THE INFLUENCE OF FATHERS IN THE DEVELOPMENT
OF PROSOCIAL AND PROBLEMATIC BEHAVIOURS IN
SINGAPOREAN YOUTHS

LIM YEN NIE, HELENA
(LIN YANNI, HELENA)

NATIONAL INSTITUTE OF EDUCATION
NANYANG TECHNOLOGICAL UNIVERSITY
2019
The Influence of Fathers in the Development of Prosocial and Problematic Behaviours in Singaporean Youths

Lim Yen Nie, Helena
(Lin Yanni, Helena)

A thesis submitted to the National Institute of Education, Nanyang Technological University in partial fulfilment of the requirement for the degree of Doctor of Philosophy

2019
Statement of Originality

I hereby certify that the work embodied in this thesis is the result of original research and has not been submitted for a higher degree to any other University or Institution. In addition, I declare that to the best of my knowledge, this thesis is free of plagiarism, and contains no material previously published or written by another person, except where due reference has been made in the text.

9 September 2019

Date

Lim Yen Nie Helena
Supervisor Declaration Statement

I have reviewed the content and presentation style of this thesis, and I declare that it is free of plagiarism and of sufficient grammatical clarity to be examined. To the best of my knowledge, the research and writing are those of the candidate except as acknowledged in the text and/or the Author Attribution Statement. I confirm that the investigations were conducted in accord with the ethics policies and integrity standards of Nanyang Technological University and that the research data are presented honestly and without prejudice.

9 September 2019

..............................................
Date

..............................................
Huan Swee Leng Vivien
Authorship Attribution Statement

Please select one of the following: *delete as appropriate:

*(A) This thesis **does not** contain any materials from papers published in peer-reviewed journals or from papers accepted at conferences in which I am listed as an author.

9 September 2019

.............................. ..............................
Date                           Lim Yen Nie Helena
ACKNOWLEDGEMENTS

I would like to extend my grateful thanks and appreciation to the following people who have helped me in my journey of completing my study.

Dr Vivien Huan, my supervisor. She has influenced me to stay focused and motivated throughout the process of completing this research study. I have benefited immensely from her good insights during discussions, professionalism and teaching. She has been a wonderful support and her friendship makes the process of completing the study meaningful and a rewarding experience. She is the person whom I can trust to provide good advice and encouragement. Without her, I would not have the opportunity to embark on this study.

Dr Rebecca Ang, my supervisor. The discussion that we had for the process of completing my study, I am most inspired by her wisdom and vast knowledge of the research subject we are working on. More importantly, she has been so willing to share her knowledge with me. She has provided the guidance and skills of an experienced supervisor and helped me navigate the maze of the research and writing process. The discussions with her has helped clarify my ideas and sharpened my concepts and writing.

I am also grateful to the youths who participated in the study. I must express my deep sense of gratitude to my many friends who helped me with the referral and recommendation for my data collection.
My family, especially my parents, my sister, Andrea, and my niece, Gwen. I am grateful for the support, concern and joy that they have given me while I worked towards completing my study.

All my lecturers in the coursework for their valuable guidance and wisdom.

My best friends, Madeleine Ong Ping Ting, and Chionh Chye Aik for the fun, support and encouragement throughout this period.

All my course mates, for the wonderful learning experiences we shared.

My wonderful colleagues and best friends, Gini Thomas and Ang Sin Sing, who provided me with the support and understanding at work that gave me the peace of mind to focus on my study.

Derrick Lee, for being my pillar of support. Thank you for all the care, concern and sacrifices that he has given me, not only in the process of my study but in my life. Without whom, completing this study might be impossible.

Sarah Li, for being my new joy and motivation. You joined me in my reading and writing for this study and this made my completion of the research more special.
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS ........................................................................................................ ii

TABLE OF CONTENTS ........................................................................................................ iv

LIST OF TABLES ................................................................................................................ vi

LIST OF FIGURES ............................................................................................................... viii

SUMMARY ............................................................................................................................ ix

CHAPTER 1 .......................................................................................................................... 1

INTRODUCTION ................................................................................................................ 1

Background of the Study: Adolescence and Behaviours ................................................... 1

Background of the Study: Singapore ................................................................................ 5

Introduction of the Theoretical Framework Proposed for the Study .............................. 17

Early Development and Child Outcomes ...................................................................... 21

Parental Dimension ..................................................................................................... 26

Statement of the Problem .............................................................................................. 42

Research Questions ....................................................................................................... 46

Research Hypotheses ................................................................................................. 47

Organization ................................................................................................................ 49

CHAPTER 2 ....................................................................................................................... 50

LITERATURE REVIEW ................................................................................................ 50

Understanding Adolescence and Behaviours ............................................................. 50

Development Trajectories of Prosocial and Problematic Behaviours ........................... 59

Theoretical Framework ................................................................................................. 75

Early Development and Child Outcomes ................................................................... 88

Parental Dimension .................................................................................................... 130

Interconnection of the Variables ................................................................................ 171
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Demographic characteristics of participants for the study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Age, sex and ethnicity</td>
<td>186</td>
</tr>
<tr>
<td>2.</td>
<td>Demographic characteristics of participants for the study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Parents’ education level</td>
<td>187</td>
</tr>
<tr>
<td>3.</td>
<td>Demographic characteristics of participants for the study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Parents’ employment</td>
<td>188</td>
</tr>
<tr>
<td>4.</td>
<td>Demographic characteristics of participants for the study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Parents’ physical and mental health</td>
<td>189</td>
</tr>
<tr>
<td>5.</td>
<td>Demographic characteristics of participants for the study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Parents’ criminal records and family size</td>
<td>190</td>
</tr>
<tr>
<td>6.</td>
<td>Descriptive statistics for variables</td>
<td>201</td>
</tr>
<tr>
<td>7.</td>
<td>Intercorrelations for study variables</td>
<td>204</td>
</tr>
<tr>
<td>8.</td>
<td>Influence of variables on prosocial behaviours</td>
<td>206</td>
</tr>
<tr>
<td>9.</td>
<td>Influence of variables on problematic behaviours</td>
<td>207</td>
</tr>
<tr>
<td>10.</td>
<td>Hierarchical multiple regression analysis: father's support dimension as</td>
<td></td>
</tr>
<tr>
<td></td>
<td>moderator of the association between psychopathy and problematic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>behaviours</td>
<td>214</td>
</tr>
<tr>
<td>11.</td>
<td>Hierarchical multiple regression analysis: father's conflict dimension as</td>
<td></td>
</tr>
<tr>
<td></td>
<td>moderator of the association between father's authoritative parenting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>style and problematic behaviours</td>
<td>219</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>12. Hierarchical multiple regression analysis: father's conflict dimension as moderator of the association between family adversity and problematic behaviours</td>
<td>223</td>
<td></td>
</tr>
<tr>
<td>13. Summary of the supported hypothesis</td>
<td>224</td>
<td></td>
</tr>
</tbody>
</table>
### LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Diagram of the hypothesized moderating role of parents’ support and admiration and conflict and criticism dimensions for the relationship between parenting styles, psychopathy, family adversity and behaviours ........................................</td>
<td>183</td>
</tr>
<tr>
<td>3.</td>
<td>Regression lines for relations between psychopathy and problematic behaviours as moderated by father's support dimension ..........</td>
<td>213</td>
</tr>
<tr>
<td>4.</td>
<td>Regression lines for relations between father's authoritative parenting style and problematic behaviours as moderated by father's conflict dimension ..................................................</td>
<td>218</td>
</tr>
<tr>
<td>5.</td>
<td>Regression lines for relations between family adversity and problematic behaviours as moderated by father's conflict dimension ...............</td>
<td>222</td>
</tr>
</tbody>
</table>
SUMMARY

The purpose of this study is to investigate the correlations and influences of psychopathy, quality of father-child relationship, father’s authoritative parenting styles and family adversity on prosocial and problematic behaviours in Singapore. A secondary objective of this study is to look the moderation relationship of the quality of father-child relationship (i.e. father’s support and admiration dimension and father’s conflict and criticism dimension) with the focus variables in this study. A review of the literature indicates that psychopathy, quality of father-child relationship, father’s authoritative parenting styles and family adversity are predictors of prosocial and problematic behaviours. Current research on child and adolescent behaviours tends to emphasize either prosocial or problematic behaviours, but seldom are both kinds of behaviours investigated in a single study and non-clinical sample. To fill this research gap, the present study investigates both the prosocial and antisocial behaviours, as well as, the factors influencing the behaviours in one single study with a non-clinical sample.

Data was collected from 694 adolescent participants. Analyses was carried out to establish the variables associated with prosocial and problematic behaviours and their correlations between the variables. Moderation relationships were explored for father’s support and admiration dimension and conflict and criticism dimension as moderators for the independent variables on prosocial and problematic behaviours.

Results from this study supported previous research findings that found psychopathy, quality of father-child relationship, father’s authoritative parenting styles and family adversity to be significantly associated with prosocial and problematic behaviours. In this study, psychopathy and father’s authoritative parenting style predicted prosocial and problematic behaviours. Also, family adversity was found to
predict problematic behaviours during adolescence but no significant relationship was found between family adversity and prosocial behaviours.

The key findings from our moderation analysis reported that for dispositional trait-like individual characteristics, like psychopathy, father’s support and admiration dimension plays a role in decreasing problematic behaviour. For contextual situations type of variables that involved reciprocal relationships or interactions (e.g., authoritative parenting and adverse family circumstances), father’s conflict and criticism dimension plays a moderating role in influencing problematic behaviours.
CHAPTER 1

INTRODUCTION

The primary objective of this study is to investigate and explore the influences of psychopathy, quality of father-child relationship, parenting styles and family adversity on prosocial and problematic behaviours in Singapore. This study also aims to investigate if the quality of father and child relationship will moderate the relationship between the independent variables (i.e. psychopathy, father’s authoritative parenting style and family adversity) and behaviours in this study. A secondary aim of this study is to look at the correlations of the focus variables in this study. This chapter describes the objectives of the study and discusses the background of the study, leading to specific hypotheses this study undertakes to investigate. Finally, this chapter concludes with a summary of organization of the various chapters.

Background of the Study: Adolescence and Behaviours

Adolescence is defined as a period that involves several changes in the physiological and psychological development of the individual. This human development period can be stressful and associated with many changes that affect the individual in the following aspects: behavioural, cognitive, emotional and ideological, as the adolescent transits from childhood to adulthood (Beyers, Goossens, Vansant, & Moors, 2003; Mulye, Park, & Nelson, 2009). Adolescent development involves a process of practising independence and autonomy, obtaining insights into their identities, and fitting in with the social roles they play in their environment (Allen, Aber, & Leadbeater, 1990; Crockett, & Crouter, 2014; Irwin, 1993; Lavery, Siegel, Cousins, & Rubovits, 1993; Morris, Silk, Steinberg, Myers, & Robinson, 2007).
Adolescence is also a stage characterised by self-searching behaviours in an effort to coexist with the environment and these individuals will experience a surge in emotional instability. The adolescent faces new challenges, new abilities to explore, and is likely to be involved in conflicts when negotiating autonomy, or having to deal with misunderstandings within the family.

It is also during this period that the adolescent express a stronger desire for new experiences coupled with the courage to experiment (Chambers, Taylor, & Potenza, 2003; Rice & Dolgin, 2005). They exhibit sensation seeking tendencies which is defined by Zuckerman (1994) as “a trait that involves the seeking of varied, novel, complex, intense sensations and experiences, along with the willingness to take physical, social, legal, and financial risks for the sake of such experience” (p. 27). They are more inclined to engage in thrill and adventure-seeking activities and more susceptible to boredom (e.g., Manna, Faraci, & Como, 2013; Morris et al., 2007; Simons, Stewart, Conger, Gordon, & Elder, 2002; Wood, Cowan, & Baker, 2002; Zuckerman, 2007). Also, these adolescents who have a higher tendency to participate in risk taking activities tend to be motivated by the positive emotions they derive from these activities (e.g., excitement) and give less thought to the negative consequences (Beyth-Marom & Fischoff, 1997).

According to Maxwell (2002), adolescents also tend to exhibit behaviours that reflect the status of an adult (e.g. alcohol consumption and smoking) during this developmental stage. Hence, adolescence signifies a time when youths are growing in independence and making decisions about important matters in their lives that will shape their developmental pathways (Allen, Kuperminc, & Moore, 1997; Wuyts, Soenens, Vansteenkiste, & Van Petegem, 2018). They will also make decisions about whether to abstain from or engage in prosocial and/or problematic behaviours.
Prosocial behaviours has typically been defined as behaviour that one participates in willingly and are beneficial to others or enables good relations with others (Denham, Mason, & Couchoud, 1995; Eisenberg, 1986; Eisenberg & Miller, 1987; Eisenberg & Mussen, 1989; Eisenberg et al., 1996; Fabes, Carlo, Kupanoff, & Laible, 1999; Hay, 1994; Naparstek, 1990; Staub, 1979). For example, the behaviours may include sharing with others, helping, being cooperative, providing support, and taking part in volunteer activities that are beneficial to the society which are distinctive characteristics of social relations in childhood and adolescence (Bukowski & Sippola, 1996). In previous research, these behaviours have been found to be associated with other forms of relational constructs such as peer acceptance and approval in the social context and how the individual processes and interprets information about people in the social situations around them (Akelaitis & Lisinskiene, 2018; Bukowski & Sippola, 1996; Denham, 1986). Prosocial behaviours is also related to competencies in intellectual abilities such as academic performance (e.g., Collie, Martin, Roberts, & Nassar, 2018; Wentzel, 2003; Wentzel & Caldwell, 1997).

