



A STUDY OF THE RELATIONSHIP OF FAMILY FUNCTIONING, SELF-
REGULATION AND ANTISOCIAL BEHAVIOUR AMONG ADOLESCENTS

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RELATIONSHIP OF FF, SR AND ASB AMONG ADOLESCENTS

A Study of the Relationship of Family Functioning,
Self-regulation and Antisocial Behaviour among Adolescents

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Universiti Tunku Abdul Rahman

This research project is submitted in partial fulfilment of the requirements for the Bachelor of Social Science (Hons) Psychology, Faculty of Arts and Social Science, Universiti Tunku Abdul Rahman. Submitted on April 2019.

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We declare that the material contained in this paper is the end result of our own work and that due acknowledgement has been given in the bibliography and references to ALL sources be they printed, electronic or personal.

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This research paper attached hereto, entitled “The relationship of family functioning, self-regulation and antisocial behaviour among adolescents.” prepared and submitted by” Chin Sie Zhen, Lee Chie Hwa and Samantha Ng Kuet Ch’ng” in partial fulfilment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

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Abstract

There is a rise in juvenile crimes from the years 2009 to 2016 in which the family and adolescents' self-regulation play crucial roles in the formation of adolescent antisocial behaviour. The current study aimed to investigate the relationship between family functioning in six aspects (problem-solving, roles, behaviour control, affective involvement, affective responsiveness, and communication) and adolescents' self-regulation on adolescent antisocial behaviour. 225 respondents were recruited from two identified secondary hotspot schools in Selangor through purposive sampling. Data was collected through self-administered questionnaires. The current study found that all six subfactors in family functioning and self-regulation were significantly associated with adolescents' antisocial behaviour; while self-regulation significantly predicted antisocial behaviour. Improving the quality of family functioning and promoting a holistically healthy adolescent development can mitigate adolescents' antisocial behaviour.

Keywords: antisocial behaviour, family functioning, self-regulation, adolescents, Malaysia

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List of Abbreviations

| | |
|-------|--------------------------|
| ABS | Antisocial Behaviour |
| PS | Problem Solving |
| COM | Communication |
| ROLES | Roles |
| AR | Affective Responsiveness |
| AI | Affective Involvement |
| BC | Behaviour Control |
| SSRQ | Self-regulation |
| FF | Family Functioning |

Chapter 1

1.1 Background of Study

Legislatively, antisocial behaviour can be defined as an act that “causes harassment, alarm or distress to one or more person not of the same household” (Crime and Disorder Act, 1998). Harradine, Kodz, Lemetti, and Jones (2004) from the Home Office Research Development and Statistics Directorate classified antisocial behaviours into four general categories which are, (1) Misuse of public space such as loitering and indecent exposure, (2) Disregard for community/personal well-being in forms of noise pollution or false calls for emergency services, (3) Acts directed at people that imposes intimidation or harassment, and (4) Environmental damage such as graffiti and damaging public amenities. Similarly, according to Dishion and Patterson (2015), those who are close to the perpetrator and the victims of antisocial behaviour described the behaviour as aversive, disruptive, or unpleasant acts. They further explained that antisocial behaviour can be in either overt or covert forms, where overt forms of antisocial behaviours are reactive whilst covert ones are more discreet and is less detected. From another perspective, antisocial behaviour is also known as maximizing one’s immediate personal gain through imposing harm or loss onto others (Loeber, 1982). While antisocial behaviour is a broad concept that is differently defined in diverse literature, it is heavily implied that antisocial behaviour is detrimental not only to the society but the person who committed the act him or herself.

Antisocial behaviour has been extensively researched in the field of developmental psychology where risk behaviour is accepted as a norm in an adolescent’s development. Statistics of juvenile crimes from 2009-2016 by the Department of Social Welfare in Malaysia showed that adolescents aged between 16-17 years-old engaged in 69%-75% of reported juvenile crimes, while those aged between 13-15 years-old contributed around 16%-

20% to the similar crime rate. This is because adolescents stand in the fifth stage of psychosocial development, generally labelled as the identity versus role confusion stage in Erikson's life-span developmental theory (Erikson, 1968). Adolescence is regarded as the principal stage in Erikson's theory because at this stage, the individual experiences the peak transition from youth to young adulthood. Here, adolescents show continual identity formation through much trial and error in defining their self-concept (Waterman, 1999). This is due to the adolescent's tendency to seek social stature and personal identity and thus experimenting with new meaning-seeking behaviours (Caskey & Anfrara, 2014). So, adolescents who experience identity and role confusion tend to engage in antisocial behaviour (Erikson, 1968).

It is undoubted that the family plays a crucial role in an adolescent's life-span development, especially in early childhood where family values and beliefs can be easily instilled in young children. Adolescents who experience family malfunctioning such as parent marital conflict, child abuse or mental-health related disorders are more likely to experience biopsychosocial development impairment (Jaffee, Strait, & Odgers, 2013). Risk factors such as poor family socioeconomic status also hinder healthy adolescent development (Sobotková, Blatný, Jelínek, & Hrdlička, 2013). In a meta-analysis carried out by Loeber and Stouthamer-Loeber (1986), socialization variables such as the lack of parental involvement in their child's activities and poor parental supervision on the child were found to be significant predictors of antisocial behaviour. Parents who show little interest or spend little time to understand their child's friends and external social education imply poor parental role in monitoring the child's social activities. Two decades later and the meta-analysis carried out by Hoeve et al. (2009) still concluded that poor family functioning is strongly associated with delinquency in youths. Higher parental warmth and behaviour control were also linked to lower externalizing problems in adolescents (Pinquart, 2017).

In a similar light, when parents spend less time interacting with their child, it also implies the lack of communication in the parent-child relationship. Poor communication is a leading cause of family dysfunction because family members find it more difficult to express themselves which consequently leads to misunderstandings and conflicts. Rothbaum and Weisz (1994) explained that a negative parent-adolescent relationship is characterized by low levels of relatedness and acceptance, and higher levels of conflict. Therefore, adolescents turn to confide in deviant peer groups to compensate for their social needs earlier rejected by their parents (Patterson, DeBaryshe, & Ramsey, 1989). Furthermore, adolescents who grew up in rejective, conflicting, and unsupportive family environments and who lack quality bonds with their parents are more likely to be involved in risk behaviours compared to adolescents who grew up in a warm and affectionate environment (Deković, Janssens, & Van As, 2003; Hoeve et al., 2009). According to Deković et al. (2003), proximal factors in terms of parental responsiveness, involvement, punishment, monitoring, and consistency in child-rearing behaviours were strongly associated with adolescent antisocial behaviour. Hence, the lack of parental control on an adolescent's behaviour becomes a risk factor in the development of the adolescent's antisocial behaviour.

The self-regulatory capability of an adolescent is also a vital factor linked to antisocial behaviour. Self-regulation is a part of self-management which involves inhibiting or modifying affective, behavioural or cognitive aspects in response to the many experiences in daily life (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003; Baumeister & Alquist, 2009; Muraven & Baumeister, 2000). Self-regulation is seen as an active and effortful process that influences decision-making, and thus is a finite resource of the self which can be depleted as demanding situations increase. According to Baumeister, Bratslavsky, Muraven, and Tice (1998), self-regulation is basically the process of overriding motivated responses, and for an individual to successfully do so, the self-resource must be

able to influence behaviour just as motivation does. They further elaborated that motivations can vary in strength, and it is assumed that stronger impulses are more difficult to restrain. In the same year, Muraven, Tice, and Baumeister (1998) concluded that acts of self-regulation impair subsequent self-regulatory attempts through fatigue from previous successful effort exertion. Hence, an individual who constantly faces conflict-arising situations that invoke aggression or negative affect would have to self-regulate in order to avoid negative outcomes. Yet however, the self-regulation abilities of the same individual will gradually be impaired from such demands.

Bandura (1997) viewed adolescence as the especially taxing phase of life-span developmental stages where they not only undergo biopsychosocial changes but also discover new emerging adulthood responsibilities. Adolescents are exposed to wider social networks, increased academic tasks, familial roles and pubertal development. Here, effective self-regulation is vital for a holistic positive self-development in adolescents, yet excessive stress from the demands of life can impair the adolescent's self-regulatory capability. Consequently, depletion of self-regulatory resources leads to negative consequences in both social and relationship outcomes. According to Pocheptsova, Amir, Dhar, and Baumeister (2009), individuals with low levels of self-regulatory resources are found to be more likely to make impulsive choices compared to deliberate ones. Paired with the developing adolescent brain, they are more likely to be involved in antisocial behaviours (Spear, 2000).

In summary, both family functioning and self-regulation hold significant roles in the development of adolescent antisocial behaviour. In a collectivistic nation like Malaysia, the family system serves as a key construct to an adolescent's psychosocial development, while the ability of an adolescent to self-regulate ultimately affects how an adolescent interacts with his or her surroundings.

1.2 Problem Statement

Antisocial behaviour is seen as a feature that develops over time which might affect us since early childhood until adulthood (Patterson, DeBaryshe, & Ramsey, 1989). Past studies illustrated that youths who perform negative and passive attitude toward livelihood are more inclined to show antisocial personality and behaviours (Elliott, Huizinga, & Ageton, 1985; Hirschi, 1969). Several studies linked antisocial behaviour with academic performances. Consistent results in Hawkins and Lishner's (1987) and Herrnstein and Wilson's (1985) studies indicated that children who demonstrated antisocial behaviours usually have lower score in their academic performances. Despite above research outcomes, they discovered that ameliorating academic skills and performances of these children did not help in reducing their antisocial behaviours (Herrnstein & Wilson, 1985; Kazdin, 1987). Therefore, this study overtures other aspects that will improve children's behaviour and help to reduce antisocial behaviours among adolescents, such as family functioning and self-regulation.

Adolescents that perform antisocial behaviours are more likely to fail in their academics. Negative displays of antisocial behaviour such as harming and bringing distress unto others will result in punishment at school. Most of the adolescents who receive punishment as reprimandation of their antisocial behaviour will spend most of their time being punished, resulting in being left behind in their academic achievements. Besides, adolescents living with an antisocial lifestyle brings negative impacts to their physical health. Shepherd and Farrington (2003) stated that antisocial behaviour such as school misconduct, divorce, truancy and early contact with police are significant predictors of premature death. More severe behaviours such as taking drugs and alcohol will contribute to

a higher death rate. All of these are contributors to a low quality of life in which they will have weaker bond with family, peers and society, and low religious beliefs.

Social-interactional perspective stands a position of manifesting that family members are the direct reason on children's antisocial behaviours (Forehand, King, Peed & Yoder, 1975; Patterson, 1982; Snyder, 1977). Family is indeed an important factor that influences the growth development of each and every individual yet it is difficult for us to determine the main reason that denotes to antisocial behaviours. Domestic violence, unemployment, relationship discord, and divorce can be the source of family stress which leads to delinquency and antisocial behaviours among children (Farrington, 1987; Garnezy & Rutter, 1983; Hetherington, Cox, & Cox, 1982; Rutter, 1979). Researchers have proved that youths coming from divorced families or single-parent families possess higher tendencies of displaying antisocial behaviours such as substance abuse (Hoffman, 1993; Turner, Irwin, & Millstein, 2014), aggression (Vaden-Kiernan, Ialongo, Pearson, & Kellam, 1995), drop outs (Astone & McLanahan, 1991), and teenage pregnancy (Hogan & Kitagawa, 1985). With all these latency factors, the McMaster Model of family functioning (Epstein, Bishop, & Levin, 1978) came out with six dimensions, declaring the roles and responsibilities of each family member to fulfil the standard of quality family. Researches and studies characterized children with antisocial behaviours were usually raised by families with harsh and unpredictable reprimandations, have less parental involvement with children, and inadequate parental monitoring and supervision of children behaviours (Loeber & Dishion, 1983; McCord, McCord & Howard, 1961). Therefore, family members should be aware of their roles and responsibilities in their families in order to establish and maintain a complete and healthy family.

Another variable that this study would like to look into is self-regulation among adolescents. Previous study showed that adolescents who have better capabilities in self-regulating tend to be more active in exercising pro-social behaviours instead of antisocial behaviours, compared to those who are weaker in self-regulating (Bandura, Caprara, Barbaranelli, Pastorelli & Regalia, 2001). Self-regulation allows us to think before we act so that we do not regret what we have done at a later time. Indiscriminately indulging in anger and emotions will eventually bring destruction in forms of hurting others, mentally or physically (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003). Self-regulation is vital for mental health because health quality is associated and is heavily influenced by an individual's lifestyle (Bandura, 2005). When individual able to have a good quality lifestyle, he or she will put effort to maintain the positive minded lifestyle by incorporating self-regulating factors so that the routine that has positive aspect on one's life will be maintain. Adolescents that display antisocial behaviour are more vulnerable to mental health issues (Vermeiren, Deboutte, Ruchkin, & Schwab-Stone, 2002). Statistics from Malaysian Mental Healthcare Performance showed that the prevalence of mental health problems among children and adults were 12.1% and 29.2% respectively. This will result in premature death and also suicide. According to the Malaysian Mental Healthcare Performance report, the prevalence of suicide attempts is still increasing.

Overall, this study is looking into the topic of antisocial behaviour from two different perspectives, that is family functioning and one's ability to self-regulate. Although family is the initial and critical place to cultivate individual growth, it is also important for us to explore the ability of individuals to regulate salient developmental challenges and demands.

1.3 Research Objectives

Results from past studies had shown the many reasons why adolescents involve in antisocial behaviour. However, the current study focuses on family functioning and self-regulation as the predicting effects of antisocial behaviour among adolescents. Therefore, the three objectives in our current study are:

1. To examine the relations of family functioning (problem solving, roles, communication, behaviour control, affective involvement, and affective responsiveness) and antisocial behaviour among adolescents.
2. To examine the relation between self-regulation and antisocial behaviour among adolescents.
3. To examine the predicting effect of family functioning and self-regulation on antisocial behaviour among adolescents.

1.4 Research Questions

1. What is the relationship between problem solving and antisocial behaviour?
2. What is the relationship between communication and antisocial behaviour?
3. What is the relationship between roles and antisocial behaviour?
4. What is the relationship between behaviour control and antisocial behaviour?
5. What is the relationship between affective responsiveness and antisocial behaviour?
6. What is the relationship between affective involvement and antisocial behaviour?
7. What is the relationship between self-regulation and antisocial behaviour?
8. Do family functioning and self-regulation predict adolescents' antisocial behaviour?

1.5 Research Hypotheses

Based on the aforementioned possible connections between family functioning and self-regulation on antisocial behaviour in adolescents, eight hypotheses are proposed:

H_a1: There is a significant negative relationship between problem-solving and antisocial behaviour in adolescents.

