 (5%) Indians and 2 (1%) in the other ethnicity category.

Research question 1: How are parental marital quality (i.e. dyadic consensus, dyadic cohesion and dyadic satisfaction) and family environment (i.e. relationship, personal growth and system maintenance) associated with students' behavior (2 levels: delinquent & non-delinquent)?

Table 1 showed the first part of research question 1, which was the relationship between parental marital quality with students' behavior. Results from Pearson product-moment correlation reported two positive significant correlations of parental marital quality variables with students' behavior.

The overall parental marital quality had the strongest coefficient at the .01 level of significance, revealing that parents of non-delinquents reported better parental marital quality compared to parents of delinquents. Results also reported significant relationship between dyadic satisfaction and delinquent behavior at the .05 level of significance yielding a coefficient of .187. Hence, high levels of parental dyadic satisfaction and marital quality were positively associated with students' non-delinquent behavior.

Table 1
Correlations between parental marital quality and students' behavior

Variables	Correlation Coefficient (<i>r</i>)
Parental marital quality	.235**
Dyadic consensus	.053
Dyadic cohesion	.146
Dyadic satisfaction	.187*

* $p < .05$. ** $p < .01$.

Tables 2, 3 and 4 illustrated the second section of research question 1, which was the relationship between family environments with students' behavior. Results from Pearson product-moment correlation reported five positive and 1 negative significant correlations of family environment variables with students' behavior.

In the family relationship dimensions of family environment (Table 2), results from Pearson product-moment correlation indicated that all the three variables (family cohesion, expressiveness & conflict) were significantly associated with students' behavior. This meant that high levels of family cohesion and expressiveness were associated with non-delinquent behavior of students. While high levels of family conflict were associated with students' delinquent behavior. The overall family relationship was also positively significantly associated with students' behavior.

Table 2
Correlations between family relationship dimensions and students' behavior

Variables	Correlation Coefficient (<i>r</i>)
Family relationship	.148**
Family cohesion	.413**
Family expressiveness	.249**
Family conflict	-.342**

* $p < .05$. ** $p < .01$.

In the family personal growth dimensions (Table 3), results indicated no significant association between family independence, family intellectual-cultural orientation, family moral-religious emphasis, and the overall family personal growth dimensions with students' behavior. However, there was a significantly weak and positive correlation between family achievement orientation and family active-recreational orientation with students' behavior. This meant that high levels of family achievement orientation and family active-recreational orientation were associated with non-delinquent behavior of students.

Table 3
Correlations between family personal growth dimensions and students' behavior

Variables	Correlation Coefficient (<i>r</i>)
Family personal growth	.104
Independence	.019
Achievement orientation	.191**
Intellectual-cultural orientation	.007
Active-recreational orientation	.151*
Moral-religious emphasis	-.044

* $p < .05$. ** $p < .01$.

Table 4 reported the family system maintenance dimensions of family environment. Pearson product-moment correlation statistical results indicated that there was no significant relationship between family system organization, family system control, and the overall family system maintenance dimensions with students' behavior.

Table 4
Correlations between family system maintenance dimensions and students' behavior

Variables	Correlation Coefficient (<i>r</i>)
Family system maintenance	.047
Family organization	.030
Family control system	.040

* $p < .05$. ** $p < .01$.

In summary, weak and moderate significant positive correlation were found between dyadic satisfaction, parents' marital quality, family cohesion, expressiveness, relationship dimensions, achievement orientation, and active recreational orientation with students' behavior. This meant that if a family consists of these marital and family factors, then it would positively be associated with students' non-delinquent behavior. Additionally, there was a significant moderate and negative relationship between family conflict and students' behavior. This indicated that higher family conflict was related to students' delinquent behavior.

The findings in this section were consistent with Bronfenbrenner's ecological theory (1979) of overlapping ecosystems, which states that an individual's development is affected not only by their relationships with others in the family but also by interactions between members of the family. Therefore, the relationship between family relationships dimensions, personal growth dimensions, and systems maintenance dimensions and students behavior which were assessed in this study would significantly support Bronfenbrenner's ecological theory.

In addition, the findings in this section which found significant relationships between students' behavior and their family functioning were also consistent with family-systems theory which emphasizes the concept of holism and states that every family is tied together in ways that make it impossible to understand each member without understanding the whole family functioning.