On the other hand, problematic behaviours such as cheating during examination, stealing, being late for school, truancy, lying to a teacher, fighting, reading pornographic magazines and, defiance towards parents can sometimes be normative during adolescence although such behaviours have negative consequences (French & Conrad 2005). Mayer (1995) referred to these behaviours as repeated violations against the norms of society, usually involving “aggression, vandalism, rule infraction, defiance of adult authority and violation of the social norms and mores of society”. Several risks have been associated with engaging in problematic behaviours (French & Conrad 2005; Simons, Simons, & Wallace, 2004), including lower school achievement, disengagement from school and reduced opportunities in education and occupation.
during adolescence and in early adulthood (Luthar & Ansary 2005; Sanford, Offord, McLeod, Boyle, & Hall, 1994).

As the adolescent navigates this period of heightened risk for emotional and behavioural problems, the outcomes in adolescence developmental have a significant impact on his future (Youngblade & Theokas, 2006). There is no lack of prior empirical evidence that demonstrates the negative effects and consequences of child and adolescent problematic behaviour, which continue to influence the individual in later adult life (Henderson, Dakof, Schwartz, & Liddle, 2006). Some of these consequences include poor social adaptation during the adult years, continued addiction, negative and poor family relationships, and persistence in unlawful and criminal activities (Bongers, Koot, Van der Ende, & Verhulst, 2008).

As a result, further research is needed to examine both the protective and risk factors which influence adolescent behaviour development. For an adolescent to transit successfully into early adulthood, it is necessary to make sense of and learn about the various factors associated with prosocial and problematic behaviours during adolescence.
Background of the Study: Singapore

Singapore is a small island that sits at the southern tip of the Malay Peninsula. She has come a long way since becoming a sovereign nation in 1965. Today, Singapore is described by many as a prosperous and successful city state. Singapore is also recognised as one of the most affluent developed countries in Asia (“There are 183,737 millionaires”, 2018). The Singapore Government has continuously tried to develop the potential of her citizens through education and skills-training since people are her only natural resource. There is also an investment in government’s expenditure on education, hence, it is not surprising that there are significant developments and achievements in education. Singapore is now one of the most literate countries in the world with the literacy rate of her population aged 15 and over, reaching 97.2% in 2017 (Singapore Department of Statistics, 2018).

Singapore students are known to excel in Maths, Science and Reading. The primary and secondary students were ranked first in OECD's global school performance rankings across 76 countries in 2015 (Graham, 2015; QS, 2016-2017). In that same year, Singapore students did well, with more than half of the participants scoring perfect scores of 81 and achieving 98% passing rate in the International Baccalaureate exams taken across 107 countries (Teng, 2016).

In 2016, Singapore was placed 6th and was the only Asian country in the top ten English Proficiency Index taken across 72 countries (Carlström, 2016; Nylander, 2016). In 2016, Singapore students came up top in Program International Student Assessment (PISA) (Coughlan, 2016; Davie, 2016; Hunt, 2016; Wong, 2016) and Trends in International Mathematics and Science Study (TIMSS) (Davie, 2016). Since 1987, Singapore literature students have won the Angus Ross Prize by Cambridge
Examinations every year (except in 2000) (Yang, 2017). The prize was awarded to the top A-level English literature student outside Britain (Yang, 2017).

Even with its world renowned education system, Singapore is not free from having to manage and maintain a percentage of her youths who are disengaged from school and display problematic behaviours which sometimes land them in trouble with the law.

*Youth Behaviour in Singapore*

Singapore youth has been provided with the opportunity to grow up in a country that has a relatively high standard of living. According to a United Nation’s report, children and youth in Singapore have opportunities to quality education, housing and health care (UNCRC, 2003).

The Singapore Government is particularly supportive in national initiatives to promote prosocial related messages and behaviours amongst her citizens. The government takes a proactive approach to tackle youth related issues and supports programmes that provide opportunities to nurture the capacities of youths in creating internal protective factors like the abilities to problem solve and manage their emotions.

Through the Ministry of Education and Ministry of Social and Family Development, policies and programmes are set in place to encourage youths’ involvement and orientation towards the larger community and society, cultivate their relationships with family and friends, and improve individual attitudes and wellbeing. For example, national programmes like Values-in-Action and the Youth Expedition Project, schools and corporations have supported the initiatives of community involvement and encouraged youths to be involved in society (Handy, Hustinx, Cnaan, & Kang, 2010).
Generally, youths in Singapore care about improving society. In a national youth survey, 39% of youths reported that contributing to our society is one of their important life goal, and 41% want to help the less fortunate (National Youth Survey, 2013). Likewise, the Youth Barometer Survey conducted by Credit Suisse’s reported similar findings. 60% of Singapore’s youths wanted to be responsible for their society and the environment, and 34% expressed strong social commitments to act responsibly, help the less advantaged, and be part of a charitable organisation (Credit Suisse, 2014).

However, there were instances of media reports on youth behaviour in Singapore that captured the attention of the public. The examples included public violence involving youths, under-aged sex and adolescent suicide reported by local media, the Singapore Police Force as well as Ministry of Social and Family Development. Such reports of problematic youth behaviour are common not only in Singapore but also in other countries in the West and Asia regions. Although there is a need to learn about such problematic youth behaviours and to reduce them, the society should take note not to stereotype these youths and blame them for their failure in education and make them feel inadequate in this system.

The first systematic large scale research on delinquency of youths was conducted by Choi and Chan (1994). In their research, Choi and Chan (1994) investigated the relationship between critical factors influencing the socialization process and juvenile delinquency. They analysed 740 self-reports of the juvenile delinquents, 275 juveniles in the offender group and 465 youths in the comparison group and reported higher self-reported delinquency among delinquent youths when the data was compared with official statistics (Choi & Lo, 2002).

In another study conducted by Tam, Heng and Bullock (2007), the researchers investigated different variables that correlated with youths engaging in delinquent
activities and eventually facing incarceration. Their analysis of 54 case files of juvenile offenders from the Kaki Bukit Prison Education Centre revealed that the motivation of influence and pressure from peers, provocation by others, anger, boredom, thrill seeking, alcohol and drugs consumption, and money resulted in these youths engaging in problematic behaviours (Tam et al., 2007).

A different study conducted by Lim, Khoo and Wong (2007) explored the impact of delinquent behaviours on adolescents’ prosocial orientation. Their results reported that students who displayed problematic behaviours were less helpful, less cooperative and less likely to share. This group of students was also less likely to maintain affective relationships and less likely to comply with social norms.

In one extensive study conducted by Fei Yue Counselling Centre in October 2002, they reported that the most frequent occurring problematic behaviours are vandalising school properties, trespassing into public facilities, truancy, and causing hurt or fighting (National Youth Council, 2018). Their study also reported more girls than boys were involved in vandalising school properties and played truant. Secondary 2 and 3 students had higher frequency of problematic behaviours. Students from the Normal Technical (NT) stream were reported to have the most number of problematic behaviours of the 30 delinquent acts listed. 55.9% of the participants in the study reported that losing temper and becoming aggressive were the most frequently reported problem behaviours.

Teen aggression has been a growing concern in Singapore. The Straits Times reported that many of the teen riots were triggered by trivial provocations like staring incidents or rude remarks (The Straits Times, 4 May, 1997). Staring resulted in one out of ten violent crimes reported to the police in 1995 and 1996 (The Straits Times, 4 May, 1997). Boredom was another reason that these violent acts were committed.
younger offenders were dealt with for rioting in 1997 (The Straits Times, August 3, 1998). The frequency of adolescent drinking was higher than smoking. Drug experimentation had the lowest in frequency as the offender will be severely dealt with in Singapore's legal system (National Youth Council, 2018). The penalty against drug consumption and trafficking was a deterrence.

According to the latest figures released by the police, it was reported that there was a fall in the number of arrests for young people in the first half of 2017 compared to the same period last year (Lee, 2017). From January to June 2017, 1,279 arrests were reported and there was a drop of 14.2 per cent compared to the previous year (Lee, 2017). However, there was an increase trend in youths being arrested for shop theft and possession of offensive weapons recorded in the police data (Lee, 2017). Compared to the same period in 2016, there was an increase of 10 cases for shop theft bringing the total arrests for shop theft to 317 by young people (Lee, 2017). In 2017, the total number of arrests for possession of dangerous weapons were 47 arrests, an increase from 30 cases in 2016 (Lee, 2017).

In a recent interview, Minister for Social and Family Development, Desmond Lee expressed that although there was a decline in the proportion of juveniles who return to crime, the figure was still too high (Tan, 2018). In 2011, for juveniles aged between seven and under-16, 16.7 per cent of those who had completed their rehabilitation re-offended within three years (Tan, 2018). This was a drop from 20.3 per cent compared to the 2007 cohort who was tracked for three years until 2010 (Tan, 2018). Police figures also showed the number of under-16 juveniles arrested had dropped as the figure reported went down from 1,561 in 2012 to 1,134 in 2016 which was a significant 27 per cent decline. For offenders below age 21, there was a similar trend reported with 10.7 per cent who completed their rehabilitation in 2012 re-
offending within three years (Tan, 2018). Re-offending for this group was down from 
13.8 per cent for those discharged from rehabilitation in 2010 (Tan, 2018).

The above statistics on the rate of juvenile delinquency and re-offending seemed 
to suggest that the risks and protective factors for adolescents who exhibited 
problematic behaviours need further examination. Hence, it is important to understand 
the development of prosocial and problematic behaviours amongst the youths in 
Singapore.

*Parenting Youth in Singapore*

Parenting is never an easy responsibility. It can be challenging and difficult at 
times. In contemporary Singapore, parents face with a range of challenges like money 
woes, and demands at work that compete with their time for “good parenting”. They 
choose to parent their children with the available parenting styles, practices or 
knowledge they know, to prepare their children for the future. It is of utmost 
importance that parents are made aware of their parenting as parenting styles will affect 
the child's growth (Brown, 2018).

In Singapore, men and women have the same rights and access to education. 
Singapore females are equally educated as the Singapore males and have similar 
employment and career opportunities (Quek, Knudson-Martin, Orpen & Victor, 2011). 
With government policies supporting women to return to the workforce post childbirth, 
these women tend to remain in the work force long after marriage and childbirth. Hence, 
Singapore women contribute 39 to 46 per cent to the combined household income 
(Quek et al., 2011). Supervision of their children in the family can be compromised 
when both parents work.
In addition, being a country that meritocracy is deeply rooted in its culture, parenting in Singapore is tied closely to the children’s education outcomes. Thus, Deputy Prime Minister Tharman Shanmugaratnam advised parents and warned against helicopter parenting (Teng, 2019). According to him, as our education system evolves and broadens, parenting also needs to evolve (Teng, 2019). For these types of parents, they are usually overtly involved with their children’s routine and will rush in to help with many aspects of their tasks. Parents tend to be overprotective and want to save or prevent their child or adolescent from unforeseen problems. This type of parents is a mixture of authoritarian and permissive parenting types (English, 2016).

One popular parenting term made popular by Law professor and author Amy Chua in her 2011 book, “Battle Hymn of the Tiger Mother” (English, 2016). She describes tiger parents, often seen in Chinese families, as superior to Western parents. Chinese parents expect their children to follow their instructions and demands by being obedient and making them proud. Parents use this style because they want their child to be successful and are most likely to be authoritarian (English, 2016).

Some Singapore parents use the authoritative parenting style (English, 2016). These parents try to balance high expectations with empathy. There is usually respect and positive parent-child interactions in such families. Another group of Singapore parents tend to overindulge in their children and allow them to do what they like. They lack rules, expectations and monitoring of their children’s activities. This type of parents tend to be more permissive in their parenting styles (English, 2016). In some situations, they find that they can no longer manage their children’s behaviours.

For parents who are not able to control or manage their children who is below the age of 16 years, they may turn to the state for help. They may choose to refer their children who persistently defy their authority for Beyond Parental Control (BPC) order.
The parents can apply to the Youth Court for a BPC order. The child or young person who is referred to BPC is usually having persistent conflict with his/her parent/s and school or other authorities. He/she may be exhibiting at risk behaviours. Often in such cases, there is poor relationship and communication between the parents and their children resulting in the inability of the parents to exercise care and control.

Even with the advancement of technological progress, some culture and ethnic practices remained unchanged (Quah, 2003). Each generation of parents may differ in their parenting compared to their preceding generation, the elements of culture and other factors like the level of formal education and economic related variables continues to influence the pace and nature of change across generations. Therefore, the dynamic changes within the family of interactive individuals will result in parents adopting different parenting styles. Previous literature concentrated on the published research conducted on Chinese or immigrant Chinese populations and there was a lack of research on parenting among Malays and Indians in Singapore. Therefore, more research on parenting in Singapore context is needed.

One local study by Ong, Tan and Cheng (2000) discussed the relationship between problem behaviours and adolescents’ relationship with fathers and mothers. Their findings reported the significant association of behavioural problems with parenting behaviours and stronger correlation between problematic behaviours and fathers’ parenting behaviours. In this study, adolescents who perceived their fathers' parenting behaviours negatively were reported to have higher levels of problematic behaviours like truancy, substance use, sexual promiscuity, and incidents of threatening to run away from home. Father’s strict parenting was linked to alcohol drinking and teenage sex. Inconsistent father’s parenting were linked to higher tendency of truancy and sexual promiscuity. The use of forceful control and punitive discipline practices by
fathers was positively associated with school disciplinary issues, sexual promiscuity, smoking and drinking.