H_a2: There is a significant negative relationship between communication and antisocial behaviour in adolescents.

H_a3: There is a significant negative relationship between roles and antisocial behaviour in adolescents.

H_a4: There is a significant negative relationship between behaviour control and antisocial behaviour in adolescents.

H_a5: There is a significant negative relationship between affective responsiveness and antisocial behaviour in adolescents.

H_a6: There is a significant negative relationship between affective involvement and antisocial behaviour in adolescents.

H_a7: There is a significant negative relationship between self-regulation and antisocial behaviour in adolescents.

H_a8: Family functioning and self-regulation significantly predict adolescents' antisocial behaviour.

1.6 Significance of Study

The findings of this study will redound to the benefit of society considering that family functioning and self-regulation play important roles in providing reasons why adolescents portray antisocial behaviours. Many researchers have justified that poor relationship quality between parents and children often led to externalizing problems (Dekovic', 1999; Deković, et al., 2003; Dodge, Price, Coie, & Christopoulos, 1990). The importance of self-regulation as a decisive personal development during adolescence, mentally and physically, appears to be notable as researches regarding self-regulation increases (Farley & Kim-Spoon, 2014). Thus, by having a better understanding on the relationships of family functioning, self-regulation and antisocial behaviour, the probability of adolescents performing antisocial behaviours will be reduced.

Family members will be guided to recognize the significance of their roles in the family and will be able to gain the knowledge on how to fulfil their responsibilities in the family. Benefits and importance of self-regulation will be popularized through understanding the relationship between self-regulation n antisocial behaviour. From the academic perspective, we hope to propose the idea of self-improvement and self-development despite living in a limited environment with countless factors and variables that affect our thoughts, emotions, and behaviours, it is still possible for us to move forward without being affected by negative elements. As from the industrial perspective, this study will be contributing by providing more information on the influence of family functioning and the adolescent's self-regulation on their antisocial behaviour.

1.7 Conceptual and Operational Definition

1.7.1 Antisocial behaviour.

Conceptual definition. Antisocial behaviour can be conceptualized as the infliction of harm, discomfort or some sort of harassment unto other persons or objects which may involve violation of societal laws (“Antisocial Behaviour - Causes and characteristics, Treatment”, n.d.).

Operational definition. The Antisocial Behaviour Scale (ABS) by Schwab-Stone, Chen, Greenberger, Silver, Lichtman, and Voyce’s (1999) work was used to assess the frequency of antisocial behaviour in adolescents. A higher score in the ABS describes higher antisocial behaviour.

1.7.2 Family Functioning.

Conceptual definition. Family functioning is a broad concept that encompasses many premises in a family’s management. Epstein, Levin, and Bishop (1976) emphasized a family unit “to be that of a laboratory of a social, psychological, and biological development and maintenance of family members”. In other words, a family unit carries out functions to maintain the establishment and continuance of the family. The McMaster model conceptualized by Epstein et al. (1978) considers family functioning in six dimensions which are: (1) problem solving, (2) communication, (3) roles, (4) affective responsiveness, (5) affective involvement, and (6) behaviour control.

Operational definition. Based on McMaster’s model of family functioning, the Family Assessment Device (FAD) authored by Epstein, Levin, and Bishop (1983) was used to measure family functioning. It consists of seven subscales, in which one measures overall

family functioning and the remaining six subscales for each of the dimension as described in the McMaster model. Higher scores in each dimension indicate poorer family functioning.

1.7.3 Self-regulation.

Conceptual definition. Self-regulation is defined as an individual-difference dimension which involves the modulation of behaviour and affect influenced by contextual demands (Posner & Rothbart, 2000).

Operational definition. The Short Self-Regulation Questionnaire (SSRQ) from Carey, Neal, and Collins's (2004) work was used to measure self-regulation capacity. A higher total score indicates higher self-regulation capacity.

1.7.4 Adolescents.

Conceptual definition. Adolescence is defined as a period of transitional changes from childhood to adulthood. According to Petersen and Leffert (1995), adolescence is distinctly marked with pubertal changes, an increased obligation in the preparation and learning of adult roles, and the significant change in social spheres of life.

Operational definition. Adolescents are individuals in the chronological age from 13 to 17 (Dasar Kesehatan Remaja negara, 2015).

Chapter 2

2.1 Theoretical Application

In our research, we adopted the Self-Determination Theory (SDT) (Deci & Ryan, 1985) and Systems theory (Broderick, 1993) to support our research ideas. SDT is a broad-based social theory for personality and motivation. SDT has been under development for the past 35 years (Soenens & Vansteenkiste, 2010). SDT also highlights the importance of human's inner needs for self-regulation and personality development (Ryan & Deci, 2000; Ryan, Kuhl, & Deci, 1997). SDT states that there are three essential needs (competence, relatedness, and autonomy) which assists humans to achieve optimal functioning for integration and growth as well as for personal well-being and constructive social development (Ryan & Deci, 2000). SDT supports that all three basic needs must be satisfied in order to have good health and also well-being; whereas people will display psychopathological maladjustments if the needs are not satisfied (Ryan & Deci, 2000; Vansteenkiste & Ryan, 2013). Self-determination, or autonomy in SDT is meant by the willingness or a sense of volition when we are engaging in tasks (Deci & Ryan, 2000; Vansteenkiste, Ryan, & Deci, 2008). It is viewed as a universal significant human capacity to be involved in a volitional manner (Soenens & Vansteenkiste, 2010). Autonomy is the psychological freedom of an individual to involve in any action. People will feel frustrated and pressured to behave, think and feel in undesired ways if this need is not fulfilled. Unfulfilled needs of autonomy have been found to associate with psychopathology and maladjustments among adolescents (Petegem, Soenens, Vansteenkiste, & Beyers, 2015). This eventually link with the involvement of adolescents' antisocial behaviour so as to release their anger and frustration inappropriately unto others. The second essential need in SDT is the need for relatedness which is defined as a sense of belongingness and connection with others (Bolter & Kipp, 2016). Past studies stated that each of us as a human being need

other humans to some degree in our life, in which we love and care about each other (Broeck, Vansteenkiste, Witte, Soenens, & Lens, 2010). This need can only be fulfilled when an individual experiences and develops intimate and close relationships with others (Deci & Ryan, 2000). Moral dilemmas in life such as to be involved or not in antisocial behaviours are inherently social processes, so the way an adolescent learns and understands social experiences and treats others may be influenced by how connected is the adolescent to his or her peers and family (Bolter & Kipp, 2016). They will have a weaker relation and connection with their parents and family which will eventually leads to antisocial behaviour with deviant peer groups. Adolescents who have better relationship with their parents and family are more likely to follow parental advice and therefore inhibit the tendency to have antisocial behaviour. Past studies suggested that disrupted family management skills will result in an adolescent antisocial interpersonal style (Patterson, 1986).

Systems theory is applied in this study to further support the relations between family functioning and antisocial behaviour. System theory is a way of elaborating gradually complex systems across a continuum that involves the person-in-environment (Anderson, Carter, & Lowe, 1999). A system is defined as “an organized whole made up of components that interact in a way distinct from their interaction with other entities and which endures over some period of time” (Anderson et al., 1999, p. 4). Meadows (2009) also defined system as a set of things that interconnected with each other in such a way that they produce their pattern of behaviour across time. All of these definitions are all similar with other existing definition as all of them shares four similar elements which is having a group of thing (forces, objects, or molecules), interaction and relationship between those group and the environment, how those group become larger and the purpose or function of element in the group which will affect the function of whole group (Cordon, 2013).

In our current study, we adopt the systems theory in family functioning. A family is a system in which that each family member has rules to respect and follow, and roles to play (Genopro, n.d.). Each family member has his or her own roles and responsibilities which is determined by relationship agreements in order to maintain the system's equilibrium. Each family member is expected to respond to one another in a certain manner according to their roles. Each member of the family is like parts of the whole organization because they are interrelated in specific ways such as father-son, brother-sister and mother-son (Hill, 2015). It was further suggested that lacking of any one of these positions may result in deficits of the family structure. Therefore, to reach and maintain the equilibrium of the family system, each family member has to fulfil his or her familial functions. Past study result showed that lack of parental involvement in their child's growth such as activities and poor parental supervision on their child will lead to conduct problems (Frick & Jackson, 1993). Parental involvement such as parent's interest in their child's daily activities, time spend together and taking care of child academic will let their child feel that their parents are care about them which contribute in stronger bond and attachment between the child and their parents.

2.2 Antisocial Behaviour

Antisocial behaviour is defined as behaviours intended to disadvantage or harm others (Kavussanu & Boardley, 2009; Sage, Kavussanu, & Duda, 2006). According to Malaysia Ministry of Statistics, adolescents' antisocial behaviours were increasing from year 2009 to 2012, from a total of 3377 cases to 5562 cases. The total cases continue to increase from year 2016 onwards although statistics had shown some decrease in cases from year 2012 to 2015. This implies that more and more adolescents are engaging in antisocial behaviours. One consequence that adolescents face from antisocial behaviour is academic failure. In McEvoy

and Welker's (2000) study, they mentioned that in general, academic failure may be associated with antisocial misconducts but it does not predict any specific forms of antisocial behaviours. There are many risk factors on adolescent antisocial behaviour including divorce, teen parenthood, social disadvantage and many more (Jaffee, Strait, & Odgers, 2012). In the current study, we are focusing on family functioning and self-regulation. As mentioned above, antisocial behaviour will have negative impacts on adolescents' health. Drugs and alcohol abuse will result in premature death in adolescents (Shepherd & Farrington, 2003). Some of them may also live with some health-related disorders which result in low quality of life. They will eventually face difficulties in having a stable job or in getting married. They will also have weaker bond with society, low empathy, substance misuse and a lack in religiosity (Shepherd & Farrington, 2003).

2.3 Family Functioning

The McMaster Model measures family functioning from six different aspects in order to see thoroughly the factors that will affect the quality of a family. Different aspects include problem solving, communication, roles, affective responsiveness, affective involvement, and behaviour control (Epstein, Bishop, & Levin, 1978). These six aspects have been justified by past researches that each and every one of them plays an important role in a family. The McMaster Model has clearly identified and provided specific definitions on how these aspects (problem solving, communication, roles, affective responsiveness, affective involvement, and behaviour control) influence the family functioning.

2.3.1 The relationship between problem-solving and antisocial behaviour. The first aspect that The McMaster Model discusses is the problem-solving ability in a family. The

problems that McMaster Model discusses in this dimension are differentiated into two parts, instrumental and affective types (Epstein, Bishop, & Levin, 1978). Instrumental problems are considered the external problems that every family face, such as financial difficulties and shelter. Affective problems refer to the feelings of each family member (Epstein, Bishop, & Levin, 1978). Farrington (2005) illustrated that people having difficulties in fulfilling personal needs such as having low income, being unemployed and those who failed in their academic performances are more likely to perform antisocial behaviour. Offord, Alder, and Boyle (1986) and other researchers (Loeber, Green, Keenan, & Lahey, 1995; Velez, Johnson, & Cohen, 1989) had consistent findings that children with misconduct behaviour are more likely to come from low income families. These children were predicted to perform antisocial behaviour. In the line with Epstein et al. (1978), family with low family problem solving strategies are more likely to present or encounter hardships in building a good functioning family. Recent studies also found that adolescents who reported to experience low family problem solving strategies tend to perform more antisocial behaviour (Gaik, Abdullah, Elias, & Uli, 2010; Patterson, DeBaryshe, & Ramsey, 2017).

2.3.2 The relationship between communication and antisocial behaviour. The second aspect that The McMaster Model discusses is how the family communicate with each other. McMaster Model came out with two vectors on how usual family members communicate with each other, which is clear vs. masked continuum and the direct vs. indirect continuum (Epstein et al., 1978). These two vectors can emerge into four patterns of combinations which are clear and direct communication, clear and indirect communication, masked and direct communication, and masked and indirect communication. Clear and direct communication conveys clean and transparent information that can be easily understood by the others. Clear and indirect communication portrays a clear message but is not specified to anyone. Masked

and direct communication performs an unclear content but is clearly directed to someone. Masked and indirect communication is the worse pattern of all because of its unclear and indirect message (Epstein et al., 1978), the listener usually fails to receive any information from the speaker. Compared to other children, children with significant antisocial behaviour constantly display early reading problems and have poor verbal skills (Moffitt, 1993). Effective communication with family members can mitigate adolescents' antisocial behaviour (Law, Shapka, & Olson, 2010; Bacchini, Concetta Miranda, & Affuso, 2011). Good communication in family enhances the feeling of family support among family members which decreases the sense of guilt and loneliness (Bacchini, Concetta Miranda, & Affuso, 2011).

2.3.3 The relationship between roles and antisocial behaviour. The McMaster Model also discusses the roles and responsibilities of each family member should carry. In premeditating the roles in a family, McMaster Model composed two considerable parts which are role allocation and role accountability. Role allocation refers to the distribution of tasks and responsibilities among family members. Family members should be aware about the appropriateness on assigning jobs towards other family members. Role accountability is the reliability of family member whether he or she is able to complete the appointed task or responsibility (Epstein et al., 1978). Researchers should take note that it is important for family members to clarify the necessary needs and wants in a family (instrumental or affective types) before allocating roles among family members. Recent studies have emphasized the importance of family roles (Cid & Martí, 2012; Geurts, Boddy, Noom, & Knorth, 2012; Lenzi, Sharkey, Vieno, Mayworm, Dougherty, & Nylund-Gibson, 2015) with a clearer explanation on the definitions of family roles (Geurts, Boddy, Noom, & Knorth, 2012). Above studies showed the results of family members who failed to accomplish their

roles in a family. Many of them ended up in presenting antisocial behaviour and felt difficult to restore the relationship between their families (Cid & Martí, 2012).

2.3.4 The relationship between affective responsiveness and antisocial behaviour.

Affective responsiveness is the capability of family members to express or react with suitable quality and quantity of feelings and emotions. There are two kinds of emotions McMaster Model talk over which are welfare feelings and emergency feelings. Welfare feelings are emotions that possess more on positive feelings such as love, fondness, gladness, and sense of pleasure. Emergency feelings are emotions that related more on negative feelings such as fear, rage, grief and sorrow, disappointment, and despondent (Epstein et al., 1978). It is important for family members to express or react with a proper emotion, either positively or negatively towards certain things and matters for the functioning of the family. For example, parents need to express love and fondness towards their children, and sadness and disappointment when the child did something wrong in order to maintain the emotional balance among family members. Previous study suggested that family with low affective responsiveness promotes callous unemotional behaviour (Waller, Gardner, Viding, Shaw, Dishion, Wilson, & Hyde, 2014), a genetic behaviour that increase the risk for children to have antisocial behaviour (Viding, Fontaine, & McCrory, 2012). Whereas in 2010, Bolsoni-Silva and Maria Marturano proposed that positive parenting practices such as good communication with their children, suitable limit settings, and appropriate expression of feelings will reduce antisocial behaviour.