Research question 2: What aspects of parental marital quality (i.e. dyadic consensus, dyadic cohesion and dyadic satisfaction) and family environment (i.e. relationship, personal growth and system maintenance) predict delinquent behavior?

To address this research question, the binary logistic regression (backward stepwise - Wald) method was employed. Since students' behavior was categorical (delinquent & non-delinquent) and the 17 predictor variables were continuous scales, binary logistic regression analysis was the most appropriate technique employed to determine the best set of variables in explaining this model. Backward Stepwise (Wald) method was employed

because the study was exploratory. This backward stepwise method began with all the 17 predictor variables included in the model analysis. Then the predictor variables were eliminated from the model in an iterative process.

The analysis was completed at Step 8 when no more independent variables could be eliminated from the model as the elimination made no additional change to the accuracy of the prediction. The final logistic regression model indicated that family cohesion, family expressiveness, family conflict, family achievement orientation, family organization, and parents' dyadic satisfaction were most likely to contribute to students' delinquent behavior.

The B values in Table 5 were used for the construction of a regression equation. The negative values of family conflict and family system organization indicated that an increased in these values would result in increased delinquent behavior of students. As depicted in the coefficients column, the estimates of the model coefficients (B) were b0 is -9.798, b1 is .515, b2 is .247, b3 is -.387, b4 is .399, b5 is -.264, and b6 is .074.

$$Y (SB) = -9.798 + .515 (X1) + .247(X2) - .387 (X3) + .399 (X4) - .264 (X5) + .074 (X6)$$

Where:

Y (SB)	=	Students' delinquent behavior
X1	=	Family cohesion
X2	=	Family members' expressiveness
X3	=	Family conflict
X4	=	Family members' achievement orientation
X5	=	Family system organization
X6	=	Parents' dyadic satisfaction

Table 5
Variables in the model

		B	Wald	df	Sig.
Step 8	Cohesion	.515	11.104	1	.001
	Expressiveness	.247	4.088	1	.043
	Conflict	-.387	11.231	1	.001
	Achievement	.399	6.235	1	.031
	Organization	-.264	3.005	1	.083
	Dyadic Satisfaction	.074	6.183	1	.013
	Constant	-9.798	10.556	1	.001

However, only family cohesion, family expressiveness, family conflict, family achievement orientation, and parents' dyadic satisfaction were

statistical significant predictors at the .05 level. The contribution or importance of each of the predictor variables to the model (students' delinquent behavior), as indicated by the Wald test were family conflict (11.231), family cohesion (11.104), family members' achievement orientation (6.235), parents' dyadic satisfaction (6.183), and family members' expressiveness (4.088) at $p < .05$. The results from this binary logistic regression formed the model of this study, which was presented in Figure 1.

The Cox and Snell R Square was .358 and the Nagelkerke R Square was .477 (Table 6), indicating that the fit of the model to the data was moderate. And finally, the percentage correct estimate for delinquent students was 73.8% and for non-delinquent students was 87.3%, which were at an above acceptable level (Table 7).