In the same study mentioned above, the use of forceful control and punitive discipline practices by mothers was not linked to adolescent problematic behaviours and school misconduct. Adolescents who reported close communication with their mothers were less likely to engage in problematic behaviours. Interestingly, the results reported that there were differences in associations with father and mother's parenting and higher correlations with father control measures was reported.

Another study conducted by Sim (2000) set out to investigate the role of parents (i.e., how the children regarded their parents) and its relationship with psychosocial competence (self-esteem) and the likelihood for the children to be associated with negative peers. In the study, the participants were 555 Singapore youths from 4 different secondary levels. The findings showed that how the youths perceived their parents was significantly related with their competency in psychosocial competence and related in a negative direction with the adolescents’ likelihood to engage in antisocial behaviours. It was interesting that regard for parents was reported to have a significant role in the moderation and mediation relationship between parenting practices and adolescents’ psychosocial competence. The variable, regard for parents moderated the relationship between support from parents and self-esteem. The moderation relationship was stronger when the adolescents had higher regard for their parents. The same variable, regard for parents meditated the relationship between monitoring from parents and the tendency to engage in antisocial behaviours. The study conducted by Sim highlighted the importance of regard for parents in adolescent development and the roles it played in adolescents’ behaviour in a Singapore context.
One relevant study in Singapore conducted by Ang (2006) examined the influence of adolescents’ perception of their parents’ parenting style on the adolescents’ competencies in self-reliance, relationship with others, how they rate their inadequacy, and attitude to school. The participants were 548 adolescents. Interestingly, how the adolescents perceived their father’s parenting was closely related to the adolescents’ sense of inadequacy. For some adolescents, fathers’ perceived parenting style was also strongly linked to their self-reliance. The study also found perceived mother’s parenting style to be only associated to some adolescents’ attitude towards school. Ang (2006) also discussed the consequences of parenting styles, the differences in influence of father’s and mother’s parenting styles on the outcomes of adolescents in Asia.

As discussed previously, over the years, there are new developments to the concepts of fatherhood and its effects (direct or indirect) on children and adolescents. Such developments include fathers taking up roles and exhibiting behaviours that are once thought to belong to mothers (e.g., to nurture and care for the child). Hence, new theories have evolved to highlight fathers’ positive involvement and support, and their connection to positive child outcomes.

In view of the discussion above and the increase in the issues surrounding adolescents’ behaviours and their relationships with their family in the complex society, there is an increase in concern in Singapore about how Singapore parents raise their children (Tan & Huang, 2010). It is clear that understanding Singapore parenting is relevant to the citizens and policy-makers in Singapore.
Family Environment and Youth in Singapore

The median monthly household income in Singapore increased from $8846 in 2016 to $9023 in 2017 (Key Household Income Trends, 2017). The increase in dual-income households over the years has been accompanied by a decline in birth rates, with household sizes averaging 4.2 persons in 1990, 3.5 in 2010 and 3.2 in 2018 (Key Household Income Trends, 2017; Key Household Income Trends, 2018).

Youths from divorced or separated families reported lower levels of wellbeing (National Youth Council, 2018). Problematic behaviours were found to be more prevalent among students whose parents were separated or divorced. Family support and family adversity could be affected by alternative family structures (The State of Singapore Youth, 2014).

In a study that examined the problematic behaviours of Singapore youth, Ong, Tan and Cheng (2000) reported that ITE students reported more incidences of problematic behaviours compared to JC students. ITE students scored highest on most of the problem behaviours (e.g., vandalism, shoplifting, running away from home, and substance abuse). The ITE students also had higher incidences of losing temper and aggressive behaviours. JC students reported higher frequency of school related problems like disobeying teachers and not following school rules. Singapore Polytechnic students had higher levels of poor attendance.

Their study also reported that the school-type differences and the pattern of problem behaviours were reflections of their family environment. Most of the ITE students who reported high frequency of problem behaviours belonged to the lower socio-economic status. This group of youth also reported less or lack of satisfactory communication with their parents. In comparison, most of the JC students belonged to higher socio-economic status group. Their parents were more likely to have higher
education and they are more involved in their adolescents’ life. However, in another national survey conducted, higher levels of problematic behaviours were found among students from both ends of the income spectrum, that is, those from low-income families as well as from well-to-do families (National Youth Council, 2018).

One study with 113 Asian community sample of at-risk adolescents, aged between eleven to sixteen, conducted by Ang, Huan, Chong, Yeo, Balhetchet and Seah (2013) investigated the relationship between early separation from parents and traits of psychopathy. Their findings found that boys and girls were not equally impacted by their separation with their parents at a young age. Results from their findings suggested early separation from parents and early emotional parental deprivation had a greater negative impact on boys compared to girls. Even though early separation was not the focus in this present study, the results showed that poor attachment and weak bonding with parents were important factors that were closely associated with the negative behavioural outcomes of children and adolescents.

The trend in adolescents’ problematic behaviours may be a result of the weakening of family bonds and the influence of media industry. Similar to other Asian societies, the changes brought about by social, economic changes and media culture influences compete with the family and the school to socialise and exert control in influencing youth values and behaviours (Cheung, 1997).

In conclusion, the youths of Singapore have on-going challenges in their lives and in order to understand their development, we need to consider family environment related variables that influence their behaviours.
Introduction of the Theoretical Framework Proposed for the Study

Attachment Theory

Attachment theory posits that the good foundation of emotional bonds is part of a critical process in the human life development from infancy (Bowlby, 1969; 1979). For prior research aimed at understanding the underpinnings and processes of problematic behaviours in adolescents, attachment is regarded as an important and critical variable in determining the psychological and behavioural development (Ainsworth & Bowlby, 1991; Allen, Porter, McFarland, McElhaney, & Marsh, 2007; Carlo et al., 2011; Collins & Feeney, 2000). The attachment in children with their primary caregiver is a long lasting emotional relationship (Ainsworth, 1989; Raudino, Fergusson, & Horwood, 2013).

According to Benoit (2004), parents are expected to provide emotional bonding and connection in their relationship with the child so that a secure base to explore the self and the world around is provided for the child. The close attachment bond formed with significant caregivers established a secure internal self who is capable of facing the demands and adversity in life (Bowlby, 1969). The caregiver in the children’s life is considered a “secure base”, and this sense of security enabled the children to explore their surroundings in confidence, knowing that there is someone who will be ready to respond to them when they are in need (Bowlby, 1982).

In these secure attachment relationships, children will trust their caregiver to respond to their needs consistently (Bowlby, 1982). Bowlby (1979) asserted that a secure attachment is needed to establish a healthy foundation for development. This means that knowing that their parents will be supportive and responsive to their needs, adolescents will develop the ability to cope with potential stress resulting from any negative events in their environment effectively (Kullik & Petermann, 2013).
On the contrary, having an insecure attachment with the primary attachment figure is likely to be associated with issues in personality development and possibly the development of clinical symptoms (DeKlyen & Greenberg, 2008). Hence, attachment theory posits that secure attachment with significant caregiving figures will enable children or adolescents to regulate their cognition, affect, and behaviour which may eventually lead to different developmental outcomes (Carlo, Knight, McGinley, & Hayes, 2011).

Past research has associated attachment as a factor that protects an individual from risks or possible risks depending on the quality of attachment to primary caregivers (e.g., Egeland & Carlson, 2004; Kobak, Cassidy, Lyons-Ruth, & Ziv, 2006). For example, the risk of developing maladaptive or problematic behaviour is higher when the quality of attachment is poor. It is also evident from previous research that attachment exerts its influence in the context and presence of other risks within the child and his/her immediate environment (Greenberg, Speltz, DeKlyen, & Jones, 2001; Schimmenti, Passanisi, Gervasi, Manzella, & Famà, 2014).

The above discussion reiterated the need to investigate parent-child attachments as potential moderators for adolescent behaviours and other risk variables. For the purpose of this study, we proposed to use the Greenberg’s Risk Model emphasizing attachment insecurity to investigate the influence of father-child relationship as a moderator (i.e., the Support and admiration and Conflict and criticism dimensions) for psychopathy, father’s authoritative parenting style and family adversity on adolescents’ behaviours (prosocial and problematic).
Greenberg’s Risk Model Emphasizing Attachment Insecurity

Based on the underlying principles of attachment theory and risk factors in the development of behaviours, Greenberg and colleagues (Greenberg, Speltz, & DeKlyen 1993, Greenberg, Speltz, DeKlyen & Jones, 2001) proposed a framework to conceptualize and investigate the onset of disruptive problem behaviours that incorporates attachment as one critical factor (see Figure 1: Greenberg’s Risk Model). Four general risk domains are supported by research and these include (1) child characteristics (e.g., psychopathy) (e.g., Campbell, Porter, & Santor, 2004) (2) quality of attachment relations (e.g., quality of parent-child relationship) (e.g., Kobak & Sceery 1988; Sloman, Gilbert, & Hasey, 2003) (3) parental management/socialization strategies (e.g., parenting styles) (e.g., Baumrind, 1991; Pettit & Arsiwalla, 2008) (4) family ecology (e.g., family adversity) (e.g., Beck & Shaw, 2005; Sanson, Oberklaid, Pedlow, & Prior, 1991).

The purpose of the graphic model (Figure 1) on the risk domains is not to demonstrate the actual degree of overlap between risk factors but rather to illustrate the possible interactions of the many factors (Deklyen & Greenberg, 2008). As mentioned previously, risk factors occur at multiple levels and that include the individual, caregiver and the broader ecological context (Bronfenbrenner, 1979; Kellam, 1990; Kobak et al., 2006).

Hence, I propose using Greenberg’s model for this study’s investigation of prosocial and problematic behaviours of adolescents in Singapore. The following sections will discuss the variables selected based on Greenberg’s risk model for this research.
Figure 1

*Graphical Representation of Greenberg’s Risk Model (1993, 2001)*

*Areas 1 through 4, two-factor interaction (visible); Area 5 (high family adversity and ineffective parenting), two-factor interaction (invisible); Area 6 (insecure attachment and child characteristics), two-factor intersection (invisible); Area 7 through 10, three-factor interaction; Area 11, four factor intersections.*
Early Development and Child Outcomes

Psychopathy

The construct of psychopathy has proven to be very important for identifying and understanding a distinctive subcategory of delinquent and antisocial individuals (Hare, 1998). According to Hare (1998), only a small number of offenders show the “affective (for example, lack of guilt and empathy; lack of emotion), interpersonal (for example, grandiosity and manipulativeness), and behavioural (for example, impulsivity and irresponsibility) features that define psychopathy”. Some previous literature on psychopathy defined psychopathy with traits like antisocial behaviour, presence of impulsivity, and other variables like callousness, lower ability to empathise and lack of emotional expression (Hare 1991). Hence, these individuals who exhibit psychopathic traits will display more serious, violent, and recurring patterns of problematic behaviours and fewer prosocial behaviours (Coccaro, Lee, & McCloskey, 2014; Douglas, Vincent, & Edens, 2006; Leistico, Salekin, & DeCoste, 2008). In addition, other research has also reported that such psychopathic traits can be found in children and adolescents (e.g., Dadds, Fraser, Frost, & Hawes, 2005; Frick, Kimonis, Dandreaux, & Farrel, 2003).

Furthermore, antisocial individuals with significant psychopathic features are characterised by other neurological, cognitive and emotional deficits that seem to suggest that specific factors led to their problematic behaviours as compared to antisocial individuals without psychopathic traits (Blair, Mitchell, & Blair, 2005; Glenn & Raine, 2008; Hart & Hare, 1997). Additionally, the research community has called for more research on psychopathy using non-clinical samples but school-going children and adolescents (e.g., Campbell et al., 2004). The continued investigation into these at risk individuals from community settings is necessary as it will enhance our
understanding of the entire continuum of psychopathy (Campbell et al., 2004; Kotler & McMahon, 2005). Hence, in this study, psychopathy is viewed as traits in a continuous dimension and not a categorical diagnostic classification (Dadds et al., 2005; Michonski & Sharp, 2010).

There is substantial theoretical and empirical research that proposed risk factors that are present in early childhood will predict psychopathy. One such factor involves being separated from their parents at an early age. It is suggested that this lack of parental presence may affect bonding at an early age and result in higher risk of developing psychopathic traits (e.g., Farrington 2007; Lang, Klinteberg, & Alm, 2002; Skilling, Harris, Rice, & Quinsey, 2002). One of the examples provided in the previous literature was an earlier work by Bowlby in 1951. He argued that a long period of deprived maternal bonding would result in a lack development of affection and emotion in the child which could set the child on the pathway to delinquency. This further reinforced the importance of attachment in a child’s early life stages. The insecure attachment or disrupted attachment may cause difficulties in relating and connecting with others later in life.

Another study by Gacono and Meloy (1998) revealed that deficits in attachment were correlated with psychopathic traits in children with conduct disorder and adults who were antisocial. Also, in an even earlier research conducted by McCord and McCord (1959), neglect from parents at an early age and inconsistent punishment were reported to be closely associated with psychopathy. Likewise, a similar study conducted with participants who were between four to fifteen years old, showed that children who experienced separation from mothers in intact families for more than 6 months have a higher risk in developing conduct disorder (Wardle, 1961). A study comprising male prisoners in Canada also reported that separation from parents for children below
sixteen years of age would predict psychopathy (Skilling et al., 2002). Many studies also revealed that separation from parents, neglect by parents and disruption in the family were all correlated with psychopathic traits (Campbell et al., 2004; Farrington 2007; Lang et al., 2002).