2.3.5 The relationship between affective involvement and antisocial behaviour. Affective involvement is the extent to which level family members pay attention to and cherish the

movements and moments among each and every family member. The degree of possible involvement includes lack of involvement, involvement devoid of feelings, narcissistic involvement, empathic involvement, over involvement, and symbiotic involvement (Epstein et al., 1978). Lack of involvement refers to family members demonstrate no interest at all, whereas involvement devoid of feelings refers to have very little interest and only put efforts when one of the family members is asked to. Narcissistic involvement means to have no feeling of importance when the thing or matter is mainly centred on other family member. Empathic involvement suggests that family members have feelings and values the importance of family activities. Over involvement occurs when family members are being over reactive. Last but not least, symbiotic involvement, meaning to have extreme involvement in the extent that the relationship became indistinct (Epstein et al., 1978). Affective involvement that shows the concern from family members is important to reduce adolescents' engagement in antisocial behaviour. Past studies revealed that scarcity of parental support and involvement arouses antisocial behaviour (Gaik, Abdullah, Elias, & Uli, 2010; Bacchini, Concetta Miranda, & Affuso, 2011; Lenzi et al., 2015; Patterson et al., 2017). Adolescents may engage in more antisocial behavior due to low parental monitoring and family involvement (Bacchini, Concetta Miranda, & Affuso, 2011). Due to low affective involvement, adolescents who failed to gain support or attention from family members are more likely to seek the support from peer and it may increase their risk taking behavior as they might follow their friends blindly (Bacchini, Concetta Miranda, & Affuso, 2011; Patterson et al., 2017).

2.3.6 The relationship between behaviour control and antisocial behaviour. Behaviour control is the method of family members applied in order to deal with family's behaviours, including circumstances where family members participating in vicious activities, meeting up psychobiological needs and drives, and their social behaviours inside and outside of the

family. McMaster Model categorized four styles of behaviour control that are often seen in most family (Epstein et al., 1978). The first style is rigid behaviour control, family who implement this behaviour have strict family rules and regulations and have very limited negotiation opportunity among family members. The second style is flexible behaviour control, this style of family behaviour control provides acceptable family rules and regulations and is more accommodate to circumstances. The third style is laissez-faire behaviour control, a family behaviour with no rules and regulations and there is no specific method to solve problems. The last style is chaotic behaviour control, which are the stochastic diverting of the above three styles, rigid behaviour control, flexible behaviour control, and laissez-faire behaviour control. Family members will not be able to identify which family rules and regulations will be applied and will not know which method to resolve a problem (Epstein et al., 1978). Families that perform rigid behaviour control style of management usually produces children with lower focus on internal moral judgements (Hoffman, 1970) and empathy (Feshbach, 1974) due to the punitive, cabined, and authoritarian style of family behaviour (Dombusch, Carlsmith, Bushwall, Ritter, Leiderman, Hastorf, & Gross, 1985). Whereas families that exercise chaotic behaviour control are more likely nurture individuals who are impetuous, incursive, and having shortage in executing social responsibilities and independence (Baumrind, 1971). Thus, either restrained or unrestrained family behaviours are predictors to lead children towards antisocial behaviour. Appropriate level of behavioural control had been found to be correlated with lower level of antisocial behaviour in recent studies (Laird, Marrero, & Sentse, 2010; Tompsett & Toto, 2010; Wang, Dishion, Stormshak, & Willett, 2011). Excessive control will result in argument (Laird, Marrero, & Sentse, 2010) whereas adequate parental monitoring may effectively reduce antisocial behaviour (Wang, Dishion, Stormshak, & Willett, 2011).

2.4 Conceptual Application

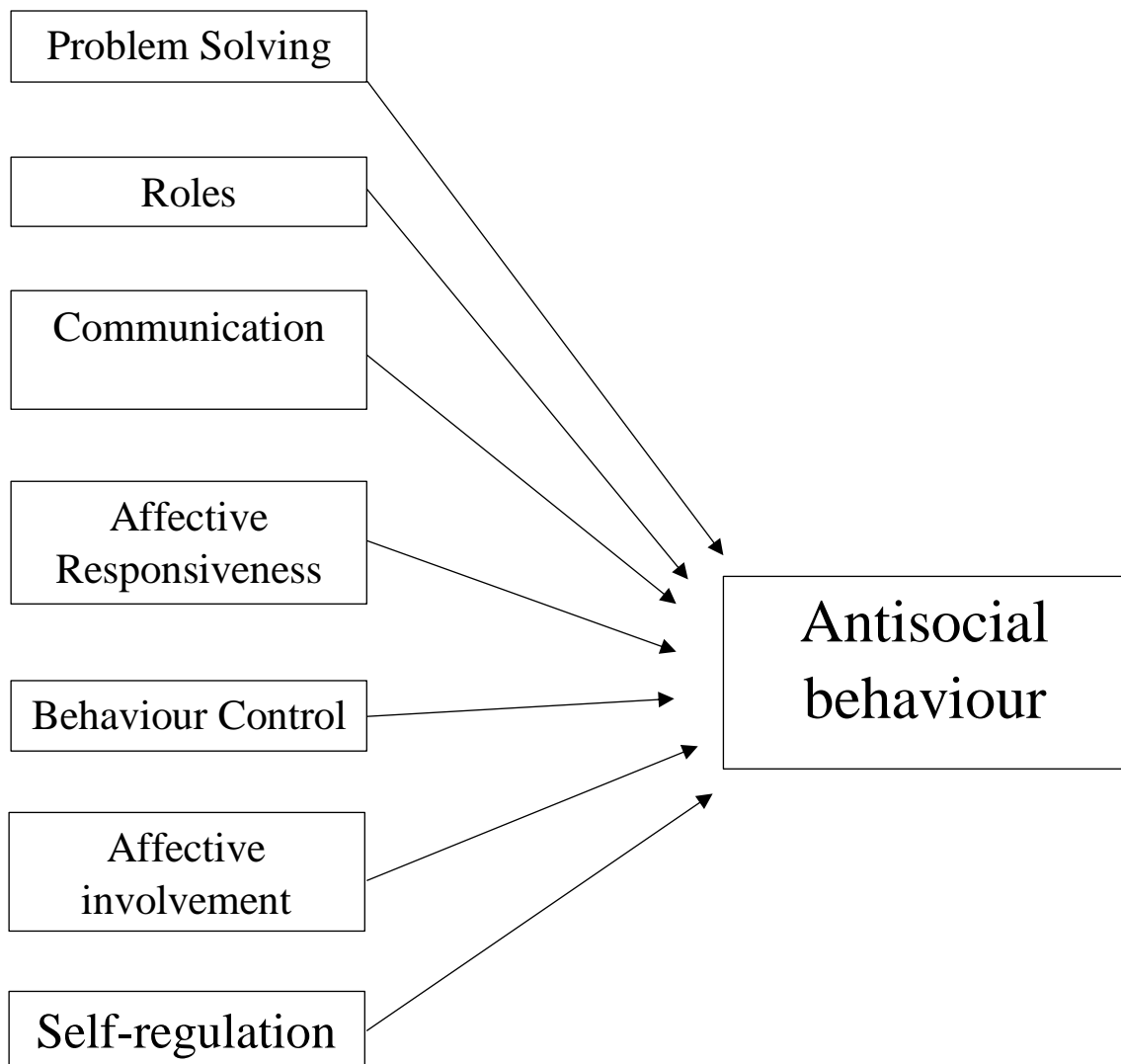


Figure 2.1. Theoretical framework

A family system is made up of interdependent individual family members, while at the same time each member has their own needs to fulfil. In other words, individual needs may be in conflict or unfulfilled when there is a dysfunction in the system. By integrating Self-determination theory (SDT) and Systems theory, this study proposed that higher level of perceived of family functioning and self-regulation among adolescents is important to mitigate their involvement in antisocial behaviour.

Methodology

3.1 Research Design

The study was a quantitative cross-sectional study using self-administered questionnaires. The purpose of this study was to examine the relationships between family functioning, self-regulation and antisocial behaviour among adolescents. A cross-sectional study is used to analyze data collected at a given, specific point of time across a sample population. Meanwhile, a quantitative approach to data collection increases the scientific objectivity of the study by providing data that can be quantified and measured (Denscombe, 2016). Hence, this study applied the appropriate research approach to examine the research questions.

3.2 Participants

The present study targeted secondary school students from a state with reportedly high rates of adolescent antisocial behaviour, which was Selangor, West Malaysia. According to Malaysia's Department of Social Welfare (2014; 2015; 2016), Selangor was recorded having the highest number of children involved in crime, which was 830 out of 5153 children in 2014, 823 out of 4669 children in 2015, and 764 out of 4886 children in 2016.

Respondents were selected through purposive sampling method. A sampling frame was made for the study comprising of all the identified hotspot schools located in Selangor. According to a New Straits Times article, former Education Minister Datuk Seri Mahdzir Khalid explained that hotspot schools are schools that had been identified with disciplinary problems, high absenteeism rates, and the most severe forms of crime such as drug abuse (Mohd, 2017). The article further elaborated that there are 76 hotspot schools in Selangor. Two secondary schools were randomly selected from the list.

The targeted population were adolescents enrolled in Malaysian identified hotspot secondary schools. Our sample size was calculated by using G*Power 3.1 software which was developed by Faul, Erdfelder, Buchner and Lang (2009), and the sample size was 153 participants.

The respondents of the study comprised of adolescents from the chosen hotspot secondary schools in Selangor, Malaysia. The age range of the respondents was 13 to 17 year old.

3.3 Instruments

Demographics questions such as age and gender were included.

3.3.1 The Antisocial Behaviour Scale (ABS)

The Antisocial Behaviour Scale (ABS) was a 19-item scale with no reverse item (Schwab-Stone, Chen, Greenberger, Silver, Lichtman, & Voyce, 1999). Five items were removed due to cultural sensitivity, which were items 9, 12, 14, 15, and 18. The items were rated on a 5-point Likert scale ranging from 0 = “zero times” to 4 = “five and more times” based on the past year behaviour of respondents. Example items of ABS are “*Started a fistfighting or shoving match?*” and “*Been in juvenile court?*” The scores were summed up and had the minimum score of 0, meaning no antisocial behaviour, and a maximum score of 76, meaning high levels of antisocial behaviour (Sobotková, Blatný, Jelínek, & Hrdlička, 2013). Reliability of ABS was $\alpha = .83$ (Sobotková, Blatný, Jelínek, & Hrdlička, 2013).

3.3.2 The Family Assessment Device (FAD)

The Family Assessment Device (FAD) was a 60-item self-report instrument which consisted of six subscales of family functioning according to the McMaster Model (Epstein et al., 1978). The six subscales were problem solving, communication, roles, affective responsiveness, affective involvement, and behavioural control. Items were rated on 4-point Likert scale ranging from 0 = “*strongly agree*” to 3 = “*strongly disagree*” with reverse scoring. The scores of each subscale were summed up and divided to the number of items in each subscales. Higher scores of the particular subscale indicates higher level of the family functioning dimension. Reliability of FAD were $\alpha = .74$ for problem solving, $\alpha = .70$ for communication, $\alpha = .57$ for roles, $\alpha = .73$ for affective responsiveness, $\alpha = .76$ for affective involvement, $\alpha = .70$ for behaviour control, and $\alpha = .83$ for general functioning scale (Kabacoff, Miller, Bishop, Epstein, & Keitner, 1990).

3.3.3 Short Self-Regulation Questionnaire (SSRQ)

The SSRQ measured an individual's self-regulation capacity. Carey, Neal, and Collins (2004) derived this 31-item inventory based on the original 63-item Self-Regulation Questionnaire (SRQ) by Brown, Miller, and Lawendowski (1999) which was designed to measure self-regulation capacity across seven processes (information input, information evaluation and comparison to norms, triggering change, searching for options, devising plan, implementing plan, evaluating plan). It consisted of 31 positive statements (e.g. “*I have trouble making plans to help me reach goals.*”) and negative statements (e.g. “*I have a lot of willpower.*”) measured on a Likert scale ranging from 1 = ‘*strongly disagree*’ to 5 = ‘*strongly agree*’ with reverse scoring on negatively worded items. The minimum score of 31 meant lowest self-regulation levels and the maximum score of 155 signified highest self-regulation levels

(Carey, Neal, & Collins, 2004). Reliability of SSRQ was $\alpha = .91$ (Denson, Pedersen, & Miller, 2006).

3.4 Procedure

Data collection was carried out through the pen-and-paper method. Prior to the data collection, permission to carry out the study was requested to the Ministry of Education and State Education Department. Upon approval, the researchers approached the principals of the selected secondary schools before the actual data collection. After receiving agreement to cooperate and consent from respective schools, with the help and collaboration of the school counsellors, students were briefed about the study. During the data collection, researchers answered questions from students who had doubts about the study. The estimated time used to complete the questionnaire was around 35 to 45 minutes. All of the data collected were anonymous and were private and confidential as only researchers had the access to the data collected. Prior to data collection, the questionnaire was forward-translated into Bahasa Melayu. Forward translation is defined as the translation from the original language of the questionnaire to the target language (Tsang, Royce, & Abdullah, 2017). A pilot study was then conducted to test the reliability of the Malay version of the scales. Next, accuracy of the translated questionnaire was further checked by referring to a psychology related expertise.

3.5 Data Analysis Plan

A pilot test was conducted by recruiting 30 respondents to check the reliability of the instruments. IBM SPSS Statistics 23 was used to calculate the reliability of the instruments. The result of the pilot test shows that the reliability of Short Self-Regulation Questionnaire (SSRQ) is ($\alpha = .91$) and the Antisocial Behaviour Scale (ABS) is ($\alpha = .52$). While for the Family Assessment Device (FAD), the general reliability is ($\alpha = .80$), and the reliability for

each subscale (problem solving, communication, roles, affective responsive, affective involvement and behaviour control) are ($\alpha = .33$), ($\alpha = .27$), ($\alpha = .71$), ($\alpha = .76$), ($\alpha = .48$) and ($\alpha = .71$). IBM SPSS Statistics 23 was also used in the actual analysis. Normality test was conducted to check the normality of our data and filter out the outlier. Multicollinearity test was then used to examine the independent variable are correlated. After passing multicollinearity test, the reliability test was conducted to check the reliability of each instrument. The reliability of the instruments was presented in Table 4.2. Descriptive analyses for participants demographic was calculated and presented in Table 4.1. The correlation for all independent and dependent variable was examined. Multiple regression analysis was conducted.