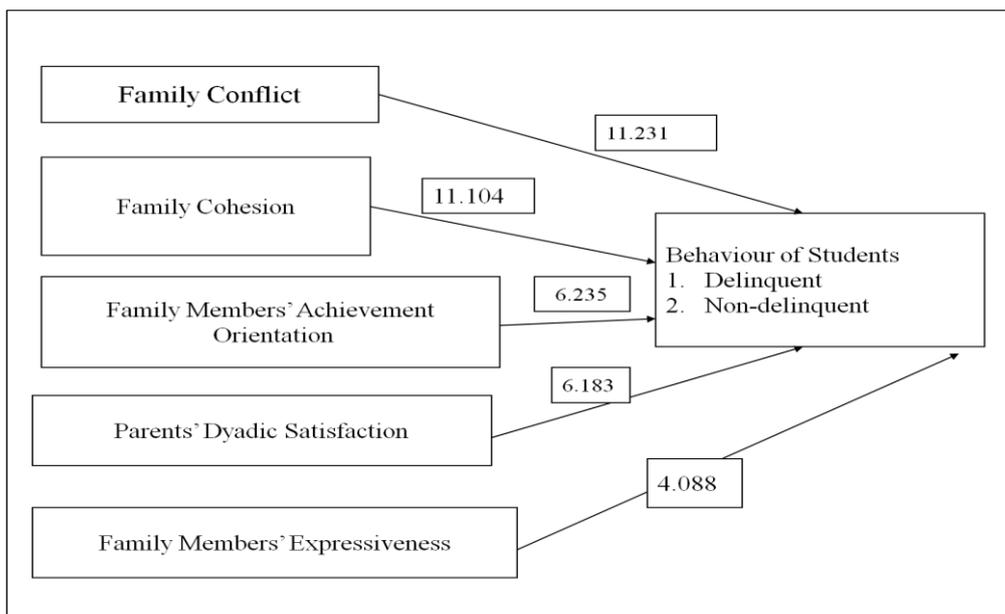
Table 6
Model Summary

Step	-2 log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	122.592a	.383	.511
2	122.592a	.383	.511
3	122.743b	.382	.510
4	123.190b	.380	.507
5	123.872b	.377	.503
6	124.948b	.372	.497
7	126.585b	.365	.487
8	128.086b	.358	.477

Table 7
Classification Table

Observed			Predicted		
			Student		Percentage Correct
			Delinquent	Non-delinquent	
Step 8	Student	Delinquent	48	17	73.8
		Non-delinquent	9	62	87.3
Overall Percentage					80.9

Figure 1: Predictors of Students' Delinquent Behavior



Limitations and Recommendation

One of the limitations in this study is the gender of participants. The present researcher did not study the impact of gender of participants which may have higher tendency being affected by parental marital quality or family environment and resulting in delinquency at school. The reason for future research to focus on gender is because males and females' development are different as in cognition, belief system, and emotion. A study conducted by Siegel and Welsh (2008) indicated that female students are more involved in delinquency at school compared to male students. Hence, future research should focus on the impact of parental marital quality and family environment on different gender's behavioral patterns.

The second limitation was that if the selected research subjects (delinquents, non-delinquents & parents) did not feel comfortable answering a question truthfully, they may have provided evasive, distorted, or blatantly false responses. Thus, other procedures should be developed and employed to evaluate the truthfulness of the responses.

Another limitation is the age of participants. This study only focused on Form Four students – 16 years old. It believed that student at other ages have higher inclination to be involved in delinquency related to family environment or parental marital quality. As a recommendation, future research should focus on other ages of school students so as to provide more concrete evidence for the knowledge of Malaysians.

In addition, the participants of this present were selected from only Selangor and Kuala Lumpur. Future research may focus on other Malaysian states such as Kedah, Perlis, Penang, Terengganu and Sabah and Sarawak to avoid result biasness. This present study collected data only from the urban

areas. Although the rate of students involved in delinquency at schools in urban areas are higher than in rural areas but it is still very important for future research to focus on so as to provide more information on this matter to the general Malaysian public.

In the United States, the rate of urban students involvement in violent crimes is 41 per 1000 while for rural areas, the rate for student involved in violent crimes is 23 per 1000 (Lippman, Burns, & McArthur, 2004). In the nutshell, future study can be improved by focusing on both the urban and rural areas in Malaysia, and perhaps even our neighbor country (Singapore) for comparison purposes.

Contribution of this Study

Based on the final conclusion of this study, it is thus proven that mental health care professionals should incorporate the family into their plans for intervention with delinquent adolescents. From the findings on family conflict, it is hence concluded that the openly expressed anger and conflict among family members is the most influential factor on children's behavior. Children are influenced by the reinforcement of family members and the environment.

The degree in which family members commit, help and support each other (as described by the variable family cohesion) can influence behavior of children as children need security and sense of belongingness at home. From the findings on family members' achievement orientation, the amount of either school or work activities being put into a competitive framework can affect children's behavior. The more the children compete to achieve success, the more discipline they can become.

The level of satisfaction in which parents feel about their marriage can affect their children's behavior, regardless of the degree of agreement between spouses (dyadic consensus e.g. religion, recreation, friends, household tasks, time spent together) and common interests and activities shared (dyadic cohesion / closeness). The ability and opportunity of family members to express their feelings directly can also influence children's behavior. Effective communication amongst family members such as between parents and children and siblings are important in socio-emotional and behavioral development of children.

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