In summary, the study of psychopathy and the influence on behaviours is important in at least three areas: a) the educational system because such research helps to better understand these characteristics in the young and for those who are in school, b) the legal system as it helps to possibly identify young offenders who are at risk of juvenile recidivism, and c) the mental health system as it screens a particular group of individuals who need specialized treatment. It is essential for us to better understand how psychopathy influences adolescent behaviours as treatment for psychopathy is complex. This research focused on adolescents and psychopathic traits that are identifiable by this age. In this study, psychopathy is viewed as an outcome of the interaction of adverse events and absence of protective factors.

Family Adversity

The environment in which adolescents function and live, play a critical role in influencing their development. The children begin their socialisation in the family and that is one of the most important social contexts which will influence the development of the adolescent (White & Matawie, 2004). There is a substantial amount of literature that investigates the role of the family and how it impacts the development and the ability of the adolescents to navigate and negotiate tasks while transiting into young adulthood (White, Liu, Gonzales, Knight, & Tein, 2015).

A large amount of literature has shown that strain in the economic status of the family (McLoyd, 1990), unstable and conflictual situations in the family environments
(Repetti, Taylor, & Seeman, 2002), parental separation and divorce (Amato & Keith, 1991) can all impact adolescent development negatively. Other unfavourable family conditions like parents involved in crime and arrests, absence of parents, family conflicts and abuse or violence, have been found to predict early onset and chronic patterns of problematic behaviour in children and adolescents (McEvoy & Welker, 2000).

At the same time, findings from other studies also showed that poor relationship and weak bonding between parent and adolescent, lack of or insufficient support from the family, parents’ low education levels, constant experience of insufficient financial resources and conflicts and violence present in the home environments heightened risks of psychological disorders and problematic behaviours in adolescents (Pillai, Patel, Cardozo, Goodman, Weiss, & Andrew, 2008; Plybon & Kliewer, 2001).

In previous research, family adversity is defined as the combination of disruptive and unfavourable events in the family that impacts the predictability and stability of family life negatively (Foley, 2011; Forman & Davies, 2003). Family adversity refers to cumulative risk and this includes negative events in the family or conditions that disrupt experiences of the adolescent, such as divorce, parental addiction, parental illness, residential moves, and family composition (e.g. Forman & Davies, 2003). Other adversity indicators used in different studies include large family household size, maternal and paternal psychiatric illness or criminality, marital conflicts between parents, and placements in foster care (Biederman et al., 1995; Seahill et al., 1999).

It is also well documented in research that the higher the number of adversity indicators present in a child’s environment, the higher the risks of the child engaging in behaviour problems (e.g. Adam & Chase-Lansdale, 2002; Criss, Pettit, Bates, Dodge, &
Lapp, 2002; Dragan, & Hardt, 2016; Forman & Davies 2003; Rutter & Quinton, 1977). Previous studies similarly reported that during adolescence, family adversity was closely associated with problematic behaviours (e.g. Adam & Chase-Lansdale 2002; Forman & Davies, 2003).

It is evident that children exposed to adverse, stressful, and negative family experiences face an increased risk for adjustment issues and problematic behaviours (Criss et al., 2002). Adverse experiences such as low socio-economic circumstances, high incidences of parental conflict, violence in the home, and punitive discipline measures were linked to development of behaviour problem in children (Cummings, Davies, & Campbell, 2000).

Besides, behavioural issues, being exposed to adverse events (e.g. low socio-economic status; parents’ with criminal records, separation in the family and frequent conflicts in the home) were also linked to various poor health outcomes (e.g., Criss et al., 2002; George, Herman, & Ostrander, 2006; Jenkins, Simpson, Dunn, Rasbash, & O’Connor, 2005). It is also evident from previous theoretical underpinnings and empirical research that these variables discussed above are correlated with variables delineated in our study (e.g., psychopathy, parenting, father and child relationship, and adolescent behaviours) (Caye, McMahon, Norris, & Rahija, 1996; Coccaro et al., 2014; DeKlyen et al., 1998; Douglas et al., 2006; Leinonen, Solantaus, & Punamaki, 2003; Leistico et al., 2008; Paquette, 2004; Yilmaz, 2000).

In view of the impact of family adversity has on adolescents’ behaviour, it is essential to investigate the role of this familial factor and the impact it has on adolescent development. In chapter two of this study, there will be a more in depth discussion of the adversity indicators (family size, family separation, physical and mental health of the parents, criminal records of the parents, presence of conflict in the family and
socioeconomic status) that contribute to the family adversity variable discussed in this study.

Parental Dimension

Quality of Parent-Child Relationship – the Importance of Father

A great amount of research is focused on the dynamics of relationships that set the early foundation for the development of one’s sense of self and relationship with others as secure or insecure (Bartholomew 1990; Collins & Feeney 2000). Likewise, the Attachment theory (Bowlby, 1988) explains how closeness with parents can protect and provide a source of security in the early human development stages (Ainsworth, Blehar, Waters & Wall, 1978). Parents are the primary attachment figures for children until late adolescence (Hazan & Zeifman, 1994). It is irrefutable that the role parents play in adolescent development is highly critical (e.g., Holmbeck, Paikoff, & Brooks-Gunn, 1995; Steinberg, Elmen, & Mounts, 1989).

The interaction and relationship with parents is critical in understanding how children and adolescents regulate their behaviour (e.g., Ainsworth et al., 1978; Allen, Hauser, & Borman-Spurrell, 1996; Armsden & Greenberg 1987; Caye et al., 1996; Kobak & Sceery 1988; Sloman et al., 2003). Parents help facilitate the development of their children when they 1) stimulate their children appropriately and during the appropriate age of their children; 2) provide opportunities and the conditions for children to discover and define themselves; 3) give sufficient and sound interpretation of reality around them; 4) establish a loving and warm relationship with them; 5) guide them to set and define goals. In turn, these children will interact with others in a similar fashion based on their positive experience with their parents. They are also less likely to choose peers that engage in antisocial activities or violent acts. Studies examining the
links between parental attachment and adolescents’ image of self, esteem and problematic behaviours are well documented in the research literature (e.g., Marcus & Betzer, 1996; O’Koon, 1997; Rice & Mulkeen, 1995).

However, if characteristics of parent and child relationship and interactions differ from what is mentioned above, the threat for negative outcomes increases, one of which includes a higher chance for the child to look for alternative relationships of love and acceptance. The probability of these children connecting with peers who engage in antisocial and law-breaking activities in order to be part of the group is also higher (e.g., Hirschi, 1969, 1977). In return for their participation, they would receive what they thought to be loyalty, love and acceptance by their peers.

Attachment is defined in terms of the social and emotional relationship children develop with the significant people in their lives (Bowlby, 1988). Very often, the first attachment an infant forms with his/her mother although sometimes, another adult can replace this primary attachment figure (Caye et al., 1996). Hence, according to Allen and colleagues (1983), “attachment is a process that is made up of interactions between a child and his/her primary caregiver”. This process influences the child’s cognitive and social development from birth, and helps the child attain certain important developmental milestones such as forming and organizing perceptions and to think logically. Through this, the child will also develop conscience, coupled with healthy autonomy, and acquiring mechanisms for coping (for frustration, stress, worry, and fear). This will eventually help the child form healthy and close relationships with others (Allen et al., 1983).

One theory that strongly advocated the importance of parents in the life of an adolescent is Hirschi’s social control theory of delinquency. Hirschi (1969) posited that with the parent being "psychologically present" (p. 88) the adolescent can be deterred
from committing a crime or engaging in antisocial activities. This theory also states that
the presence of delinquency echoes the quality or lack of positive relationship between
parent and child. He further explained that no parent desires to have their children go
on a delinquent pathway. When adolescents disregard their parents’ thoughts and
reactions, they are then more likely to engage in problematic behaviours or delinquency
(Hirschi, 1977).

Furthermore, researchers have highlighted the importance of the quality of
attachment (resulting from the parent-child attachment bond) on the adaptive
development in adolescence (Allen et al., 1996; Armsden & Greenberg 1987; Kobak &
Sceery 1988; Sloman et al., 2003). It is well documented that parents play important
socialization roles to encourage prosocial behaviours and discourage problematic ones
in their adolescent (Maccoby, 1992).

Relationship with parents continues to be an important determinant of
adolescent behaviours (Önder & Yılmaz, 2012). Relevant literature showed that an
adolescent who experienced parental closeness demonstrates more confidence,
independence and stability compared to other adolescents (Önder & Yılmaz, 2012).
Hence, adolescents are less likely to engage in problematic behaviours and less tended
towards crime when relationship with parents are positive (Grotevant & Cooper, 1986;

There is no lack in previous research that supported the claim that when
members in the family connect with the adolescent meaningfully and have quality
engagement with adolescents, these adolescents have less tendency to be involved in
deviant activities and problematic behaviours (Chandrasekaran, Kamath, Ashok,
Kamath, Hegde & Devaramane, 2017; Smetana, Campione-Barr & Metzger, 2006).
Also, during this critical transition phase that the adolescents go through, the structure
of their relationship with the family will have to be responsive to meet changing
demands (Steinberg & Morris, 2001). Therefore, it is very important for parents to
support the adolescents when they experience the ups and downs in life. It is no surprise
that research literature has highlighted the critical role of parent and child relationship in
understanding of the adolescents’ behaviour (Armsden & Greenberg, 1987; Harrist &

Although studies looking at parent and child relationship are well established,
there is a dearth of research when it comes to the role of father parenting and youth
behaviours (e.g., Bogels & Phares, 2008; Eliezer, Yahav, & Or Hen, 2012; Phares,
Fields, Kamboukos, & Lopez, 2005). Most research studies available on family
interactions and adolescent psychopathology focused their investigation mainly on
mothers and their relationship with their adolescents (Chuang & Moreno, 2008;
DeKlyen, Biernbaum, Speltz, & Greenberg, 1998; Goodman, 2007; Phares, 1996). In
view of this, many researchers thus called for an increase in research studies examining
the father and child relationship (Connell & Goodman 2002; Kane & Garber 2004;

Historically, there is minimal research in psychology on the role of fathers in
child and adolescent development. However, there is increased attention on fathers’
roles and their involvement in the development milestones of their children and
adolescents in recent years (Day & Lamb, 2004; Hofferth, Cabrera, Carlson, Coley,
Day, & Schindler, 2007; Lamb, 2000). Compared to mother’s involvement in their
children, research evidence seems to suggest that fathers’ involvement is more closely
linked to the temperament of pre-school children and future adult functioning (Lewis &
Lamb, 2003; McBride, Schoppe, & Rane, 2002). Interestingly, there is a theoretical
perspective, about “social fathering” (i.e., a male figure who may or may not be the
biological parent involved in parenting the child) that has been linked to youth outcome (Hofferth et al., 2007).

Before looking at the role of fathers in greater depth, it is necessary to look into the roles both fathers and mothers play in the lives of their children. It is evident that since infancy, mothers are known to be with and around their infants and young children more than fathers (Day & Lamb, 2004; Hofferth et al., 2007; Pleck & Masciadrelli, 2004). Past literature has recounted that mothers were more involved than fathers in the direct interaction with their children. They were also more available and responsible for fulfilling children’s needs (Hofferth et al. 2007). In particular, mothers are responsible for tasks that required daily and health care (e.g., providing food and feeding, cleaning, washing and bathing) (e.g., taking care of the sick child, arranging for medical appointments), especially in the child’s early developmental years, from infancy to early childhood (Parke, 2000). Even though, fathers have similar skill sets to engage in the daily care routine, they tend to be less involved in the family care routine (Parke, 2000). The fathers were reported to spend more time engaging in playful interactions with their children compared with mothers (Parke, 2000). In some families, mothers engage in interactions involving both play and care with their young children, but fathers are more inclined to spend a greater percentage of their time being a playmate than a caregiver (Lewis & Lamb, 2003).

However, the extent to which mothers and fathers are involved in the lives of their adolescents are less well-documented compared to their involvement during infancy and early childhood. There is research evidence which shows that there is a decline in the amount of time parents spend with their children as they mature and progress to adulthood (Hofferth et al., 2002; Pleck & Masciadrelli, 2004). One possibility for this trend is the decrease in childcare needs and an increase in the child’s
independence and participation in activities outside the home. There is evidence that
fathers engage in more play and fun related activities with adolescents than mothers
(Hosley & Montemayor, 1997), although, not much is known about how fathers interact
with their adolescents. Even less is known about the role of fathers, their presence and
their availability in the development of their adolescents.

In view of this, there is a greater need to investigate the differences in parents’
styles of engagement, interaction, and involvement with their daughters and sons.
Research evidence shows that fathers are more likely to interact with their sons
compared to their daughters from young (Pleck & Masciadrelli, 2004). They also
engage and spend more time with their sons than daughters. This seems to suggest that
fathers may have stronger relationships with their adolescent sons compared to their
daughters (Youniss & Smollar, 1985).

Studies documenting the role of fathers in terms of engaging and being available
or responsible for their children’s adolescent development are scarce but important.
Some authors have claimed that understanding the concept of paternal involvement and
its role in children’s development is one of the most important developments for
understanding adolescents’ behaviour (Lamb, Pleck, Charnov, & Levine, 1987;

Father, undeniably, is an important figure in a child’s development because of
the social, emotional and intellectual impact he has on the child (Adamson & Johnson,
2013; Allen et al., 2006; Bernier, Be’langer, Bordeleau, & Carrier, 2013; Brennan,
Katz, Hammen, & Le Brocque, 2002; Charity, 2003; Day & Padilla-Walker, 2009;
Hale, Van Der Valk, Engels, & Meeus, 2005; Lee & Asgary, 2009; Leidy et al., 2011).