Chapter 4

4.1 Result

4.1.1 Normality Test

Table 4.1 shows that normality test for all of the variables. The skewness level of all variable falls with the expected range which is ± 2 . However, for the kurtosis level of self-regulation exceed 0.69. This is because the large sample size is sensitive so it will indicate the shape of a distribution statistically different from normal (Rindskopf & Shiyko, 2010).

Furthermore, the outliers is one of the factors that affect skewness and kurtosis issues. The outliers will have deleterious effects to increase the error variance and decrease the normality (Osborne & Overbay, 2004). Therefore, large sample size does not insure the normality.

Table 4.1

Normality table

| Variable | Mean | Std. Deviation | Skewness | Kurtosis |
|--------------------------|--------|----------------|----------|----------|
| General FAD | 24.35 | 5.004 | -.109 | .037 |
| Communication | 14.18 | 2.906 | .293 | .592 |
| Roles | 19.48 | 3.639 | -.010 | .032 |
| Affective Responsiveness | 10.86 | 2.887 | -.125 | .374 |
| Affective Involvement | 12.66 | 3.028 | -.020 | -.151 |
| Behaviour Control | 15.42 | 3.092 | -.005 | -.133 |
| Self-regulation | 107.25 | 13.718 | -.552 | 3.690 |
| Antisocial Behaviour | 7.23 | 5.458 | 1.223 | 1.027 |

Note. FAD = Family Assessment Device

4.1.2 Reliability Test

Table 4.2

Reliability of the variable

| Variable | Number of items | Pilot Study (N = 30) | Actual Study (N = 209) |
|--------------------------------------|-----------------|----------------------|------------------------|
| Family Assessment Device (FAD) | | | |
| General FAD | 12 | .80 | .78 |
| Problem solving | 6 | .33 | .40 |
| Communication | 9 | .27 | .52 |
| Roles | 11 | .71 | .58 |
| Affective | 6 | .76 | .58 |
| Responsiveness | | | |
| Affective | 7 | .48 | .54 |
| Involvement | | | |
| Behaviour | 8 | .71 | .59 |
| Control | | | |
| The Antisocial Behaviour Scale (ABS) | | | |
| Antisocial Behaviour | 14 | .52 | .67 |
| Self-regulation Questionnaire | | | |
| Self-regulation | 31 | .91 | .89 |

Table 4.2 shows the result of reliability test using SPSS software. SPSS result of the actual study shows that the reliability of Short Self-Regulation Questionnaire (SSRQ) is ($\alpha = .89$) and the Antisocial Behaviour Scale (ABS) is ($\alpha = .67$). While for the Family Assessment Device (FAD), the general reliability is ($\alpha = .78$), and the reliability for each subscale (problem solving, communication, roles, affective responsive, affective involvement and behaviour control) are ($\alpha = .40$), ($\alpha = .52$), ($\alpha = .58$), ($\alpha = .58$), ($\alpha = .54$) and ($\alpha = .59$). We removed one of the subscales in FAD which is problem solving as its reliability is less than ($\alpha = .50$). A measure with cronbach's alpha lower than .50 is suggested to be omitted due to less reliable (Nunnally, 1978). The cronbach's alpha for problem solving ($\alpha = .40$), is lower than .50 is because the item in problem solving subscale is hard to be understand by the

participants. Hinton, Brownlow, McMurray, & Cozens (2004) mentioned that cronbach's alpha of .50 is consider as moderate reliability. One item form behaviour control subscale was removed to improve the reliability.

4.1.3 Demographic Details

Table 4.3 showed the demographic details of our participants. Our participants consist of 80 male (38.3%) and 129 female (61.7%). Among all our participants, 60.3% of them is Malay, 32.5% is Chinese and the rest of them is Indian. Most of our participants are from 16 years old ($n = 89$) and 4 of them did not report their age.

Table 4.3

Participant's demographic

| Participants information | n | % |
|--------------------------|-----|------|
| Age | | |
| 13 | 1 | 0.5 |
| 14 | 2 | 1.0 |
| 15 | 60 | 28.7 |
| 16 | 89 | 42.6 |
| 17 | 53 | 25.4 |
| Missing | 4 | 1.9 |
| Gender | | |
| Male | 80 | 38.3 |
| Female | 129 | 61.7 |
| Race | | |
| Malay | 126 | 60.3 |
| Chinese | 68 | 32.5 |
| Indian | 15 | 7.2 |
| Religion | | |
| Islam | 126 | 60.3 |
| Buddhist | 67 | 32.1 |
| Hindu | 14 | 6.7 |
| Others | 2 | 1.0 |

4.2 Correlation Analysis

Table 4.4

Correlation analyses (N = 209)

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Mean | Standard Deviation |
|-----------------------------|---|--------|--------|--------|--------|--------|--------|---------|--------|--------------------|
| 1. General FAD | - | .596** | .567** | .642** | .523** | .493** | .579** | -.209** | 24.35 | 5.004 |
| 2. Communication | - | - | .407** | .480** | .394** | .433** | .430** | -.214** | 14.18 | 2.906 |
| 3. Roles | - | - | - | .467** | .527** | .501** | .511** | -.140* | 19.48 | 3.639 |
| 4. Affective Responsiveness | - | - | - | - | .397** | .384** | .467** | -.122 | 10.86 | 2.887 |
| 5. Affective Involvement | - | - | - | - | - | .479** | .403** | -.141* | 12.66 | 3.028 |
| 6. Behaviour Control | - | - | - | - | - | - | .459** | -.198** | 15.42 | 3.092 |
| 7. Self-regulation | - | - | - | - | - | - | - | -.277** | 107.25 | 13.718 |
| 8. Antisocial Behaviour | - | - | - | - | - | - | - | - | 7.23 | 5.458 |

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

4.2.1 General Family Functioning

The results of Pearson correlation showed that there was a significant correlation between general family assessment device score and antisocial behaviour scores, $r(207) = -.21, p = .002$. The higher the general family assessment device score, the lower the antisocial behaviour scale scores. Therefore the first hypothesis is accepted.

4.2.2 Communication

Study result indicates that communication subscale from FAD shows a significant relationship with antisocial behaviour. The results of Pearson correlation showed that there was a significant correlation between communication subscale and antisocial behaviour scores, $r(207) = -.21, p = .002$. The higher the communication subscale score, the lower the antisocial behaviour scale scores. Therefore the second hypothesis is accepted.

4.2.3 Roles

The results of Pearson correlation showed that there was a significant correlation between roles subscale and antisocial behaviour scores, $r(207) = -.14, p = .043$. The higher the roles subscale score, the lower the antisocial behaviour scale scores. Therefore the third hypothesis is accepted.

4.2.4 Affective Responsiveness

The results of Pearson correlation showed that there was a correlation between affective responsiveness subscale and antisocial behaviour scores, $r(207) = -.12, p = .079$.

4.3 Multiple Regression Analysis

Table 4.5

Multiple regression analysis for antisocial behaviour (N = 209)

| Model | Unstandardized Coefficient |
|-------|-------------------------------|
|-------|-------------------------------|

Chapter 5

5.1 Discussion

The aim of this research was to investigate the relationship between family functioning, self-regulation and antisocial behaviour among adolescents. Correlations and multiple regression analysis were carried out separately in order to find out the relationships between family functioning subscales, self-regulation and antisocial behaviour. However, one of the subscales was excluded due to its low value of reliability, which is problem solving.

Findings revealed that most subscales of family functioning according to the McMaster model have significant correlations with antisocial behaviour except for affective responsiveness. For predicting effects, only self-regulation was found to have a significant

relationships with antisocial behaviour. However this study excluded the problem solving subscale due to low reliability with $\alpha = .39$.

Generally, our findings indicated that all subscales of family functioning were found to have significant relationships with an adolescent's antisocial behaviour. Higher levels of family functioning showed lower levels of antisocial behaviour among adolescents and vice versa. This is because family plays an important role for adolescents to develop with positive character or personality (Morris, Silk, Steinberg, Myers, & Robinson, 2007).

Similar to the results of Cernkovich and Giordano (1987), communication between parents and children do contributes to the behaviour of adolescents. Studies indicated that having poor communication in a family results in the existence of defensive communication which will lead to delinquency behaviour (Alexander, 1973; Law, Shapka, & Olson, 2010). Poor communication such as less supportive communication, interruptive communication, and dominating communications will also result in antisocial behaviour (Hetherington, Stouwie & Ridberg, 1971; Hanson, Henggeler, Haeefe, & Rodick, 1984). Recent studies proposed that children need to have good communication with their parents in order to understand and feel the love and warmth from their parents (Bacchini, Concetta Miranda, & Affuso, 2010; Law, Shapka, & Olson, 2010; Geurts, Boddy, Noom, & Knorth, 2012). Lacking of communication in the family will also cause adolescence to feel unwanted, being rejected, and lack of parental warmth.

Family management mentioned by Smith and Stern (1997) refers to the way of parents to administer their family with their own strategies. It is parents' responsibilities to assure that every family member fulfils their roles in the family. Many studies had emphasized on the importance of the roles played by family members in the family system (Goldstein, 1984; Loeber, & Stouthamer-Loeber, 1986). It is not only parents who have to

carry out familiar responsibilities but so do children in order to have a good and complete family system. Studies indicate that adolescents who help in house chores are seen to have a strong sense of responsibility and value family more (Calderón-Tena, Knight, & Carlo, 2011; Telzer, Gonzales, & Fuligni, 2014). This allows them to think twice before performing any delinquent behaviour and disengage themselves from antisocial behaviour.

Studies revealed that parental warmth is important for the development of empathy and emotion in early adolescents (Wang, Dishion, Stormshak, & Willett, 2011; Waller et al., 2014). This does not correlate with our findings on affective responsiveness saying that parents who showed love and tenderness to their children will decrease antisocial behaviour. Studies have been showing a reciprocal relationship between parental warmth and antisocial behaviour (Wang et al., 2011; Waller et al., 2014). However, there are also studies that revealed that overprotective parental style will also elicit antisocial behaviour (Veenstra, Lindenberg, Oldehinkel, De Winter, & Ormel, 2006; Buschgens et al., 2010; Vera, Granero, & Ezpeleta, 2012). One of the reasons is that adolescents who experienced overprotection from their parents are more likely to become a victim of bullying because they are incapable to protect themselves (Kokkinos, 2013; Lereya et al., 2013). Another reason explained by Vera et al., (2012) was that the deviant behaviour displayed by adolescents who experienced parental overprotection is a kind of dissent on being over-intervened by their parents. With the controversy among these journals (Veenstra et al., 2006; Buschgens et al., 2010; Wang et al., 2011; Vera, Granero, & Ezpeleta, 2012; Kokkinos, 2013; Lereya, Samara, & Wolke, 2013; Waller et al., 2014), our study agreed to the point that affective responsiveness can help to reduce antisocial behaviour however high level of affective responsiveness may bring opposite effect resulting in promoting antisocial behaviour. Therefore this study proposed an insignificant relationship between affective responsiveness and antisocial behaviour.

Our findings support past studies that declared family demonstrating parental negativity and rejection, low level of parental support, low parental involvement, and low parental monitoring are the predictors of antisocial behaviour (Gaik, Abdullah, Elias, & Uli, 2010; Bacchini, Concetta Miranda, & Affuso, 2011; Lenzi et al., 2015; Patterson et al., 2017). This is in line with our findings on affective involvement. Studies show that adolescents experiencing parent rejection, low parental monitoring, and low parental support are more likely to exhibit aggression, depression, isolation, and delinquencies that leads to antisocial behaviour (Gaik, Abdullah, Elias, & Uli, 2010; Bacchini, Concetta Miranda, & Affuso, 2011; Lenzi et al., 2015; Patterson, DeBaryshe, & Ramsey, 2017). Therefore it is important for parents to understand the dimension of parental involvement in order to avoid such incident to happen. Our findings also support past studies that found family lacking connection between family members, improper parental involvement, and excessive arguments leads to higher frequencies of antisocial behaviour (Rankin & Wells, 1990; Sampson & Laub, 1995). Parental monitoring is important for parents to gain knowledge of the whereabouts of their children and reduce delinquent behaviour by setting rules and regulations in the house (Wang et al., 2011). This corresponded to our findings on behaviour control by indicating that the importance of having appropriate family involvement and management. From Álvarez-García, García, Barreiro-Collazo, Dobarro, and Antúnez's study (2016), they proposed that suitable behaviour control among the family will make adolescents feel being loved and concerned however excessive control (known as psychological control in the context) will bring opposite effect. Adequate worries and reliance is the key point to maintain a good behaviour control. Good behaviour control results in low antisocial behaviour.

5.1.2 Self-regulation

As per the results of this study, adolescents' capability to self-regulate significantly and negatively predicts their tendency to behave antisocially. Participants who had lower levels of self-regulation were involved in higher frequencies of antisocial behaviour, while those who had higher levels of self-regulation were involved in lesser frequencies of antisocial behaviour. This supports the notion that self-regulatory resource is finite, in which it can be depleted by repeated exposure to adverse or stressful situations.

De Kogel and Alberda's (2018) narrative review elaborated on the biological consequences of childhood adversities, explaining that early adversities led some children to develop dysregulated physiological stress system. These children either had lower resistance to react impulsively to situations that irritate them or experienced hyperarousal such as high aggression. Moreover, an earlier study done by DeLisi, Tostlebe, Burgason, Heirigs, and Vaughn (2016) found a significant association between low self-control with antisocial behaviour (i.e., aggressive offending, property damage, and self-reported delinquency). Friehe and Schildberg--Hörisch (2017) supported this concept by concluding that individuals with low self-control take more risks and are less effectively restrained by the law.

The results of this study further implied that adolescents who constantly make efforts to regulate the impacts of stress on their lives face self-regulation failure in the long run, causing them to lose control over their impulsive behaviours. This finding supported Wang, Chassin, Eisenberg, and Spinrad's (2015) similar result which showed that deficiency in effortful control (an aspect of self-regulation) served as a precursor to antisocial-aggressive behaviour. However, there is more than mere environmental stressors that account for dysregulation in the self. Eisenberg, Spinrad, and Eggum's (2010) review called to attention that both genetics and environmental factors, and the interactions between them, played their

own roles in predicting self-regulation capabilities in individuals and its relations with maladjustments.

5.2 Conclusion

The findings of this research support the hypotheses that there are significant relationships between all subfactors of family functioning, and adolescent self-regulation on the antisocial behaviours of adolescents. The findings align with the theoretical framework of Self-Determination theory and the Systems theory, which were adopted to explain the dynamic relationship between the variables. Poor family functioning and low levels of self-regulatory capabilities lead to the increase of antisocial behaviour among adolescents. In addition, self-regulation was found to be a significant predictor of adolescent antisocial behaviour, indicating that the depletion of self-regulatory resources due to the impact of stress can worsen the quality of adolescents' decision-making. These results extend existing literature regarding social aspects on adolescents' psychosocial development, and contributes to the recent growing interest on self-regulation as an individual-difference which may serve as a protective factor against adversity

5.3 Implications

5.3.1 Theoretical Implication

The findings of our study have important theoretical implications. Through this research, there would be a clearer understanding on what are the actual factors which contribute to antisocial behaviour among adolescents. The current study reinforces the Self-Determination theory which explains how our needs are affected and how unsatisfied needs

can lead to antisocial behaviour among adolescents. This is because unfulfilled needs for relation and autonomy can lead to undesired or maladjusted behaviours. Adolescents are in a phase of behaviour-experimentation and discovering the larger world around them. Hence, when they feel over-restricted by rules and regulations, their sense of freedom to explore is threatened. This can lead them to have antisocial behaviour to regain the freedom of choice. At the same time, when adolescents' feel that they are lacking relations with others, they may turn to deviant peer groups to fulfil their needs for relation, which in turn will increase adolescent antisocial behaviour.

Furthermore, based on the Systems theory, it is also implied that functional roles in a family system must be carried out by every member to reach an equilibrium between personal needs and familial needs. This is to deter a dysfunction from occurring in the system which may cause conflicts between family members. This is because dysfunctions in the family system can lead to adolescent antisocial behaviour when they seek for compensation through socially-undesirable actions such as stealing for monetary gains, involving themselves in deviant peer groups for a sense of belongingness or displacing aggression unto others when communications and emotions are negative in the family.

5.3.2 Practical Implication

This study investigated the relationship between family functioning and self-regulation on antisocial behaviour among adolescents. It was found that better family functioning within a family can be a protective factor against adolescent antisocial behaviour. By referring to the aspects of family functioning, family members can be guided to identify and understand the importance of family system dynamics and how each family member contributes to the system. As for self-regulation, adolescents will be able to recognize and

evaluate their self-regulatory capabilities through being conscious of their own social behaviours.

Governmental agencies such as the Ministry of Health or Jabatan Kebajikan Malaysia (JKM) and some non-governmental organizations (NGO) can organize awareness programs related to family health and holistic adolescent development to promote awareness among citizens. The improvement of family functioning quality and ensuring positive adolescent development can effectively mitigate adolescent antisocial behaviour and eventually reducing the rate of juvenile delinquency in Malaysia.

5.4 Limitation

There are a few limitations in our study. One of it being a lengthy questionnaire as the questionnaire consisted a total of 105 questions. Some of the participants did not answer the entire questionnaire accurately due to exhaustion. Future researchers are recommended to shorten the length of the questionnaire to overcome this problem.

Another limitation in the study was there might have been social desirability bias whilst the participants were answering the questionnaire. Researchers found that some of the participants were answering the question according to social conformity and not from their own perspective. They provided a more ideal answer that was expected from them instead of answering based on their true opinion. As this is a self-administered questionnaire, some of them also referred to their peer's answers. This affected the consistency and accuracy of our data.

Lastly, language barrier was also a limitation in this study. Although the questionnaire was translated into Bahasa Melayu, 31.1% of our respondents were Chinese (n=70). For our Chinese respondents, some of them did not fully comprehend the translated questionnaire.

Therefore, the participants' comprehension and understanding of the items in the questionnaire may have been low and hence influenced the reliability of the measures.

5.5 Recommendation

To extend the knowledge on antisocial behaviour among adolescents in Malaysia, future researchers can opt to expand this research by recruiting more participants from different schools and from other states in Malaysia. This will produce a more reliable result.

Since Malaysia is a multicultural country, future studies can be replicated by additionally translating the questionnaire into one more language, which is Mandarin. This will effectively overcome the language barrier of Chinese respondents who could neither fully understand Malay nor English.

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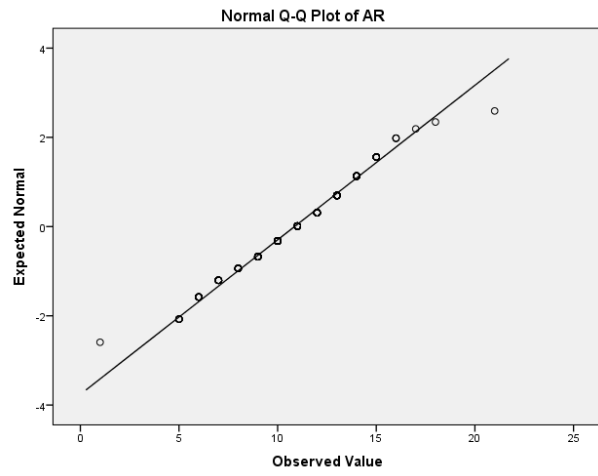
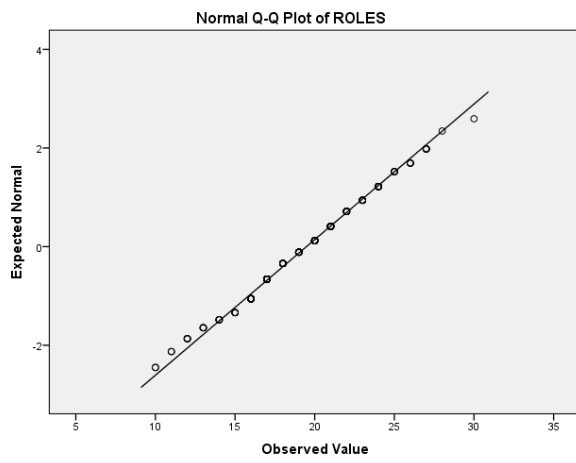
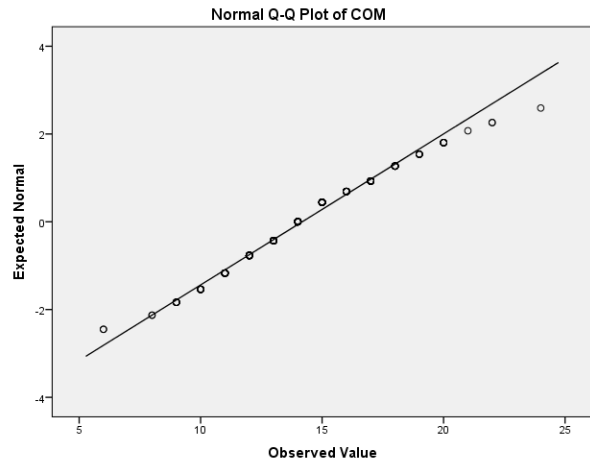
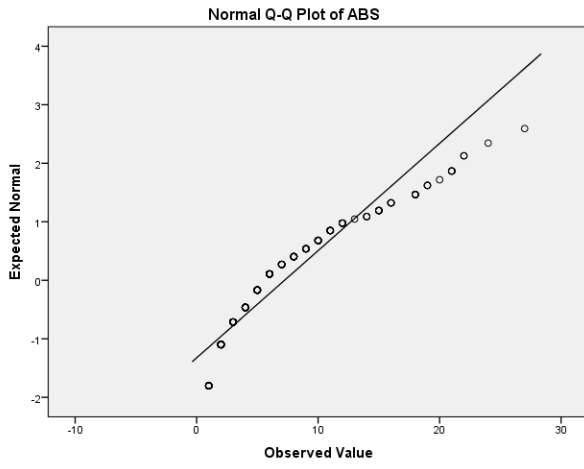
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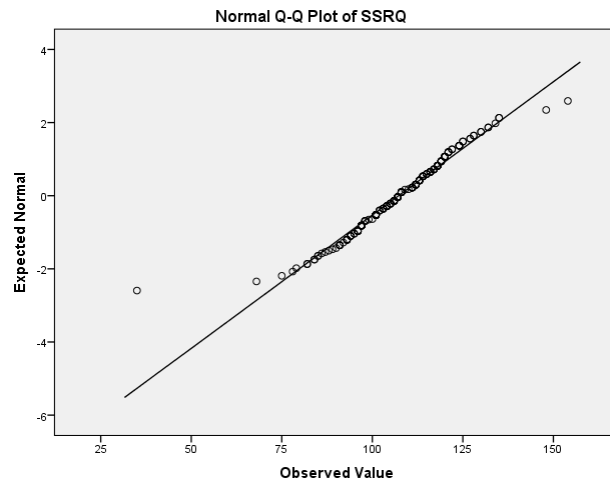
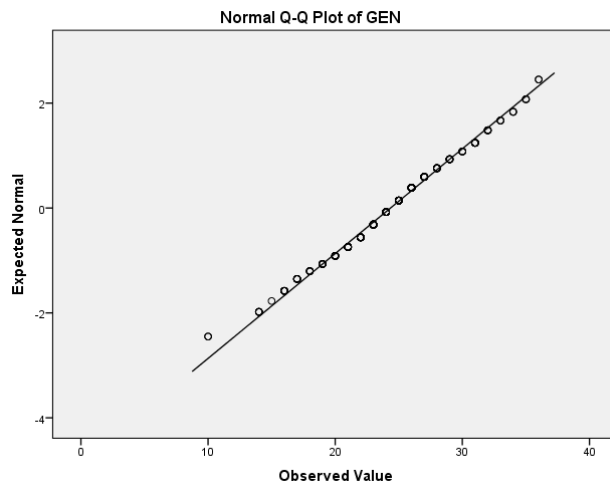
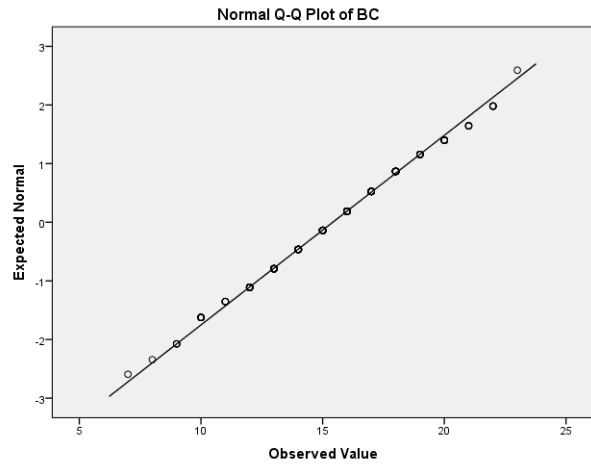
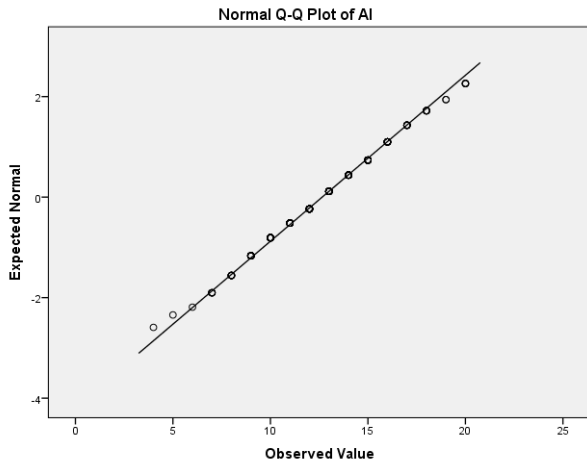
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Appendix A

Q-Q Plot





Appendix B

Multiple Regression Analyse

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .304 ^a | .093 | .066 | 5.275 | .186 |

a. Predictors: (Constant), SSRQ, AI, COM, BC, ROLES, GEN

b. Dependent Variable: ABS

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1 | Regression | 573.885 | 6 | 95.647 | 3.437 | .003 ^b |
| | Residual | 5621.627 | 202 | 27.830 | | |
| | Total | 6195.512 | 208 | | | |

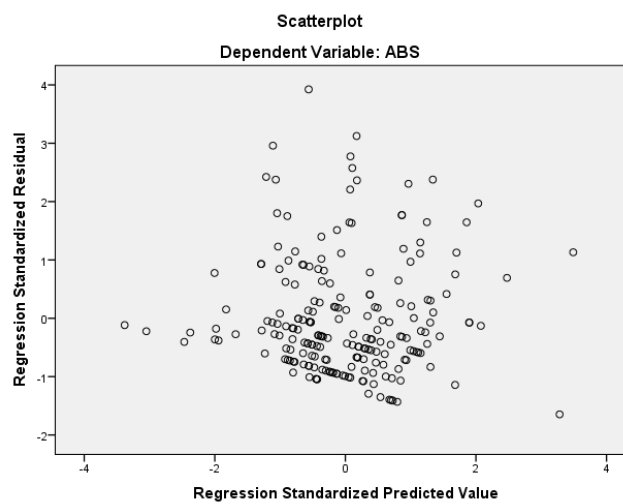
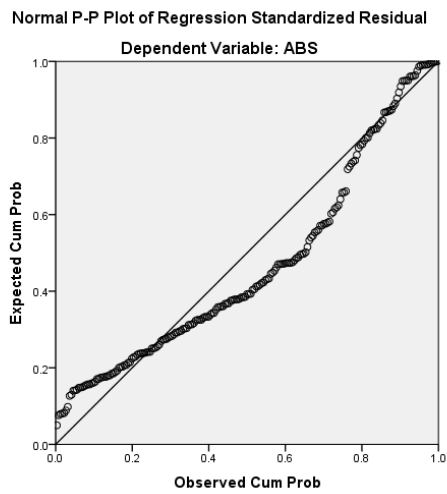
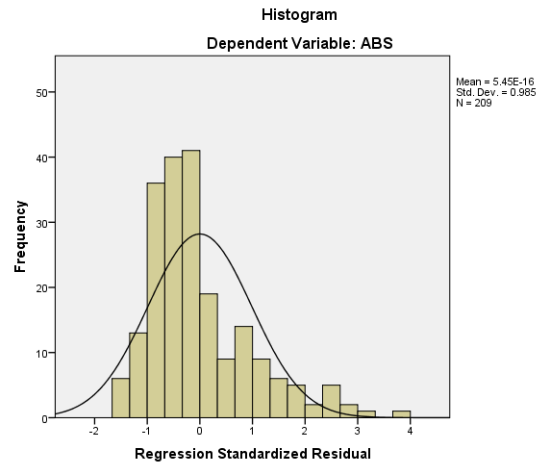
a. Dependent Variable: ABS