In view of the above, this study aims to investigate how quality of parent-child
relationship, in particular, father-child relationship would influence the adolescents’
behaviour in a non-clinical Asian context. We investigate the quality of father-child relationship using the variables – father’s support and admiration dimension and father’s conflict and criticism dimension. In addition, this study also seeks to examine positive father’s parenting style, in specific, authoritative parenting and its influence on behaviours.

*Parenting Styles – Father’s Authoritative Parenting Style*

Past research has shown the critical role the family plays in instilling in the child the social and cultural norms of the society because of its impact on the developmental outcome of the child or adolescent behaviour (e.g., Coie & Dodge, 1998; Patterson & Yoerger, 1999). The following discussion posits the environment (e.g., the parenting style used in the family) that will significantly influence the child’s behaviours, in particular, father’s parenting style (e.g., Almeida & Galambos, 1991; Collins & Russell, 1991).

As the child transits into adolescence stage, they experience increased autonomy and greater competencies. At this stage, parents need to modify their parenting style and manage their adolescents’ behaviours through supervision and acting as a mentor instead. According to Patterson and Yoerger (1999), the child will model the family’s interaction patterns and how family members cope with difficult situations (Patterson & Yoerger, 1999). They posit that if the caregivers use avoidance and harshness to handle conflicts, the child and adolescent will model the same techniques when they are faced with problems outside the home.

Parents have the power to influence their children while interacting with them. They can reward the child with privileges when the child behaves or to punish the child when he/she misbehaves by withdrawing privileges (Lerner, Castellino, Terry,
Villarruel, & MckKinney, 1995; Yilmaz, 2000). In rewarding the desired behaviours and punishing inappropriate behaviours, parents are delineating their expectations with the child. However, when parents failed to respond to the child’s inappropriate and aggressive behaviours, problematic behaviours would increase (Coie & Dodge, 1998).

Insufficient supervision or monitoring is one of the most significant predictors of problematic behaviours (e.g., Coie & Dodge, 1998; Fagot & Pears, 1996; Fisher, Ellis & Chamberlain, 1999; Tornay, Michaud, Gmel, Wilson, Berchtold, & Suris, 2013). For instance, a study in Switzerland reported that adolescents whose parents monitored them when compared with adolescents who were not, were less involved in smoking, drinking and drug abuse (Tornay et al., 2013).

Also, parents having little knowledge about their children’s whereabouts, is strongly correlated with delinquency. To illustrate there was an international youth survey (IYS) conducted to compare adolescents whose parents know their whereabouts compared to those parents who had no idea of their adolescents’ whereabouts. The findings reported that 56% of youths whose parents never knew who they spend their time with, were involved in antisocial and delinquent behaviour in the previous 12 months when compared to 35% of youth whose parents at times, knew who their children spent time with and 12% of youth whose parents were always aware of the whereabouts of their children (Savoie, 2007).

In contrast, parents who were clear and consistent in their expectations and who used appropriate discipline techniques, together with supervision and monitoring, facilitated prosocial outcomes in their children and adolescents (Chandrasekaran, Kamath, Ashok, Kamath, Hegde, & Devarmane, 2017; Fosco, Stormshak, Dishion, & Winter, 2012; Hoeve, Dubas, Eichelsheim, van der Laan, Smeenk, & Gerris, 2009).
Support from parents was also shown to be positively associated with the child’s self-esteem (Openshaw & Thomas, 1986).

Some described parenting as an activity that is complex and involved behaviours that function together to influence, teach and control behavioural outcomes in children and adolescents (Lerner et al., 1995). According to Baumrind (1978), parenting is many behaviours working together or individually to have an effect on the child’s behaviour. Parenting behaviours, in particular, physical punishment, may have an effect on children’s development and consequently, behavioural disorders may result (Baumrind, 1978). Being the primary caregivers, parents exert the most impact on the psychological and behavioural development of children and adolescents (Belsky, Conger, & Capaldi, 2009).

Baumrind (1991) proposed that parenting style is determined by how parents control, interact and socialise their children. Baumrind (1967) defined parenting styles based on two dimensions: responsiveness and demandingness. Responsiveness conveys the degree of parental warmth or support provided to children and adolescents (Barnett, 1987; Eisenberg & Murphy, 1995; Pegah, 2008). Demandingness, also known as behavioural control, conveys the degree to which parents use discipline to set expectations of behaviours and to confront a child or adolescent who disobeys (Grusec & Goodnow, 1994). The responsiveness and demandingness dimensions define three different kinds of parenting styles.

Authoritative style is characterised by high responsiveness and high demandingness while authoritarian style is characterized by low responsiveness and high demandingness. Finally, the permissive style of parenting is characterized by high responsiveness and low demandingness. In the original conceptualization, Baumrind (1967) delineated only three parenting styles (authoritative, authoritarian, and
permissive). The neglectful style of parenting was added much later by Maccoby and Martin (1983).

It is widely known that authoritative parenting promotes positive development in children and adolescents compared to the authoritarian, permissive or neglectful styles of parenting. Authoritative parenting is characterised by high involvement from parents who use parenting techniques that demonstrate warmth and effective use of discipline (Chandrasekaran et al., 2017). It is significantly correlated with fewer psychological problems and fewer problematic behaviours in children and adolescents (Fosco et al., 2012; Hoeve et al., 2009). Consistent supervision and stable monitoring are part of the characteristics of authoritative parenting (Chandrasekaran et al., 2017). It was also reported that there were adolescents who experienced positive psychological adjustment when they were allowed to participate in the decision making process with their parents regardless of culture or ethnicity (Smetana, Campione-Barr, & Metzger, 2006).

The high responsiveness and high demandingness in authoritative parenting style were associated with fewer misbehaviours in children (Alizadeh, Talib, Abdullah, & Mansor, 2011; Baumrind, 1991). In examining youth outcomes, adolescents from authoritative families were found to perform better in school and were less likely than their peers to be engaged in problematic behaviours (Garcia & Gracia, 2009). Other similar studies also agreed that children with authoritative parents presented the best behavioural and psychological outcomes (Jackson, Henriksen, & Foshee, 1998; Radziszewska, Richardson, Dent, & Flay, 1996). Janssens and colleagues (1992) found that demandingness from both parents (i.e., the parent's willingness to address which behaviour he or she expects in a situation) were associated with empathy in a self-report research of elementary school children. These findings concur with Baumrind's (1971)
conclusion that parents who are firm and supportive in setting boundaries and expectations will encourage socially responsible children.

Authoritative parents are also more able to express and demonstrate their ability to regulate emotions (e.g., sadness, sorrow). This communication and modelling of behaviours encourage sympathy and prosocial behaviours in adolescents (i.e., behaviours that are beneficial to others) (Barnett, 1987; Eisenberg & Murphy, 1995). In contrast, permissive and authoritarian parenting style has been linked to delinquency. Likewise, Palmer (2009) reported that a positive correlation between authoritative parenting and children’s adjustment.

In authoritarian parenting style, parents set out to control adolescents’ behaviour in a high and intrusive manner, and display less warmth in their relationship. It was also evident that communication gaps between parent and adolescent, stress on the part of parents, and poor home environment together with the use of harsh and punitive discipline measures, contributed to the adolescent’s problematic behaviours (Kim, Kim, Koh, & Leventhal, 2013; Malhotra & Patra, 2005; Soenens, Vansteenkiste, Smits, Lowet, & Goossens, 2007). Poor communication with their parents was correlated with anxiety in adolescents (Deb, Chatterjee, & Walsh, 2010). Odubote (2008) reported that authoritarian parenting style is highly correlated with delinquent behaviour.

In much of the western literature, authoritarian parenting style has been reported to be positively associated with negative child and adolescent outcomes. Ang and Goh (2006) proposed that the meaning and implications for authoritarian parenting style are not viewed in the same way for Asians and Caucasians due to their different cultural systems. In their study, they found that the adolescents were divided into two groups - maladjusted and well-adjusted. The maladjusted group (N=117 for mothers’ authoritarian parenting style; N=167 for fathers’ authoritarian parenting style) were
made up of individuals who reported low self-esteem, poor self-reliance, poor interpersonal relations and a high sense of inadequacy. The well adjusted group (N=171 for mother and N=94 for father) reported having higher self-esteem, and self-reliance, good interpersonal relations and a low sense of inadequacy. One interesting thing to note is that there seems to be a higher number of adolescents who experienced father’s authoritarian parenting style in the maladjusted group (N=167) compared to the number of adolescents who experienced father’s authoritarian parenting style in the well-adjusted group (N=94).

According to some studies using Asian samples, authoritarian parenting style is not always linked to negative outcomes (Chao, 2001; Gonzalez, Greenwood, & Hsu, 2001; McBride-Chang & Chang, 1998). In some studies favourable effects were reported instead (e.g., Leung, Lau, & Lam, 1998).

As previously discussed, there is a dearth of research in Asia that focuses on the role of the father in influencing youth behaviours (DeKlyen et al., 1998; Phares, 1996). The Asian expression “strict father, warm mother” has traditionally presented fathers to be more authoritarian, one who used more control and discipline with their children. On the other hand, mothers were presented as one who is nurturing and supportive (Wilson, 1974).

The Asian expression has led many researchers to focus on parental control and authority using Baumrind’s (1971) parenting definition and categorization of authoritarian and authoritative styles. Parents who were authoritative used reasoning, sound guidance, and were sensitive to their children’s needs and opinions. In contrast, parents who were authoritarian were high in control and used punitive strategies when disciplining their children. They also expect their children to obey them totally. Moreover, many research studies have repeatedly reported that when compared to their
Western counterparts, Chinese and immigrant Chinese parents controlled and restricted their children more (Chao & Tseng, 2002).

In contrast to authoritarian parenting, parents who are permissive are warm but passive in their parenting style. They choose to indulge their children and have lower levels of demands and expectations of them. Lack of effective monitoring from these parents and granting too much autonomy to adolescents who are not mature, together with inconsistent use of discipline techniques have been known to predict problematic behaviours (Bae & Wickrama, 2014). Parents who fail to be present and available will encourage their children to look for alternative sources of guidance from deviant peers when they need support from this parent. It was documented in the developmental trajectories of delinquent youth that the lack of efficient parenting, together with early onset of negative child behaviours, and rejection from their peers, were strong predictors of adolescent problematic behaviours (Wang & Dishion, 2012).

High frequency of parent and child conflict, lack of effective monitoring and absence or low parental involvement are all factors correlated with problematic behaviours in children and adolescent (Wasserman, 2003). Other studies also established that problematic behaviours are associated with factors such as lack of parental supervision, inconsistent or overtly harsh and unreasonable discipline, poor bonding between parent and child and the lack of clear boundaries and expectations (Claes, 2005; Lacourse, 2006). Delinquents are known to have grown up in family environments that are void of order and consistent discipline (Hoeve, 2007; Turner, Hartman & Bishop, 2007). Furthermore, Frick (1998) associated inconsistent harsh, overtly strict, punitive styles in parenting to problematic behaviours.

It is widely known that positive parenting can influence psychological and behavioural problems in children and adolescents. Previous studies suggest that the
relationship between ineffective parenting styles, poor parental bonding and lack of
communication with parents can result in poor adolescent outcomes. One study in China
affirmed this and found that positive communication between parent and adolescent was
linked to lower problematic behaviour (e.g., drug use and smoking) among Chinese
adolescents (Shek, 1997).

There is no lack of literature looking at relationships between parenting styles
and adolescent outcomes. Most of these studies have focused their investigation on
characteristics of maternal parenting and fathers are often not included in these
investigations (Phares & Compas, 1992). However, there is evidence demonstrating the
importance of assessing fathers because some research suggested that they are involved
in an essential role that determines the positive development and functioning of their

According to Collins and Russell (1991), there is a difference how mothers and
fathers socialise their children and adolescents. Therefore, one cannot make the
assumption that both mothers and fathers parent and influence their children in an
identical way and there will be similar outcomes from these interactions.

Some research compared parenting by mothers and fathers and concluded that
they influenced their children differently (Wierson, Armistead, Forehand, Thomas, &
Fauber, 1990). Mothers were found to engage in more intense discussions with their
children and thus encounter greater conflicts. This resulted in a less positive relationship
with their children when compared to fathers (Wierson et al., 1990). On the other hand,
fathers were reported to show less affection but have fewer incidences of conflicts with
adolescents compared to mothers. These findings suggested that when fathers’ interact
with their children, the interaction revolved around performance related goals (e.g.,
school achievement) and they often exert their authority during these interactions (Collins & Russell, 1991).

Unfortunately, there is little developmental work conducted on father’s positive parenting among Singapore youths. Thus, it is necessary to establish how fathers structure their positive parenting practices and their relationship with the youths, which will, in turn, influence the youth’s development in prosocial and problematic behaviours. There is limited research on parenting and fathering among Asian families and not enough attention is being focused on the development of prosocial and problematic behaviours (Ang, 2006; Leung et al., 1998; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). It is thus important to learn the building blocks for future parenting.

Research examining the advantageous effects of authoritative parenting style have been consistently conducted in the West (Chan & Koo, 2011; Pong, Johnston, & Chen, 2010). However, these same effects are not always found in other samples from other cultures. Research that looks at the authoritative parenting style among Asian families is scarce (Chen, Chen, & Zheng, 2012; Pong et al. 2005; Sorkhabi 2005, 2012).

In this study, we first explore the extent to which fathers’ parenting attitudes (authoritative) influence youth’s behaviour before proceeding to examine if their relationship (conflictual or supportive) will moderate the youth’s behaviour. A study conducted in the Singapore context will yield greater understanding of the relationship between father’s authoritative parenting practices and adolescents’ behaviours among Singapore youth. It will also be beneficial to examine the relationship of this positive parenting style with the other independent variables, like family adversity (discussed in the next section) proposed in this study as it will enable us to gain insights to the interactions of these variables.
From the literature review, it is shown that numerous factors are predictive of prosocial and problematic behaviours and to investigate all the factors will be beyond the scope of this study. Through reviewing the existing literature on prosocial and problematic behaviours, psychopathy (Campbell et al., 2004; Hare, 1998; Kosson, Cyterski, Steuerwald, Neumann, & Walker-Matthews, 2002; Lynam 1997), quality of parent-child relationship (Allen et al., 1996; Kobak & Sceery 1988; Sloman et al., 2003), parenting styles (Baumrind, 1978; Baumrind, 1991; Pettit & Arsiwalla, 2008; Yilmaz, 2000) and family adversity (e.g., Beck & Shaw, 2005; Sanson et al., 1991) were documented to be strong predictors of behaviours (e.g. Amato & Rivera, 1999; Carlson & Corcoran, 2001; Emma, Adam, & Chase-Lansdale, 2002; Juby & Farrington, 2001).

Based on the above discussion, this present study focused on investigating the predictors of prosocial behaviours and problematic behaviours, in particular, psychopathy, quality of father-child relationship (i.e., Father’s support and admiration dimension and Father’s Conflict and criticism dimension), father’s authoritative parenting styles and family adversity.
The World Health Organisation reported that problematic behaviours bring about global issues that significantly become a burden for many countries (Heo & Son, 2013; UNICEF India, 2015). Problematic and antisocial behaviour (e.g., disobedience, aggression, temper tantrums, lying, stealing and violence) in adolescents can therefore escalate into severe social problems because of its negative consequences on adolescents’ families and his immediate community (Hersen & Gross, 2008; Patterson, 1982).

The Singapore government has been known to invest heavily in education and these youths will incur a cost when they drop out of mainstream education (Singapore Department of Statistics, 2018). The social problems caused by youth problematic behaviours meant that Singapore has to allocate resources for treatment and incarceration. Also, these youths will contribute to the unemployment cost if they continue to stay in the prison system through their adulthood. For Singapore, a country without natural resources, human resource is the country’s greatest resource. Each person convicted and sent to prison is one less to contribute to the Singapore economy. For example, in 2013, 5.1% of the Singapore budget for Ministry of Home Affairs, a sum of $197.9 million was allocated to rehabilitate inmates and reintegrate ex-offenders so they can be contributing members of society (Singapore Budget, 2013).

Around the world and in different cultures, problems caused by adolescents’ misbehaviours have been reported to be between 16.5%-40.8% (CDC, 2016) and these behaviours are on an upward trend. It is thus important to examine the development of these antisocial and harmful behaviours and what might contribute to them (Pathak, Sharma, Parvan, Gupta, Ojha, & Goel, 2011).
As discussed in the previous section, although the reported figures in Singapore have indicated a decline in the number of arrests amongst youths in the year of 2017 compared to the same period in the previous year, there is a new upward trend of youths arrested for theft and in possession of weapons (Lee, 2017). Over the years, however, it was also reported that the reoffending percentage had declined (Tan, 2018). It is important that the rate of juvenile delinquency and re-offending continue to go on the downward trend. Hence, one cannot sufficiently stress the importance of research into the field of youth and their developmental outcomes because of its eventual impact on society.

Despite the voluminous research studies conducted on prosocial and problematic behaviours overseas, there is not yet a study which looks jointly at predictors of prosocial and problematic behaviours of adolescents in Singapore. The findings from previous studies conducted were limited to the adolescent population in the country when the studies were undertaken. Current research on child and adolescent behaviours tends to focus either on prosocial or problematic behaviours, although a few studies explored both kinds of behaviours in one single study (e.g., Coie & Dodge, 1998; Eisenberg & Fabes, 1998; Gibbons & Krohn, 1986; Rutter & Giller, 1983).

In a similar vein, there is limited work looking into the influence of fathers’ positive parenting techniques specifically those found in authoritative parenting, and the quality of father and child relationship, since most research on child development tends to focus on mothers (DeKlyen et al., 1998; Phares, 1996). To address this research gap, the current study investigates both the prosocial and antisocial behaviours, as well as, how father’s authoritative parenting style would influence the youth’s behaviours and if the quality of father and child relationship would moderate for the relationships between the variables examined for this study and behaviours.
By investigating the influences of psychopathy, quality of father-child relationship (Support and admiration dimension and Conflict and criticism dimension), father’s authoritative parenting style and family adversity on behaviours for the general adolescent population, this study will contribute greatly to the existing literature on Singapore adolescents in a non-clinical sample. Psychopathy is not easy to treat and it is important for us to understand how it influences the adolescents’ behaviour. It is evident in previous literature that quality of parent-child relationship, parenting styles and family adversity help shape the development of behavioural adjustment in youth. Hence, the continual development of knowledge in this field would give insights into the developmental pathways of adolescent behaviours.

As suggested by previous research, insecure attachment is not itself a form of psychopathology but together with other risk factors, it increases the risk for problematic behaviours in adolescents (Rutter, 1995). Further study on the role of quality of father and child relationship as a moderator in developmental psychopathology is also needed. This would yield a more accurate picture of the risk factors affecting the development of adolescent behavioural adjustment in Singapore.

There is little doubt that much needs to be examined with regards to variables that influence the development of prosocial and problematic behaviours, and how this differs among adolescents (Carroll et al., 2006; Eisenberg & Carlo, 1995; Eisenberg & Fabes, 1998; Eisenberg et al., 1996). First, the findings can help policy makers better assess the risk of problematic behaviour development among children and adolescents, particularly, those below the age of criminal responsibility but are at risk of participating in delinquent activity during early or middle adolescence (Monahan, Steinberg, Cauffman, & Mulvey, 2009). Subsequently, early and specific intervention
for this group can be delineated and the resources allocated, in order to maximize the impact of prevention and developmental efforts.

Moreover, individuals who participated in antisocial acts face difficulties in rehabilitating and some are likely to become chronic offenders (Moffitt, 1993). Thus, identifying risk factors of early problematic behaviours are important because of its implications for enhancing both intervention and preventive efforts.

To address challenges faced by our adolescents before their attainment of adulthood, further investigation of factors which encourage prosocial and problematic behaviours is required. The education system will also be able to make a more holistic decision to the type of preventive measures or developmental programmes that support the adolescents in achieving educational goals. Furthermore, identifying the risk factors present in the youths’ immediate environments would help guide policy-making, programme designs and future research in meeting the needs of youths and their families.

The main focus of this study is to investigate specifically, psychopathy, quality of father-child relationship (i.e., the perceived support and admiration and conflict and criticism dimensions in the father-child relationship), father’s authoritative parenting style and family adversity and the influences of these variables in the development of prosocial and problematic behaviour in adolescents. Analyses will be carried out to establish the variables associated with prosocial and problematic behaviours and their correlations between the variables. Relationship on moderation will also be explored with these variables.
Keeping in view of the existing literature and implication in mind, it is worthwhile to investigate the following research questions.

**Research Questions**

(1) Does psychopathy predict prosocial and problematic behaviours in Singapore adolescents?

(2) Does father’s authoritative parenting style predict prosocial and problematic behaviours in adolescents?

(3) Does family adversity predict prosocial and problematic behaviours in adolescents?

(4) Does the quality of father-child relationship moderate the relationship between psychopathy and adolescent’s behaviours?

(5) Does the quality of father-child relationship moderate the relationship between father’s authoritative parenting style and adolescent’s behaviours?

(6) Does the quality of father-child relationship moderate the relationship between family adversity and adolescent’s behaviours?
Research Hypotheses

(1) Psychopathy will predict prosocial and problematic behaviours in adolescents.
   (a) Psychopathy will negatively influence prosocial behaviours in adolescents.
   (b) Psychopathy will positively influence problematic behaviours in adolescents.

(2) Father’s authoritative parenting style will likely predict prosocial and problematic
    behaviours in adolescents.
   (a) Father’s authoritative parenting style will positively influence prosocial
       behaviours in adolescents.
   (b) Father’s authoritative parenting style will negatively influence problematic
       behaviours in adolescents.

(3) Family adversity will predict problematic behaviours but not prosocial behaviours
    in adolescents.
   (a) Family adversity will not predict prosocial behaviours.
   (b) Family adversity will likely predict problematic behaviours.

(4) The quality of father-child relationship will moderate the relationship between
    psychopathy and behaviours.
   (a) Father’s support and admiration dimension will moderate the relationship
       between psychopathy and prosocial behaviours.
   (b) Father’s support and admiration dimension will moderate the relationship
       between psychopathy and problematic behaviours.
   (c) Father’s conflict and criticism dimension will moderate the relationship between
       psychopathy and prosocial behaviours.
   (d) Father’s conflict and criticism dimension will moderate the relationship between
       psychopathy and problematic behaviours.
(5) The quality of father-child relationship moderate the relationship between father’s authoritative parenting style and behaviours.

(a) Father’s support and admiration dimension will moderate the relationship between father’s authoritative parenting style and prosocial behaviours.

(b) Father’s support and admiration dimension will moderate the relationship between father’s authoritative parenting style and problematic behaviours.

(c) Father’s conflict and criticism dimension will moderate the relationship between father’s authoritative parenting style and prosocial behaviours.

(d) Father’s conflict and criticism dimension will moderate the relationship between father’s authoritative parenting style and problematic behaviours.

(6) The quality of father-child relationship moderate the relationship between family adversity and problematic behaviours.

(a) Father’s support and admiration dimension will moderate the relationship between family adversity and problematic behaviours.

(b) Father’s conflict and criticism dimension will moderate the relationship between family adversity and problematic behaviours.
Organization

This study consists of five chapters. Chapter 1 describes the background and purpose of the study in Singapore context. It outlines the specific research questions and the related hypotheses the study seeks to investigate. More importantly, it provides an introduction to the theoretical framework that guides this study. The chapter ends with a summary of the organization of the different chapters. Chapter 2 presents and discusses the literature review on prosocial and problematic behaviours and the related factors specific to the present study. The factors examined in this study include psychopathy, quality of father-child relationship, father’s authoritative parenting style and family adversity. Chapter 3 describes the methodology of the study, in particular, participants, consent and coding procedure and how the data was collected and analysed. Chapter 4 describes the results and the findings of the relationships of the related variables with prosocial and problematic behaviours for the study. It will also present descriptive statistics of the variables used in the study and the various relationships between the different variables. Chapter 5 will discuss the findings, the limitations of the study and including directions for future research.
CHAPTER 2

LITERATURE REVIEW

To gain a better understanding of the influence of psychopathy, quality of father-child relationship, father’s authoritative parenting style and family adversity on adolescents’ behaviours, as well as the predictors of adolescents’ prosocial and problematic behaviours, it is necessary to review the relevant research literature in these areas. This chapter will summarise and integrate relevant theories and research findings in the following areas: the developmental trajectories of prosocial and problematic behaviours, theoretical perspectives of proposed framework used for this study and the predictors of behaviours on prosocial and problematic behaviours. Finally, the influence of the variables on adolescents’ prosocial and problematic behaviours will be discussed.

Understanding Adolescence and Behaviours

In order to understand the development of adolescents and their behaviours, we review the discussion and empirical findings from previous literature on the growth and changes in the following domains: physical, social and emotional, cognitive and moral. It is evident in many research literature, that this developmental stage is often described as “Sturm and Drang” which means “storm and stress” (Hall, 1904). The changes in physiological and psychological aspects are to meet the demands of the adolescent’s new role in society.

During this transition, the adolescents may face complex problems and dilemmas that challenge their choices. Along with the uncertainties that they face during this period, comes the conflicts within themselves and with people around them. Arnett (2013) proposed that adolescents face three potential big disruptions in their
lives: (1) changes in relationship with parents (mostly increase in conflict); (2) disruptions in their moods; (3) increased vulnerability to at-risk behaviours.

Adolescence starts with biological changes within the physical self (i.e., puberty) and ends when one is given adult’s role in work and responsibilities (Owens, 2002). The age range at this stage can differ from person to person. Hence it is documented in many studies that adolescence is a distinctive period that one goes through before reaching the status of adulthood (e.g., Owens, 2002). According to Owens (2002), early adolescence range from ages 10 to 13 and is characterised by puberty changes. From this stage, the individual transits from early to middle adolescence which involves identity related issues such as searching and forming of one’s identity (Owens, 2002). Finally, the individual will proceed into late adolescence stage with age ranges from 17 to 20, and subsequently move on to adulthood (Owens, 2002).

To better understand adolescents and their behaviours, we could begin by understanding the primary development of the adolescents in terms of their physical, social, and emotional, cognitive and moral development. Even though the individual factors are distinct, they are constantly intertwined and affect one another. For instance, the development of the cognitive domain will influence the emotions, cognitions, and social capabilities of the adolescent. In turn, the development of certain abilities in the socio-emotional and behavioural domain may alter how the adolescents interact with their parents.