b. Predictors: (Constant), SSRQ, AI, COM, BC, ROLES, GEN

Residuals Statistics^a

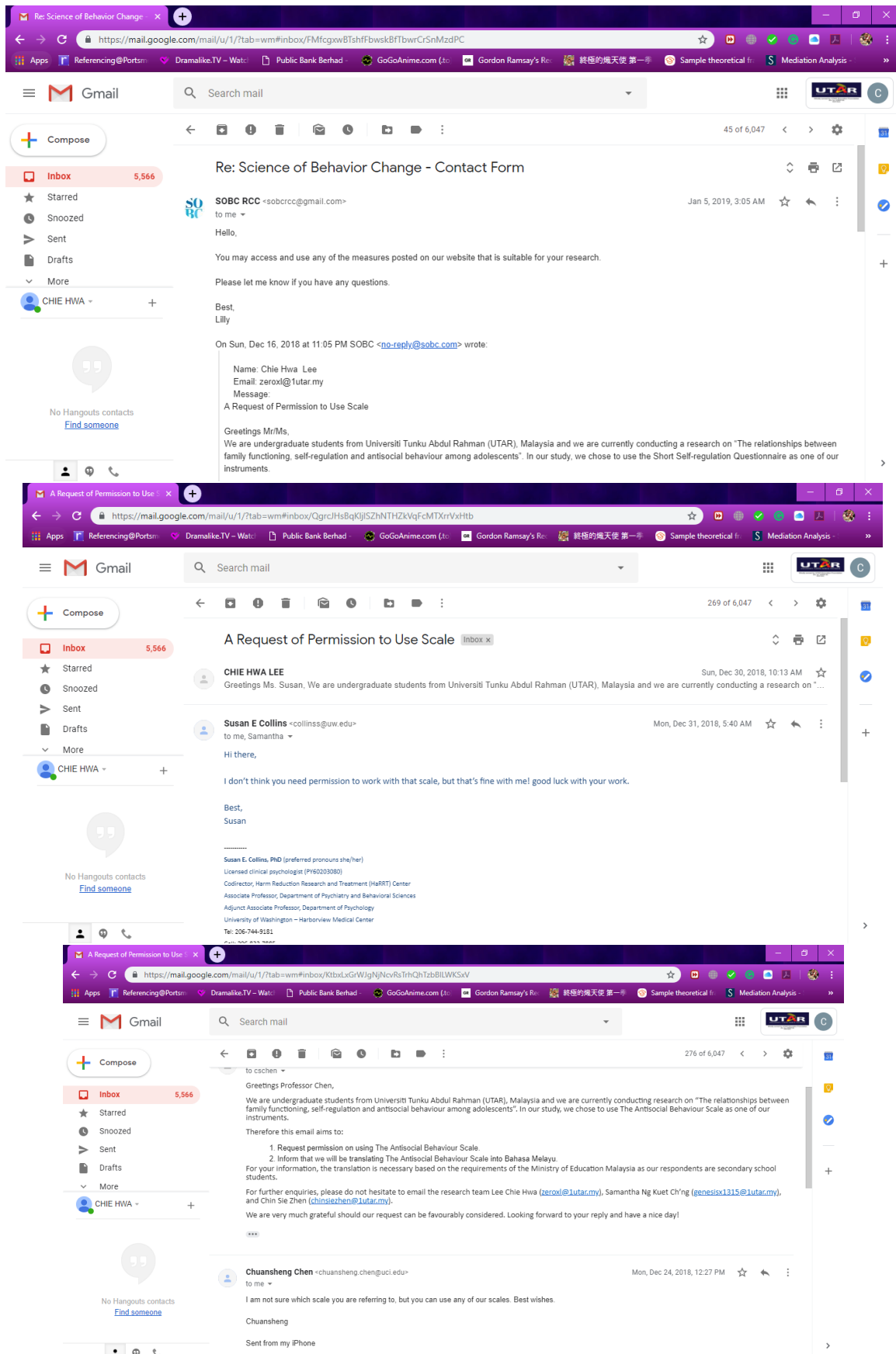
| | Minimum | Maximum | Mean | Std. Deviation | N |
|-----------------------------------|---------|---------|-------|----------------|-----|
| Predicted Value | 1.62 | 13.03 | 7.23 | 1.661 | 209 |
| Std. Predicted Value | -3.381 | 3.490 | .000 | 1.000 | 209 |
| Standard Error of Predicted Value | .488 | 2.431 | .924 | .281 | 209 |
| Adjusted Predicted Value | 1.68 | 13.31 | 7.22 | 1.647 | 209 |
| Residual | -8.685 | 20.700 | .000 | 5.199 | 209 |
| Std. Residual | -1.646 | 3.924 | .000 | .985 | 209 |
| Stud. Residual | -1.705 | 3.997 | .001 | 1.003 | 209 |
| Deleted Residual | -9.311 | 21.483 | .016 | 5.389 | 209 |
| Stud. Deleted Residual | -1.713 | 4.155 | .005 | 1.012 | 209 |
| Mahal. Distance | .782 | 43.163 | 5.971 | 4.777 | 209 |
| Cook's Distance | .000 | .086 | .005 | .011 | 209 |
| Centered Leverage Value | .004 | .208 | .029 | .023 | 209 |

a. Dependent Variable: ABS



Appendix C

Request for Scale permission



Appendix D

Section A: Demographic

Please fill in the blanks or put a “√” in your answer.

1. Age

_____ years old

2. Gender

| | |
|--------|--|
| Male | |
| Female | |

3. Race

| | |
|--------|--|
| Malay | |
| Indian | |

| | |
|--------------------------|--|
| Chinese | |
| Others (please state) | |

4. Religion

| | | | |
|--------------------------|--|-----------|--|
| Islam | | Buddha | |
| Hindu | | Christian | |
| Others (please state) | | | |

Section B: Questionnaires

Please fill in your answer with a “√”.

Antisocial Behaviour Scale

0 = zero times

1 = once

2 = twice

3 = three to four times

4 = five and more times

| During the past year: | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| 1. Started a fistfighting or shoving match? | | | | | |
| 2. Shoplifted from a store? | | | | | |
| 3. Damage public or private property? | | | | | |
| 4. Lied to a teacher? | | | | | |
| 5. Stayed out without permission? | | | | | |
| 6. Lied to your parents or guardians? | | | | | |
| 7. Skipped school? | | | | | |
| 8. Hurt someone as badly so needed a doctor? | | | | | |
| 9. Carried a gun? | | | | | |
| 10. Had been involved in gang fight? | | | | | |
| 11. Had been arrested by the police? | | | | | |
| 12. Carried a blade, knife, or gun to school? | | | | | |
| 13. Been suspended from school? | | | | | |
| 14. Been at school drunk? | | | | | |
| 15. Been high at school by marijuana? | | | | | |
| 16. Stole a motorcycle or car? | | | | | |
| 17. Pick-pocketed somebody? | | | | | |
| 18. Sold drugs to earn money? | | | | | |
| 19. Been in juvenile court? | | | | | |

Family Assessment Device

SA = Strongly agree

A = Agree

D = Disagree

SD = Strongly Disagree

| Statement: | SA | A | D | SD |
|---|----|---|---|----|
| 1. Planning family activities is difficult because we misunderstand each other. | | | | |
| 2. We resolve most everyday problems around the house. | | | | |
| 3. When someone is upset the others know why. | | | | |
| 4. When you ask someone to do something, you have to check that they did it. | | | | |
| 5. If someone is in trouble, the others become too involved. | | | | |
| 6. In times of crisis we can turn to each other for support. | | | | |
| 7. We don't know what to do when an emergency comes up. | | | | |
| 8. We sometimes run out of things that we need. | | | | |
| 9. We are reluctant to show our affection for each other. | | | | |
| 10. We make sure members meet their family responsibilities. | | | | |
| 11. We cannot talk to each other about the sadness we feel. | | | | |
| 12. We usually act on our decisions regarding problems. | | | | |
| 13. You only get the interest of others when something is important to them. | | | | |
| 14. You can't tell how a person is feeling from what they are saying. | | | | |
| 15. Family tasks don't get spread around enough. | | | | |
| 16. Individuals are accepted for what they are. | | | | |
| 17. You can easily get away with breaking the rules. | | | | |
| 18. People come right out and say things instead of hinting at them. | | | | |
| 19. Some of us just don't respond emotionally. | | | | |
| 20. We know what to do in an emergency. | | | | |

| | | | | |
|---|--|--|--|--|
| 21. We avoid discussing our fears and concerns. | | | | |
| 22. It is difficult to talk to each other about tender feelings. | | | | |
| 23. We have trouble meeting our bills. | | | | |
| 24. After our family tries to solve a problem, we usually discuss whether it worked or not. | | | | |
| 25. We are too self-centered. | | | | |
| 26. We can express feelings to each other. | | | | |
| 27. We have no clear expectations about toilet habits. | | | | |
| 28. We do not show our love for each other. | | | | |
| 29. We talk to people directly rather than through go-betweens. | | | | |
| 30. Each of us has particular duties and responsibilities. | | | | |
| 31. There are lots of bad feelings in the family. | | | | |
| 32. We have rules about hitting people. | | | | |
| 33. We get involved with each other only when something interests us. | | | | |
| 34. There's little time to explore personal interests. | | | | |
| 35. We often don't say what we mean. | | | | |
| 36. We feel accepted for what we are. | | | | |
| 37. We show interest in each other when we can get something out it personally. | | | | |
| 38. We resolve most emotional upsets that come up. | | | | |
| 39. Tenderness takes second place to other things in our family. | | | | |
| 40. We discuss who is to do household jobs. | | | | |
| 41. Making decisions is a problem for our family. | | | | |
| 42. Our family shows interest in each other only when they can get something out of it. | | | | |
| 43. We are frank with each other. | | | | |
| 44. We don't hold any rules or standards. | | | | |
| 45. If people are asked to do something, they need reminding. | | | | |

| | | | | |
|---|--|--|--|--|
| 46. We are able to make decisions about how to solve problems. | | | | |
| 47. If the rules are broken, we don't know what to expect. | | | | |
| 48. Anything goes in our family. | | | | |
| 49. We express tenderness. | | | | |
| 50. We confront problems involving feelings. | | | | |
| 51. We don't get along well together. | | | | |
| 52. We don't talk to each other when we are angry. | | | | |
| 53. We are generally dissatisfied with the family duties assigned to us. | | | | |
| 54. Even though we mean well, we intrude too much into each others lives. | | | | |
| 55. There are rules about dangerous situations. | | | | |
| 56. We confide in each other. | | | | |
| 57. We cry openly. | | | | |
| 58. We don't have reasonable transport. | | | | |
| 59. When we don't like what someone has done, we tell them. | | | | |
| 60. We try to think of different ways to solve problems. | | | | |

Short Self-Regulation Questionnaire

1 = Strongly agree

2 = Agree

3 = Neither agree nor disagree

4 = Disagree

5 = Strongly disagree

| Statement: | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1. I have trouble making plans to help me reach goals. | | | | | |
| 2. I have a hard time setting goals for myself. | | | | | |
| 3. Once I have a goal, I can usually plan how to reach it. | | | | | |
| 4. I give up quickly. | | | | | |
| 5. I set goals for myself and keep track of my progress. | | | | | |
| 6. When I'm trying to change something, I pay attention to how I'm doing. | | | | | |
| 7. I don't notice the effects of my actions until it's too late. | | | | | |
| 8. I tend to keep doing the same thing, even when it doesn't work. | | | | | |
| 9. I have personal standards, and try to live up to them. | | | | | |
| 10. I get easily distracted from my plans. | | | | | |
| 11. I have trouble following through with things once I've made up my mind to do something. | | | | | |
| 12. I have a lot of willpower. | | | | | |
| 13. I'm able to accomplish goals I set for myself. | | | | | |
| 14. If I make a resolution to change something, I pay a lot of attention to how I'm doing. | | | | | |
| 15. I put off making decisions. | | | | | |
| 16. Most of the time I don't pay attention to what I'm doing. | | | | | |
| 17. I don't seem to learn from my mistakes. | | | | | |
| 18. If I wanted to change, I am confident that I could do it. | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| 19. I usually keep track of my progress toward my goals. | | | | | |
| 20. I usually think before I act. | | | | | |
| 21. As soon as I see a problem or challenge, I start looking for possible solutions. | | | | | |
| 22. When it comes to deciding about a change, I feel overwhelmed by the choices. | | | | | |
| 23. I learn from my mistakes. | | | | | |
| 24. I am able to resist temptation. | | | | | |
| 25. Often I don't notice what I'm doing until someone calls it to my attention. | | | | | |
| 26. I have trouble making up my mind about things. | | | | | |
| 27. I know how I want to be. | | | | | |
| 28. I usually only have to make a mistake one time in order to learn from it. | | | | | |
| 29. I can stick to a plan that is working well. | | | | | |
| 30. I can usually find several different possibilities when I want to change something. | | | | | |
| 31. It's hard for me to notice when I've had enough (alcohol, food, sweets). | | | | | |

Appendix E**BAHAGIAN A: LATAR BELAKANG INDIVIDU**

Sila isikan jawapan anda di tempat kosong atau tandakan “√” pada jawapan yang berkenaan.