During this developmental stage, there are changes to the physical development due to the gonadotropin releasing hormone. Boys and girls differ in their biological maturation (Hazen, Schlozman, & Beresin, 2008). According to Erikson (1980), during
this period of development, the adolescents will experience formation and diffusion of their identities and their roles.

During adolescence, apart from experiencing physical changes, the adolescent goes through transformations in their cognition and socioemotional development as well. The adolescent’s cognitive competency increases throughout adolescence. He/she has a higher capacity in formal thinking and is more able to think abstractly. They begin to have a sense of self and socially, they are capable of forming intimate relationship with others.

Even though each person is unique and have their distinct paths in development, the adolescents have common milestones in their development which includes gaining their autonomy (their independence versus dependence), managing the changes in the relationship with their parents, with increased need for privacy, and having idealization of others (e.g., Peterson, 1988). This period marks the adolescent gaining autonomy and having the ability to stand independent of their parents. In the process of gaining more autonomy from their parents, they rely on the coping mechanisms they had learned from their parents or what they have been put through by their parents. Despite their autonomy, this period also signifies a time where they will require more support and nurturance from the caregivers. Therefore, parents should keep an open communication channel with their children (Hazen et al., 2008).

During this period, there will be changes to the expectations in the parent and child relationship. As a result of the surge in hormones and changes related to their physical development, the adolescent is likely to be affected by the impact of puberty and is more easily irritated. He/she can be negative and is likely to go against familial rules thus resulting in conflict with his/her parents (Buchanan & Eccles, 1992; Laursen, Coy, & Collins, 1998). In turn, the parents are likely to respond with increased
supervision and monitoring of the adolescent’s behaviours and an expectation for compliance with respect to expectations. This increase in control if done too intensely will cause more friction between the parents and child. At the same time, the parents also expect the adolescents to have greater maturity at this stage to manage the issues around them. Thus, their expectations could become more than what the adolescents are able to follow through (Freedman-Doan, Arbreton, Harold, & Eccles, 1993). Eventually, this could lead to more dissatisfaction and conflict between the parent and adolescent.

Adolescents who connect well with their parents are less likely to be influenced by peers or pressured to engage in problematic behaviours. One possible reason is that those individuals who have a good relationship with their parents tend to have good assertive skills, better self-esteem and a good sense of self-identity. For example, closeness with parents have been shown to discourage drug use in adolescents (Kandel & Andrew, 1987).

In many studies, most of the arguments between parents and adolescents centred around mundane matters like home and school work, the adolescent’s friends and socialisation, household chores, breaking rules and not meeting parental expectations in terms of school results (Eberly & Montemayor, 1998). In some instances, it is simply the new found cognitive ability of the adolescents to present their arguments and challenge the rules and perspectives of their parents that may cause conflict. Another possible type of conflict could arise is a result of the adolescents forming their own opinions about issues around them and about the world. The arguments about such issues with their parents will allow the adolescents to form their own opinions and views of the world. They form their values, views and beliefs that make them a distinct member of the family. One other form of the most common conflicts between parents
and adolescents revolves around control and freedom for the adolescent. It is a period that the parents and adolescent make demands and negotiate their expectations. Hence, there is an increase in tension and conflict in this part of the process and it is not necessarily bad as it helps the members realign and define their roles and relationships in the family (Muss & Porton, 1998).

Although there are reports on youths who show alienation and narcissism, most children and adolescents conform to rules and are able to socialise in a fair and respectful manner (Damon, 1995). The development of the moral domain rely heavily on the processes of family, community and society to provide the adolescent the experience of what is right and wrong as guided by the social environment.

Over the years, researchers begin to advocate the need to recognise the factors related to positive youth development (e.g., Lerner et al., 2005). Hence, it is not surprising that there is an increased surge of interest centred around the study of positive adolescent behaviours (i.e., prosocial behaviour). In their attempt to better understand children and adolescents prosocial and problematic behaviours, researchers proposed a number of explanations for both types of behaviour. From the emotion theories school of thought, for instance, it is suggested that the inability to regulate one’s negative emotions could increase problematic behaviours and decrease prosocial behaviours in an adolescent (e.g., Crick & Dodge, 1994; Dodge, 1986; Eisenberg, Fabes, Guthrie, & Reiser, 2000; Eisenberg, Fabes, & Spinrad, 2006; Eisenberg, Pidada, & Liew, 2001; Nelson & Crick, 1999). There is enough research that emphasize that children and adolescents who are aggressive and low in prosocial behaviour struggle with empathy, guilt, perspective-taking, and moral reasoning (e.g., Carlo, 2006; Carlo, Mestre, Samper, Tur, & Armenta, 2010; Hoffman, 2000).
With their advanced cognitive abilities at adolescence, these individuals are able to encode and interpret social cues, clarify goals, develop strategies to achieve the goals, evaluate the strategies and respond accordingly during a social interaction process (Crick & Dodge, 1994; Dodge, 1986). For example, research has demonstrated that aggressive children and adolescents have lower abilities in processing social information when compared to children who are not aggressive (e.g., Dodge, Price, Bachorowski, & Newman, 1990; Katsurada & Sugawara, 1998; Yeung & Leadbeater, 2007). They tended to choose more aggressive strategies than positive relationship oriented goals during their interaction with others (De Castro, Veerman, Koops, Bosch, & Monshouwer, 2002; Dodge, 1980).

Children with higher prosocial tendencies are more likely to give others the benefit of the doubt when they encounter ambiguous and conflictual interaction situations compared to children with lower prosocial tendencies (Nelson & Crick, 1999). Additionally, these adolescents who are prosocial will use more socially competent strategies to resolve hypothetical conflicts. Likewise, these children who have lower prosocial tendencies have higher levels of negative emotions and they tend to be easily over-aroused when their needs conflict with others (Eisenberg & Fabes, 2006).

Empathy, is an emotional response that arises from understanding of another person’s emotional state and feeling similar to what the other person is feeling and is presumed to be linked with feelings of responsibility for others. Thus, empathy is known to promote prosocial behaviour and inhibit aggressive behaviour (Eisenberg et al., 2006; Feshbach & Feshbach, 1986). There are substantial research studies that support the links between empathy and prosocial behaviours (e.g., Carlo, Raffaeli, Laible, & Meyer, 1999; Eisenberg et al., 2006; Laible, Carlo, & Roesch, 2004).
In addition, a number of research studies have shown that higher levels of perspective-taking and moral reasoning are associated with higher tendencies for prosocial behaviours but lower levels of aggressive behaviours. The ability for perspective taking is important to understand the needs of others, especially for those in distress (Underwood & Moore, 1982). Furthermore, perspective-taking enables children to understand the consequences of their actions on others and to empathize with the victims of their actions. Therefore, perspective taking should also encourage the adolescents to have feelings of responsibility for others, which in turn, could lead to higher levels of prosocial behaviour and lower levels of aggressive behaviour. Perspective taking is correlated to prosocial positively and antisocial behaviours negatively (e.g., Carlo et al., 2011; Iannotti, 1978; Oswald, 1996).

Also, the adolescents’ ability to engage in moral reasoning is tied to their development of prosocial or antisocial behaviours. It is often that in situations of helping others, and when there is a conflict to their needs, adolescents are faced with a dilemma. Hence, having the ability to reason and understand the needs of others will likely influence the adolescents to choose prosocial acts in such circumstances (Carlo, Koller, Eisenberg, Da Silva, & Frohlich, 1996).

During adolescence, the child transits to another phase in the developmental life span. Apart from being more competent to engage in prosocial behaviours, the adolescent also enters the stage where the presence of risk factors within him/herself and in his/her environment will likely interact to predispose him/her to delinquent behaviours.

Prior empirical literature has highlighted two types of problematic or delinquent behaviour (Moffitt, 1993; Moffitt et al., 2002). Adolescent limited antisocial behaviour, the most common type of problematic behaviour, is considered to be temporary and
typically occurs during the phase of adolescence. The behaviour is not consistent and will likely not persist through late adolescence or adulthood. Life course persistent problematic behaviour on the other hand, is less common but considered more difficult to intervene. This antisocial behaviour has an early onset and persists through the lifespan. The problematic behaviour will progressively become more severe and these explain most of the criminal activity later in life. Many studies have discussed the forces such as contributions by biological factors, cognitive processes, and adverse events in the family that are associated with problematic behaviours.

Some studies proposed that the some biological associations are hereditary and that these factors helped contribute to children’s and adolescents’ aggressive and violent behaviours (Dionne, Tremblay, Boivin, Laplante, & Perusse, 2003). Likewise, other studies found youths with difficult temperament to be easily affected by emotions, short attention spans and aggressive acts (Campbell, 2000). The aggressiveness, irritable temperament and emotional traits put them at a greater risk of engaging in conflict with their peers which might further trigger an aggressive response.

Perceptual and cognitive skills have been known to play a role in behaviour and development. Adolescents are more likely to respond aggressively when they have fewer skills in understanding and interpreting intent while interacting with others (Crick & Dodge, 1994; Dodge & Rabiner, 2004). Moreover, adolescents with psychopathic traits also tend to act more impulsively and less willing to delay gratification or pleasure (Chamberlain & Patterson, 1995).

Problematic behaviour is mostly linked to family factors such as lack of, or insufficient supervision by parents. As discussed previously in chapter one and later in subsequent sections of this chapter, absent parents, parents not aware of the adolescents’ whereabouts or activities, are factors that relate to adolescents getting involved in
delinquent acts (Pettit et al., 2001). Conflict between parents due to their marital relationship also increases the risk of problematic behaviours in adolescents. When children witness or observe the frequent fights and arguments between their parents, they are likely to learn and emulate the confrontations, the negative interaction patterns and the conflict management their parents use (Ingoldsby et al., 1999).

In adverse environments, children and adolescents are at a higher risk of exhibiting problematic behaviours. For example, instances of aggression and problematic behaviour are higher among children and adolescents who experienced financial difficulties compared to their counterparts who have more economic resources (Keiley et al., 2000). The impact and influence can be explained. To illustrate, when the family is exposed to economic strain or poverty, it can cause stress for parents which in turn may exhibit more aggressive form of parenting style such as harsh and punitive punishment measures (Tolan, Gorman-Smith, & Henry, 2003).

Their limited ability to sense and predict danger together with their lack of capability to think and look at long term consequences, tend to have a negative impact on their development. The risks also increased through their changes in physical maturity, increased sexuality and more advanced cognitive competencies. It is documented widely in many previous literature that the adolescent period is considered to be a season of frequent antisocial acts, rule breaking and criminal-related behaviours (Arnett, 1999). However, when the exploration and experimentation in the environment is not endangering the youth, risk taking is considered healthy for the development of self in an individual (Hazen et al., 2008).

There are many factors that contribute to adolescent behaviours (prosocial and problematic behaviours) (Fox & Levin, 2003). Using a meta-analysis to examine 66 longitudinal studies of adolescent population, Hawkins and colleagues (2000) further
concluded that the more risks the individual is exposed to, the higher the risk of one engaging in violent behaviour. As with previous studies, in a follow up study with boys who were exposed to multiple risks at 8 years old, Sourander and colleagues (2006) found that the accumulated number of risks was strongly associated with higher involvement in criminal behaviour when they were 16-20 years old.

The emergence of the formal operational thinking capabilities and the ability to process their thoughts affect the adolescents’ identity and self (Petersen, Compas, Brooks-Gunn, Stemmler, Ey & Grant, 1993). Hence, the role of parents, their parenting styles and factors in the immediate environment of the adolescents will have a significant impact on the adolescents. The following sections will review the existing theoretical and empirical studies of the variables related to this study. They will also shed some light on understanding adolescents’ behaviour development.

Development Trajectories of Prosocial and Problematic Behaviours

Prosocial Behaviours

There is on-going interest in adolescence research because this period is characterized by greater complexity in their social behaviour development which are influenced by their interactions with their peers and parents, and transiting into their new roles and responsibilities (Arnett, 2013; Lai, Siu, & Shek, 2015). Thus, with an increase in their social competency during this developmental stage, they have a higher tendency to engage more prosocial behaviours (Arnett, 2013; Wentzel, 2014).

Prosocial behaviour represents “a range of acts that are considered by the society to be generally advantageous to other people” (Carlo & Randall, 2002; Eisenberg, 2002; Eisenberg, Fabes, & Spinard, 2006; Penner, Dovidio, Piliavin, & Schroeder, 2005; Schroeder, & Graziano, 2015). Prosocial behaviour includes: “helping, sharing,
cooperating, providing support, and taking part in volunteer activities” (Eisenberg, 2004).

Prior studies have reported that there are five commonly known forms of prosocial behaviours among adolescents and young adults. The five forms of prosocial behaviours are emotional, dire, compliant, public, and altruistic (Carlo & Randall, 2002). In relation to the forms of prosocial behaviours, there are studies that examined the difference in context, opportunities to act in a prosocial manner and the motivations of these helping behaviours (Jessor & Turbin, 2014; Ngai & Xie, 2017; Nie, Li, & Vazsonyi, 2016).

Emotional, dire, and compliant prosocial behaviours take place in contexts where individuals are more likely to participate in the helping behaviours in specific contexts. One example of emotional prosocial behaviours is comforting another individual. Dire prosocial behaviours mean helping others in situations of crisis. Compliant prosocial behaviours happens when help is sought or asked. In contrast, public and altruistic prosocial behaviours are behaviours that tap into motivations of individuals for helping. Public prosocial behaviours refer to help done to show others. Finally, altruistic prosocial behaviours is helping without expecting any return for one’s self (Carlo & Randall, 2002). It is consistently reported in previous literature that these five forms of helping are unique constructs (McGinley, Opal, Richaud, & Mesurado, 2014).