1. UMUR

_____ tahun

2. JANTINA

| | |
|-----------|--|
| Lelaki | |
| Perempuan | |

3. KAUM

| | |
|---------------------------|--|
| Melayu | |
| Cina | |
| India | |
| Lain-lain (sila nyatakan) | |

4. AGAMA

| | |
|---------------------------|--|
| Islam | |
| Buddhist | |
| Hindu | |
| Lain-lain (sila nyatakan) | |

5. Sila terangkan status keluarga sekarang anda?

| | |
|---|--|
| Keluarga kandung (mempunyai ibu dan bapa kandung) | |
| Keluarga bapa tunggal | |
| Keluarga ibu tunggal | |
| Keluarga tiri (mempunyai ibu tiri/ bapa tiri) | |
| Lain-lain (nyatakan): _____ | |

6. Keputusan peperiksaan:

Apakah keputusan peperiksaan penggal terkini anda bagi mata pelajaran yang berikut?

| | Mata pelajaran | Markah (%) |
|----|---------------------------|------------|
| a. | Bahasa Melayu (Pemahaman) | |
| b. | Bahasa Melayu (Penulisan) | |
| c. | Bahasa Inggeris | |
| d. | Matematik | |

BAHAGIAN B: SOAL SELIDIK**Bahagian A****ARAHAN:** Sila bulatkan nombor pada jawapan yang berkenaan.

| | | | | |
|--------------|-----------|----------|--------------------|------------------------------------|
| Tidak pernah | Satu kali | Dua kali | Tiga ke empat kali | Lima atau lebih daripada lima kali |
| 0 | 1 | 2 | 3 | 4 |

Pada tahun lalu/lepas, PERNAHKAH anda:

| BIL. | PERNYATAAN | Tidak Pernah | Satu kali | Dua kali | Tiga/ empat kali | Lima atau lebih daripada lima kali |
|-------------|---|---------------------|------------------|-----------------|-------------------------|---|
| 1. | Memulakan pertengkaran atau pergaduhan? | 0 | 1 | 2 | 3 | 4 |
| 2. | Mencuri dari kedai? | 0 | 1 | 2 | 3 | 4 |
| 3. | Merosakkan harta awam atau harta peribadi? | 0 | 1 | 2 | 3 | 4 |
| 4. | Membohong kepada guru? | 0 | 1 | 2 | 3 | 4 |
| 5. | Bermalam di luar tanpa keizinan? | 0 | 1 | 2 | 3 | 4 |
| 6. | Membohong kepada ibu bapa atau penjaga? | 0 | 1 | 2 | 3 | 4 |
| 7. | Ponteng sekolah? | 0 | 1 | 2 | 3 | 4 |
| 8. | Mencederakan seseorang sehingga orang itu perlu jumpa doktor? | 0 | 1 | 2 | 3 | 4 |
| 9. | Terlibat dalam pergaduhan berkumpulan? | 0 | 1 | 2 | 3 | 4 |
| 10. | Ditangkap oleh polis? | 0 | 1 | 2 | 3 | 4 |
| 11. | Digantung sekolah? | 0 | 1 | 2 | 3 | 4 |
| 12. | Mencuri motosikal atau kereta? | 0 | 1 | 2 | 3 | 4 |
| 13. | Mencuri daripada seseorang? | 0 | 1 | 2 | 3 | 4 |
| 14. | Masuk mahkamah juvenil? | 0 | 1 | 2 | 3 | 4 |

Bahagian B**ARAHAN:** Sila bulatkan nombor pada jawapan yang berkenaan..

| | | | |
|-----------------------|---------------|----------------------|------------------------------|
| Sangat bersetuju (SB) | Bersetuju (B) | Tidak bersetuju (TB) | Sangat tidak bersetuju (STB) |
| 0 | 1 | 2 | 3 |

| BIL. | PERNYATAAN | SB | B | TB | STB |
|------|---|----|---|----|-----|
| 1. | Ini adalah susah untuk merancang aktiviti keluarga kerana kami menyalahfahami sesama lain. | 0 | 1 | 2 | 3 |
| 2. | Kami menyelesaikan kebanyakan masalah harian dalam rumah. | 0 | 1 | 2 | 3 |
| 3. | Apabila seseorang berasa susah hati, ahli lain tahu sebabnya. | 0 | 1 | 2 | 3 |
| 4. | Apabila anda meminta seseorang melakukan sesuatu, anda perlu memastikan bahawa mereka telah melakukannya. | 0 | 1 | 2 | 3 |
| 5. | Jika seseorang berada dalam masalah, ahli lain akan menjadi terlalu melibatkan diri. | 0 | 1 | 2 | 3 |
| 6. | Pada masa krisis, kami boleh bergantung kepada satu sama lain untuk mendapat sokongan. | 0 | 1 | 2 | 3 |
| 7. | Kami tidak tahu apa yang perlu dilakukan apabila kecemasan. | 0 | 1 | 2 | 3 |
| 8. | Kadang kala kami berkurangan barang keperluan dalam keluarga. | 0 | 1 | 2 | 3 |
| 9. | Kami enggan untuk menunjukkan kasih sayang terhadap satu sama lain. | 0 | 1 | 2 | 3 |
| 10. | Kami memastikan semua ahli keluarga memenuhi tanggungjawab keluarga mereka. | 0 | 1 | 2 | 3 |
| 11. | Kami tidak boleh bercakap dengan satu sama lain tentang kesedihan yang kami rasa. | 0 | 1 | 2 | 3 |
| 12. | Kami biasanya bertindak terhadap masalah dengan mengikuti keputusan kami. | 0 | 1 | 2 | 3 |
| 13. | Anda hanya diminati oleh orang lain apabila anda mempunyai sesuatu yang penting kepada mereka. | 0 | 1 | 2 | 3 |
| 14. | Anda tidak dapat memahami perasaan seseorang daripada apa yang mereka cakap. | 0 | 1 | 2 | 3 |
| 15. | Tugas-tugas dalam keluarga tidak diedarkan dengan cukup baik. | 0 | 1 | 2 | 3 |
| 16. | Individu diterima untuk menjadi diri sendiri. | 0 | 1 | 2 | 3 |
| 17. | Anda boleh senang terlepas dengan melanggar peraturan. | 0 | 1 | 2 | 3 |

| | | | | | |
|-----|--|---|---|---|---|
| 18. | Orang terus tunjuk dan menyatakan sesuatu bukannya memberi petunjuk tentangnya. | 0 | 1 | 2 | 3 |
| 19. | Sebahagian dari kami tidak bertindak balas secara emosional. | 0 | 1 | 2 | 3 |
| 20. | Kami tahu apa yang perlu dilakukan dalam keadaan kecemasan. | 0 | 1 | 2 | 3 |
| 21. | Kami elak membincangkan ketakutan dan kebimbangan kami. | 0 | 1 | 2 | 3 |
| 22. | Ini adalah susah untuk meluahkan perasaan sayang dengan satu sama lain. | 0 | 1 | 2 | 3 |
| 23. | Kami menghadapi masalah kepada pembayaran bil kami. | 0 | 1 | 2 | 3 |
| 24. | Selepas keluarga kami cuba menyelesaikan masalah, kami biasanya membincangkan sama ada ia berkesan atau tidak. | 0 | 1 | 2 | 3 |
| 25. | Kami terlalu mementingkan diri sendiri. | 0 | 1 | 2 | 3 |
| 26. | Kami boleh meluahkan perasaan antara satu sama lain. | 0 | 1 | 2 | 3 |
| 27. | Kami tidak mempunyai jangkaan yang jelas tentang tabiat menggunakan tandas. | 0 | 1 | 2 | 3 |
| 28. | Kami tidak menunjukkan kasih sayang kepada satu sama lain. | 0 | 1 | 2 | 3 |
| 29. | Kami bercakap dengan ahli keluarga secara langsung dan bukannya melalui orang tengah. | 0 | 1 | 2 | 3 |
| 30. | Kami mempunyai tugas dan tanggungjawab tertentu. | 0 | 1 | 2 | 3 |
| 31. | Terdapat banyak perasaan yang buruk dalam keluarga. | 0 | 1 | 2 | 3 |
| 32. | Kami mempunyai peraturan mengenai memukul orang. | 0 | 1 | 2 | 3 |
| 33. | Kami terlibat dengan satu sama lain hanya apabila ada sesuatu yang menarik minat kami. | 0 | 1 | 2 | 3 |
| 34. | Terdapat sedikit masa untuk meneroka minat peribadi. | 0 | 1 | 2 | 3 |
| 35. | Kami sering tidak mengatakan apa yang kami sebenarnya maksud. | 0 | 1 | 2 | 3 |
| 36. | Kami rasa diterima sebagai diri sendiri. | 0 | 1 | 2 | 3 |
| 37. | Kami berminat dengan satu sama lain hanya apabila kami boleh mendapatkan sesuatu daripadanya untuk sendiri.. | 0 | 1 | 2 | 3 |
| 38. | Kami menyelesaikan kebanyakan masalah emosi yang ditimbulkan. | 0 | 1 | 2 | 3 |
| 39. | Perasaan sayang bukan sesuatu yang paling penting dalam keluarga kami. | 0 | 1 | 2 | 3 |

| | | | | | |
|-----|--|---|---|---|---|
| 40. | Kami membincangkan siapakah yang akan melakukan kerja rumah. | 0 | 1 | 2 | 3 |
| 41. | Pembuat-keputusan adalah satu masalah untuk keluarga kami. | 0 | 1 | 2 | 3 |
| 42. | Keluarga kami menunjukkan minat antara satu sama lain hanya apabila mereka boleh mendapatkan sesuatu daripada itu. | 0 | 1 | 2 | 3 |
| 43. | Kami jujur dengan satu sama lain. | 0 | 1 | 2 | 3 |
| 44. | Kami tidak memegang sebarang peraturan atau piawaian. | 0 | 1 | 2 | 3 |
| 45. | Apabila seseorang diminta untuk membuat sesuatu, mereka perlu diperingatkan. | 0 | 1 | 2 | 3 |
| 46. | Kami dapat membuat keputusan tentang bagaimana menyelesaikan masalah-masalah. | 0 | 1 | 2 | 3 |
| 47. | Jika peraturan dilanggar, kami tidak tahu apa perlu dijangkakan. | 0 | 1 | 2 | 3 |
| 48. | Apa-apa sahaja berlaku dalam keluarga kami. | 0 | 1 | 2 | 3 |
| 49. | Kami meluahkan perasaan sayang. | 0 | 1 | 2 | 3 |
| 50. | Kami mengemukakan masalah dengan melibatkan perasaan. | 0 | 1 | 2 | 3 |
| 51. | Kami tidak bergaul dengan baik. | 0 | 1 | 2 | 3 |
| 52. | Kami tidak bercakap antara satu sama lain apabila kami marah. | 0 | 1 | 2 | 3 |
| 53. | Kami umumnya tidak berpuas hati dengan tugas keluarga yang diserahkan kepada kami. | 0 | 1 | 2 | 3 |
| 54. | Kami mengganggu hidup sesama lain yang melampau walaupun kami berniat baik. | 0 | 1 | 2 | 3 |
| 55. | Terdapat peraturan mengenai situasi berbahaya. | 0 | 1 | 2 | 3 |
| 56. | Kami yakin terhadap sesama lain. | 0 | 1 | 2 | 3 |
| 57. | Kami menangis secara terbuka. | 0 | 1 | 2 | 3 |
| 58. | Kami tidak mempunyai pengangkutan yang munasabah. | 0 | 1 | 2 | 3 |
| 59. | Apabila kami tidak menyukai apa yang dilakukan oleh seseorang, kami memberitahu mereka. | 0 | 1 | 2 | 3 |
| 60. | Kami cuba memikirkan cara yang berbeza untuk menyelesaikan masalah. | 0 | 1 | 2 | 3 |

Bahagian C

ARAHAN: Sila bulatkan nombor pada jawapan yang berkenaan.

| Sangat bersetuju (SB) | Bersetuju (B) | Tiada setuju atau tidak setuju (TSS) | Tidak bersetuju (TB) | Sangat tidak bersetuju (STB) |
|-----------------------|---------------|--------------------------------------|----------------------|------------------------------|
| 1 | 2 | 3 | 4 | 5 |

| BIL. | PERNYATAAN | SB | B | TSS | TB | STB |
|------|---|----|---|-----|----|-----|
| 1. | Saya mempunyai masalah dalam membuat rancangan untuk mencapai matlamat. | 1 | 2 | 3 | 4 | 5 |
| 2. | Saya menghadapi kesukaran dalam menetapkan matlamat untuk diri sendiri. | 1 | 2 | 3 | 4 | 5 |
| 3. | Apabila saya mempunyai sesuatu matlamat, saya biasanya boleh merancang dengan bagaimana mencapainya. | 1 | 2 | 3 | 4 | 5 |
| 4. | Saya cepat berputus asa. | 1 | 2 | 3 | 4 | 5 |
| 5. | Saya menetapkan matlamat untuk diri sendiri dan sentiasa mengawasi kemajuan saya. | 1 | 2 | 3 | 4 | 5 |
| 6. | Apabila saya cuba untuk mengubah sesuatu, saya memperhatikan bagaimana saya lakukan. | 1 | 2 | 3 | 4 | 5 |
| 7. | Saya tidak perasan kesan perbuatan saya sehingga ia adalah terlalu lewat. | 1 | 2 | 3 | 4 | 5 |
| 8. | Saya akan membuat perkara yang sama walaupun ia tidak berkesan. | 1 | 2 | 3 | 4 | 5 |
| 9. | Saya mempunyai prinsip sendiri dan saya cuba untuk mengikutinya dalam kehidupan saya. | 1 | 2 | 3 | 4 | 5 |
| 10. | Saya mudah diganggu daripada mengekalkan rancangan saya. | 1 | 2 | 3 | 4 | 5 |
| 11. | Sebaik sahaja saya membuat keputusan untuk membuat sesuatu, saya menghadapi masalah dalam mengikutinya. | 1 | 2 | 3 | 4 | 5 |
| 12. | Saya mempunyai tekad yang kuat. | 1 | 2 | 3 | 4 | 5 |
| 13. | Saya dapat mencapai matlamat yang saya tetapkan untuk diri saya sendiri. | 1 | 2 | 3 | 4 | 5 |

| | | | | | | |
|-----|---|---|---|---|---|---|
| 14. | Jika saya membuat satu rancangan untuk mengubah sesuatu, saya memberi banyak perhatian kepada bagaimana saya lakukan. | 1 | 2 | 3 | 4 | 5 |
| 15. | Saya selalu tangguh membuat keputusan. | 1 | 2 | 3 | 4 | 5 |
| 16. | Pada kebanyakan masa, saya tidak memberi perhatian kepada apa yang saya lakukan. | 1 | 2 | 3 | 4 | 5 |
| 17. | Saya tidak belajar dari kesilapan saya. | 1 | 2 | 3 | 4 | 5 |
| 18. | Jika saya ingin berubah, saya yakin saya dapat mencapainya. | 1 | 2 | 3 | 4 | 5 |
| 19. | Saya biasanya mengawasi kemajuan saya ke arah matlamat saya. | 1 | 2 | 3 | 4 | 5 |
| 20. | Saya biasanya fikir sebelum saya bertindak. | 1 | 2 | 3 | 4 | 5 |
| 21. | Sebaik sahaja saya mendapati satu masalah atau cabaran, saya mula mencari penyelesaian yang munasabah. | 1 | 2 | 3 | 4 | 5 |
| 22. | Saya berasa dibanjiri dengan pilihan apabila perlu membuat keputusan tentang satu perubahan. | 1 | 2 | 3 | 4 | 5 |
| 23. | Saya belajar dari kesilapan saya. | 1 | 2 | 3 | 4 | 5 |
| 24. | Saya dapat menahan diri daripada godaan. | 1 | 2 | 3 | 4 | 5 |
| 25. | Saya selalu tidak tahu apa yang saya sedang melakukan sehingga seseorang memberitahu saya. | 1 | 2 | 3 | 4 | 5 |
| 26. | Saya mempunyai masalah dalam membuat keputusan. | 1 | 2 | 3 | 4 | 5 |
| 27. | Saya tahu orang yang macam mana saya ingin menjadi. | 1 | 2 | 3 | 4 | 5 |
| 28. | Saya biasanya hanya perlu membuat satu kesilapan untuk belajar daripadanya. | 1 | 2 | 3 | 4 | 5 |
| 29. | Saya boleh ikut rancangan yang dijalankan dengan baik. | 1 | 2 | 3 | 4 | 5 |
| 30. | Saya biasanya boleh mencari beberapa kemungkinan yang berbeza apabila saya mahu membuat perubahan. | 1 | 2 | 3 | 4 | 5 |
| 31. | Ini adalah sukar untuk saya mendapati bila saya akan rasa mencukupi (makanan, gula-gula). | 1 | 2 | 3 | 4 | 5 |

Appendix G

Turnitin Report

| Abstract, Chapter 3, 4, 5 | | | |
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Ruj. Kami : KPM.600-3/2/3-eras(2951)
Tarikh : 25 Januari 2019

SAMANTHA NG KUET CH'NG
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12A, JALAN MAHSURI IMPIAN 5, TAMAN MAHSURI IMPIAN
31900 KAMPAR
PERAK

Tuan,

**KELULUSAN BERSYARAT UNTUK MENJALANKAN KAJIAN :
THE RELATIONSHIPS OF FAMILY FUNCTIONING AND SELF-REGULATION ON ANTISOCIAL BEHAVIOUR AMONG
ADOLESCENTS**

Perkara di atas adalah dirujuk.

2. Sukacita dimaklumkan bahawa permohonan tuan untuk menjalankan kajian seperti di bawah telah diluluskan dengan syarat :

" KELULUSAN INI BERGANTUNG KEPADA PERTIMBANGAN PENTADBIR SEKOLAH. PENGUTIPAN DATA TIDAK BOLEH MENGGANGGU AKTIVITI PENGAJARAN DAN PEMBELAJARAN MURID. "

3. Kelulusan adalah berdasarkan kepada kertas cadangan penyelidikan dan instrumen kajian yang dikemukakan oleh tuan kepada bahagian ini. Walau bagaimanapun kelulusan ini bergantung kepada kebenaran Jabatan Pendidikan Negeri dan Pengetua / Guru Besar yang berkenaan.

4. Surat kelulusan ini sah digunakan bermula dari **1 Januari 2019** hingga **17 Mei 2019**

5. Tuan dikehendaki menyerahkan senaskhah laporan akhir kajian dalam bentuk *hardcopy* bersama salinan *softcopy* berformat pdf dalam CD kepada Bahagian ini. Tuan juga diingatkan supaya mendapat kebenaran terlebih dahulu daripada Bahagian ini sekiranya sebahagian atau sepenuhnya dapatan kajian tersebut hendak diterbitkan di mana-mana forum, seminar atau diumumkan kepada media massa.

Sekian untuk makluman dan tindakan tuan selanjutnya. Terima kasih.

"BERKHIDMAT UNTUK NEGARA"

Saya yang menjalankan amanah,

Ketua Sektor
Sektor Penyelidikan dan Penilaian
b.p. Pengarah
Bahagian Perancangan dan Penyelidikan Dasar Pendidikan
Kementerian Pendidikan Malaysia

salinan kepada:-

JABATAN PENDIDIKAN JOHOR
JABATAN PENDIDIKAN SELANGOR



KEMENTERIAN PENDIDIKAN MALAYSIA

Jabatan Pendidikan Negeri Selangor
Jalan Jambu Bol 4/3E, Seksyen 4
40604 Shah Alam, Selangor

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SAMANTHA NG KUET CH'ING
12A, JALAN MAHSURI IMPIAN 5
TAMAN MAHSURI IMPIAN
31900 KAMPAR
PERAK

Tuan,

KELULUSAN BERSYARAT UNTUK MENJALANKAN KAJIAN: THE RELATIONSHIPS OF FAMILY FUNCTIONING AND SELF-REGULATION ON ANTISOCIAL BEHAVIOUR AMONG ADOLESCENTS

Perkara di atas dengan segala hormatnya dirujuk.

2. Jabatan ini tiada halangan untuk pihak tuan menjalankan kajian/penyelidikan tersebut di sekolah-sekolah dalam Negeri Selangor seperti yang dinyatakan dalam surat permohonan.

" KELULUSAN INI BERGANTUNG KEPADA PERTIMBANGAN PENTADBIR SEKOLAH. PENGUTIPAN DATA TIDAK BOLEH MENGGANGGU AKTIVITI PENGAJARAN DAN PEMBELAJARAN MURID"

3. Pihak tuan diingatkan agar mendapat persetujuan daripada Pengetua/Guru Besar supaya beliau dapat bekerjasama dan seterusnya memastikan bahawa penyelidikan dijalankan hanya bertujuan seperti yang dipohon. Kajian/penyelidikan yang dijalankan juga tidak mengganggu perjalanan sekolah serta tiada sebarang unsur paksaan.

4. **Surat kelulusan ini sah digunakan bermula dari 01 Januari 2019 hingga 17 Mei 2019**

5. Tuan juga diminta menghantar senaskah hasil kajian ke Unit Perhubungan dan Pendaftaran Jabatan Pendidikan Selangor sebaik selesai penyelidikan/kajian.

Sekian, terima kasih.

"BERKHIDMAT UNTUK NEGARA"

Saya yang menjalankan amanah,

(MUHAMAD RADZI BIN ABDULLAH)
Penolong Pendaftar Institusi Pendidikan dan Guru
Jabatan Pendidikan Selangor
b.p. Ketua Pendaftar Institusi Pendidikan dan Guru
Kementerian Pendidikan Malaysia

s.k: - Fail

" Jabatan Pendidikan Selangor Terbilang "



Samantha Ng Kuet Ch'ng,
Ketua Projek,
Department of Psychology & Counselling,
Faculty of Arts and Social Science,
Universiti Tunku Abdul Rahman,
Jalan Universiti Bandar Barat, 31900
Kampar, Perak.

Pengetua,
Batu, 14,
Jalan Puchong,
47100 Puchong,
Selangor.

14 Februari 2019

Tuan,

MEMOHON KEBENARAN UNTUK MENJALANKAN KAJIAN

Dengan hormatnya perkara di atas dirujuk.

Sukacita dimaklumkan bahawa kami akan menjalankan kajian "**The Relationships of Family Functioning and Self-Regulation on Antisocial Behaviour Among Adolescents**". Kajian ini akan dilaksanakan di beberapa buah sekolah yang terpilih dari negeri Selangor.

2. Bersama-sama surat ini dilampirkan surat pengesahan pelajar untuk menjalankan penyelidikan dari pihak Universiti Tunku Abdul Rahman (UTAR), surat kelulusan daripada Kementerian Pelajaran Malaysia, surat kelulusan daripada Jabatan Pendidikan Selangor, senarai sekolah yang dipilih, cadangan kajian dan borang soal selidik untuk tindakan pihak tuan.

3. Segala pertimbangan dan kerjasama pihak tuan saya dahului dengan ucapan ribuan terima kasih.

Sekian.

Yang benar,



Samantha Ng Kuet Ch'ng,
Ketua Projek.
(E-mel: GenesisX1315@1utar.my, No. Tel: 012-4178502)

SENARAI SEKOLAH-SEKOLAH MENENGAH DI NEGERI SELANGOR

| No | Nama Sekolah |
|-----|---------------------------|
| 1. | SMJK YOKE KUAN |
| 2. | SMK JALAN KEBUN |
| 3. | SMK TELOK PANGLIMA GARANG |
| 4. | SMK PUCHONG |
| 5. | SMK KELANA JAYA |
| 6. | SMK DAMANSARA DAMAI 1 |
| 7. | SMK LEMBAH SUBANG |
| 8. | SMK TAMAN SELAYANG |
| 9. | SMK BANDAR UTAMA |
| 10. | SMK SRI SELAYANG |

Re: U/SERC/08/2019

15 January 2019

Dr Chie Qiu Ting
 Head, Department of Psychology and Counselling
 Faculty of Arts and Social Science
 Universiti Tunku Abdul Rahman
 Jalan Universiti, Bandar Baru Barat
 31900 Kampar, Perak.

Dear Dr Chie,

Ethical Approval For Research Project/Protocol

We refer to the application for ethical approval for your students' research projects from Bachelor of Social Science (Hons) Psychology programme enrolled in course UAPZ3013. We are pleased to inform you that the application has been approved under expedited review.

The details of the research projects are as follows:

| | Research Title | Student's Name | Supervisor's Name | Approval Validity |
|----|--|--|-------------------|--------------------------------------|
| 1. | Social Support, Sense of Belonging and Family Functioning as Predictor of Life Satisfaction Among Freshmen in Selangor, Malaysia | 1. Chin Ying Ying 2. Lim Fang Yee 3. Tan Kha Muan | Dr Gan Su Wan | 15 January 2019 – 14 January 2020 |
| 2. | The Relationship of Family Functioning and Self-regulation on Antisocial Behaviour Among Adolescents | 1. Chin Sie Zhen 2. Lee Chie Hwa 3. Samantha Ng Kuet Ch'ng | | |

The conduct of this research is subject to the following:

- (1) The participants' informed consent be obtained prior to the commencement of the research;
- (2) Confidentiality of participants' personal data must be maintained; and
- (3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

Should the students collect personal data of participants in their studies, please have the participants sign the attached Personal Data Protection Statement for records.

Thank you.

Yours sincerely,



Professor Ts Dr Faidz bin Abd Rahman

Chairman

UTAR Scientific and Ethical Review Committee

c.c Dean, Faculty of Arts and Social Science
 Director, Institute of Postgraduate Studies and Research

| | | | |
|--|------------|----------------------------|------------------|
| Universiti Tunku Abdul Rahman | | | |
| Form Title : Supervisor's Comments on Originality Report Generated by Turnitin for Submission of Final Year Project Report (for Undergraduate Programmes) | | | |
| Form Number: FM-IAD-005 | Rev No.: 0 | Effective Date: 01/10/2013 | Page No.: 1 of 1 |



FACULTY OF _____

| | |
|-------------------------------------|--|
| Full Name(s) of Candidate(s) | |
| ID Number(s) | |
| Programme / Course | |
| Title of Final Year Project | |

| Similarity | Supervisor's Comments (Compulsory if parameters of originality exceeds the limits approved by UTAR) |
|---|--|
| Overall similarity index: _____ % Similarity by source Internet Sources: _____ % Publications: _____ % Student Papers: _____ % | |
| Number of individual sources listed of more than 3% similarity: _____ | |
| Parameters of originality required and limits approved by UTAR are as follows: (i) Overall similarity index is 20% and below, and (ii) Matching of individual sources listed must be less than 3% each, and (iii) Matching texts in continuous block must not exceed 8 words <i>Note: Parameters (i) – (ii) shall exclude quotes, bibliography and text matches which are less than 8 words.</i> | |

Note Supervisor/Candidate(s) is/are required to provide softcopy of full set of the originality report to Faculty/Institute

Based on the above results, I hereby declare that I am satisfied with the originality of the Final Year Project Report submitted by my student(s) as named above.

Signature of Supervisor

Signature of Co-Supervisor

Name: _____

Name: _____

Date: _____

Date: _____

**DEPARTMENT OF PSYCHOLOGY AND COUNSELLING
FACULTY OF ARTS AND SOCIAL SCIENCE
UNIVERSITI TUNKU ABDUL RAHMAN**

UAPZ 3023 Final Year Project II

Research Project Evaluation Form

TURNITIN: *'In assessing this work you are agreeing that it has been submitted to the University-recognised originality checking service which is Turnitin. The report generated by Turnitin is used as evidence to show that the students' final report contains the similarity level below 20%.'*

| | |
|---|---------------|
| Project Title: <u>The relationship of family functioning, self-regulation and antisocial behaviour among adolescents.</u> | |
| Supervisor: <u>Dr. Gan Su Wan.</u> | |
| Student's Name: | Student's Id |
| 1. Chin Sie Zhen | 1. 15AAB05889 |
| 2. Lee Chie Hwa | 2. 14AAB03124 |
| 3. Samantha Ng Kuet Ch'ng | 3. 16AAB02486 |

| |
|--|
| <p>INSTRUCTIONS: Please score each descriptor based on the scale provided below:</p> <ol style="list-style-type: none"> 1. For criteria 1, 2, 3,4, 5, 6: 0 = no attempt, 1 = very poor, 2 = poor, 3 = average, 4 = good, 5 = very good 2. For criteria 3,4: 0 = no attempt, 1 = very poor, 3 = poor, 5 = average, 7 = good, 10 = very good 3. For criteria 7: Please retrieve the mark from "Oral Presentation Evaluation Form". |
|--|

| | | | |
|--|----------------------|----------------------|----------------------|
| 4. DISCUSSION & CONCLUSION (25%) | | | |
| 1. Constructive discussion of findings. - Explanation and critical analysis. Results were critically analyzed with similar and/or dissimilar results. (10%) | | | |
| 2. Implication of the study. (5%) | | | |
| 3. Limitations mentioned relevant and constructive to the study. (5%) | | | |
| 4. Recommendations for future research. (5%) | | | |
| Subtotal | / 25% | | |
| Remark: | | | |
| 5. LANGUAGE & ORGANIZATION (5%) | | | |
| 1. Comprehensiveness: Content Organization + Language | | | |
| Subtotal | / 5% | | |
| Remark: | | | |
| 6. APA STYLE AND REFERENCING (5%) | | | |
| 1. APA format is followed | | | |
| Subtotal | / 5% | | |
| Remark: | | | |
| 7. *ORAL PRESENTATION (20%) | | | |
| | Score | | |
| | Student 1 | Student 2 | Student 3 |
| Subtotal | | | |
| Remark: | | | |
| PENALTY: Maximum 10 marks for LATE SUBMISSION, MISSING FORM or POOR ATTENDANCE for consultation with supervisor | | | |
| | Student 1 | Student 2 | Student 3 |
| **FINAL MARK/TOTAL | | | |

*****Overall Comments:**

Signature: _____

Date: _____

Notes:

1. **Subtotal:** The sum of scores for each assessment criteria
2. **FINAL MARK/TOTAL:** The summation of all subtotal score
3. Plagiarism is UNACCEPTABLE. Parameters of originality required and limits approved by UTAR are as follows:
 - (i) **Overall similarity index is 20% and below**, and
 - (ii) Matching of individual sources listed must be less than 3% each, and
 - (iii) Matching texts in continuous block must not exceed 8 words

Note: Parameters (i) – (ii) shall exclude quotes, references and text matches which are less than 8 words.

Any works violate the above originality requirements will NOT be accepted. Students have to redo the report and meet the requirements in **SEVEN(7)** days.

*The marks of “Oral Presentation” are to be retrieved from “**Oral Presentation Evaluation Form**”.

**It’s compulsory for the supervisor/reviewer to give the overall comments for the research projects with A- and above or F grading.