For most research, prosocial behaviour is conceptualized as a universal and one dimensional construct (Penner et al., 2005). The studies on prosocial behaviour used different methods to examine prosocial behaviour. These include approaches, such as observation for the presence and occurrence of specific types of prosocial behaviour in a natural setting (Gurven & Winking, 2008), or observation in a laboratory setting (e.g.,
Rao et al., 2011), or using standardised pen and paper, and self- or other-reported
behavioural measures (e.g., Carlo & Randall, 2002; Rushton, Chrisjohn, & Fekken,

From previous studies, it was noted that some types of prosocial behaviours
were committed in different contexts, such as during critical dire situations or when
one’s identity is anonymous (Carlo, Eisenberg, Troyer, Switzer, & Speer, 1991). These
studies hypothesized that in these different contexts, individuals may be more motivated
to respond in prosocial acts (Carlo et al., 1991).

In an early study of moral functioning, Hartshorne and colleagues (1930) found
weak interrelations among the prosocial behaviours measures. Similarly, Iannotti (1985)
found that relations among several measures of prosocial behaviours were not strong.
Other investigators demonstrated that specific types of perspective taking and social
cognitions were related to specific types of prosocial behaviours (Carlo et al., 1991;
Eisenberg, 1986; Iannotti, 1985).

According to evolutionary theory, humans continued with the practice of
prosocial behaviours because it was essential and it supported survival (Hastings,
Utendale, & Sullivan, 2007). However, the traditional view of evolutionary theory states
that living beings are basically selfish and competitive, and devotion to the welfare of
others has been regarded as non-defendable (Dawkins, 1976). Several sociobiologists
have proposed models to demonstrate how selfless behaviours can promote “genetic
survival, through social reinforcement of altruism” (Sober & Wilson, 1998).
Psychophysiologists have shown that biological processes provide an underlying
foundation for empathy and through behaviours that help others. This provides further
evidence that prosocial behaviours are for survival (Hastings, Zahn-Waxler, &
McShane, 2005; Preston & de Waal, 2002).
Furthermore, psychoevolutionary theory also supports the functional theory of emotions (Hastings et al., 2005). There is substantial evidence for the link between the affective and behaviour components, with the prosocial behaviour development (Eisenberg & Miller, 1987). According to Hastings and colleagues (2005), “the affective root of actions that help others is empathy.” Empathy is the emotional and affective capacity to understand the feelings of others and to some extent feel their experiences that promote empathy (Hastings et al., 2005). Empathy motivates attachment and actions of caring that enable social and emotional connection with others.

In addition, behaviour genetics analyses have claimed that genetic and heritable influences contribute to prosocial acts (Hastings et al., 2005). Many studies also concurred that both genetic and similarly shared environmental influences make significant contributions to children’s development of prosocial behaviours (Deater-Deckard, Dunn, O’Connor, Davies, & Golding, 2001; Scourfield, John, Martin, & McGuffin, 2004; Stevenson, 1997; Zahn-Waxler, Robinson, & Emde, 1992) and consistently from birth to the early childhood years (Zahn-Waxler, Schiro, Robinson, Emde, & Schmitz, 2001).

Another perspective to explain prosocial behaviour is using social learning perspective which advocated that parental cooperation and conflict resolution through communication and compromise are positively linked to children’s and adolescents’ competence in social situations. Parents can influence child development by reinforcing expected interaction and communication behaviours. Parents also influence and teach their adolescents appropriate strategies and skills to handle social situations (Domitrovich & Bierman, 2001).

It is important to examine the relationship between parenting behaviours and adolescent development when investigating prosocial behaviours. Understanding the
role of parents in adolescents' social development has long been an interest among scholars. Previously accumulated research proposes that there are features of positive parenting such as warmth in parenting, inductive discipline practices and authoritative or democratic parenting that encourage and facilitate adolescents’ healthy adjustment (Eisenberg & Valiente, 2002; Krevans & Gibbs, 1996).

Prior research in adolescence and prosocial behaviour reported attachment with parents (Eberly & Montemayor, 1999) and parent and child relationship (Padilla-Walker & Christensen, 2011) to be linked to an increased demonstration of prosocial behaviours. The relation between parenting and adolescents’ prosocial behaviour is linked to how parents socialize their adolescents and nurture personal characteristics like ability to empathise and self-regulate, both of which are closely related to prosocial behaviour (Grusec & Goodnow, 1994; Padilla-Walker & Carlo, 2007).

Additionally, studies that examine parenting practices and prosocial behaviours in adverse environments (e.g., low-income families) are limited and scarce. For example, this population may face risks and adverse events or situations that result in high levels of stress (Conger & Elder, 1994). These adverse environment variables may have an impact on the individuals’ motivation and capacity to use positive parenting practices such that positive adolescent adjustment is compromised due to reduced cognitive and emotional resources in the families during stressful period or conditions (McLeod & Shanahan, 1993).

There is definitely an increase in interest among researchers to investigate the correlates of prosocial behaviours among different cultures and groups of children and adolescents (Carlo, Fabes, Laible, & Kupanoff, 1999). Even though there are some studies that have investigated the associations between parenting behaviours and practices with prosocial behaviours among western and international samples (e.g.,
Knight & Carlo, 2012), research on prosocial development in Asian cultural contexts is still limited.

The display of prosocial behaviours has been linked to harmony in interpersonal relationships and is evident in previous studies (Keyes & Ryff, 1999; Penner et al., 2005). Prosocial behaviours has been consistently associated with social self-efficacy (Bandura, Caprara, Barbaranelli, Pastorelli, & Regalia, 2001), prosocial self-schemas (Froming, Nasby, & McManus, 1998), and higher self-esteem (Laible et al., 2004). There is substantial research that shows that prosocial behaviours are desirable social actions and are correlated with other factors such as cognitive and psychological health, lower aggression and problematic behaviour, ability to regulate one’s self, higher self-esteem, better academic outcomes, and better interpersonal relationships (Carlo, 2014). Therefore, prosocial behaviours are indicative of one’s healthy social emotional and behavioural development, which is critical for the society at large because it helps promotes the beneficial wellbeing of people in the community (Randall & Wenner, 2014).

The beneficial behavioural outcomes of prosocial behaviour include lower levels of poor school related outcomes (e.g., course failure, suspension from school, early dropout from school) substance and drug abuse, and aggressive behaviour (Carlo, Crockett, Wilkinson, & Beal, 2011; Eisenberg et al., 2006; Moore & Allen, 1996). There is more to learn about prosocial development during adolescence, and much of the existing research did not take a wide enough approach to examine prosocial behaviour. Moreover, although there has been clear support for the importance of fostering prosocial behaviour, little is known about prosocial development in the long term for the adolescent at this developmental stage.
As mentioned in the previous section on the cognitive and socio-emotional development during adolescence, with increase in moral reasoning, sympathy, and social understanding capabilities during adolescence, it is not surprisingly to assume that competencies in prosocial related skills and display of prosocial behaviours will increase too (Carlo, Eisenberg, & Knight, 1992; Eisenberg et al., 2006).

In addition, the ability to have empathic responses are evident and begins early in an individual’s development. It becomes more sophisticated as one’s awareness of emotions and cognitions becomes more developed. There is also evidence in research reporting the stability of prosocial tendencies across time and context (Carlo et al., 2007; Davis & Franzoi, 1991; Eisenberg et al., 2002; Eisenberg et al., 1999; Wentzel, 2003).

According to Eisenberg and Fabes (1998), prosocial behaviour increases from childhood to adolescence. However, there was little evidence of an increase in prosocial responding across adolescence (from age 12 to 17 or 18), even though prosocial behaviour showed an increase in adolescence during a non-natural setting observation and when target of help was a child instead of an adult (Eisenberg & Fabes, 1998). Although adolescents display more prosocial behaviour when compared to younger children, the change in adolescence was only reported for some types of recipients or specific types of studies. However, studies specifically looking at change during adolescence showed a decline in prosocial behaviours in later adolescence (Carlo, Crockett, Randall, & Roesch, 2007; Nantel-Vivier et al., 2009). Some researchers proposed that the change reported in prosocial behaviour varied because the role of the reporter differed (i.e., child or parent) and was not linear in nature (Eberly & Montemayor, 1999).
Additionally, as mentioned earlier, there was a link between empathy-related responding and prosocial behaviour. There was an age-related increase in empathy-related responding in situations in which empathy or sympathy was directed towards people who were of no relation to the individual (Eisenberg & Fabe, 1996). Eisenberg and Fabes (1996) also reported an age-related increase in empathy-related responding (empathy or sympathy) but there was no break down by age in their research findings. In previous studies of empathy-related responding, results regarding age related trends in empathy-related responding in adolescence showed consistency. It was evident that there was an increase in empathy-related responding from childhood into adolescence (Davis & Franzoi, 1991; Eysenck, Easting & Pearson, 1984; Lennon & Eisenberg, 1987). Strayer and Roberts (1997) reported that empathic sadness and display of concerned facial reactions increased with age when the participants were tasked to respond to video recording of affective-evoking films.

There is also substantial findings to support individual differences in preadolescents’ and adolescents’ prosocial behaviour and empathy-sympathy are moderately consistent in various contexts (e.g., Dlugokinski & Firestone, 1973; Eisenberg, 1990; Small, Zeldin, & Savin-Williams, 1983; Zeldin, Williams, & Small, 1984). Eisenberg and colleagues (1999) reported that the tendencies for prosocial behaviour starting from early childhood years until early adulthood was partially mediated by individual differences in sympathy. It is possible that prosocial behaviours in adolescence is consistent because of the stable nature of sympathetic responding. The stability of prosocial behaviours in adolescence could mean that there is consistency in the individual differences in prosocial values, goals, and/or self-schema for the adolescents (Davis & Franzoi, 1991; Eisenberg et al. 2000; Eisenberg et al., 1999; Wentzel, 2003).
Aligned with theory, adolescents’ empathy-related responding, like sympathy, has a positive correlation with goals of prosocial behaviours and attitudes (Eisenberg, 1986; Eisenberg & Fabes, 1998; Eisenberg et al. 1991, 1995; Hoffman, 2000; Krevans & Gibbs, 1996; Staub, 1979). Sympathy, the ability to feel sadness or care for another person in a particular situation or condition has been associated with prosocial behaviour (Eisenberg et al., 2006; Knafo & Plomin, 2006). For example, in a study on early adolescents, researchers showed that sympathy is associated with some forms of prosocial behaviours (e.g., prosocial behaviours in emotional contexts) but not others (e.g., anonymous prosocial behaviours) (Carlo, Hausmann, Christiansen, & Randall, 2003). Furthermore, some types of prosocial behaviours might develop later in life while others might be more gender specific, e.g., exhibited by either girls or boys (Eisenberg et al., 2006).

The ability to self-regulate is also necessary for one to function competently in a social context (Carlo, Crockett, Wolff, & Beal, 2012; Eisenberg, Liew, Pidada, & Untari, 2004; Eisenberg et al., 2006). There is also evidence that adolescents who are able to regulate their emotions, exhibit perspective-taking, show sympathy, and have skills in moral reasoning, tend to display higher levels of prosocial behaviours and lower levels of problematic behaviours (Carlo, 2006; Eisenberg et al., 2006).

However, prosocial behaviours are not the opposite of antisocial behaviours, as some adolescents were found simultaneously to have high levels of aggression and prosocial behaviours (Haapasalo, Tremblay, Boulerice, & Vitaro, 2000; McGinley & Carlo, 2007; Pulkkinen & Tremblay, 1992; Zamboanga & Carlo, 2007).

Despite this increase in research in this area, our knowledge about prosocial behaviours is still limited. For example, studies of mediating and moderating factors that consider the individual processes and social influences on prosocial behaviours are
uncommon (Eisenberg & Fabes, 1998). There is very little known research about prosocial behaviours beyond early development phases (Fabes et al., 1999). There are also challenges to the investigation of prosocial behaviours as the methods for research remain complex and interspersed with other difficult problems (Eisenberg & Mussen, 1989). Thus, the current study sets out to investigate the associations among familial and individual factors such as parenting styles, family adversity and adolescents' individual traits, and ascertain how these factors enhance or promote positive social behaviours among adolescents.

**Problematic Behaviours**

Antisocial and problematic behaviours in adolescents can escalate into very challenging and serious social problems because of their impact on individuals, their families, their immediate neighbourhoods and communities, and the society (Loeber, Farrington, Stouthamer-Loeber, & Van Kammen, 1998). For instance, Patterson (1982) defined problematic behaviours as a group of behaviours that comprise aggressive behaviours, throwing temper tantrums, lying, stealing and violent behaviours, among others. Likewise, Elliot and colleagues (1998) explained that problematic behaviours include causing intentional physical hurt, intimidation and causing damage, and sometimes attacking another individual resulting in threatening one’s life.

Problematic behaviours also include “behaviours resulting from the inability of an individual to respect the rights of others, or conform to social norms, or meet the expectations of authorities” (Frick, 1998). According to Ma and Shek (1996), problematic behaviours of adolescents include deviant behaviours such as truancy, or reading pornographic materials, defying parents and demonstrating aggressive behaviour. Problematic behaviours is a strong predictor of maladjustment problems.
during later adult years (Kohlberg, Ricks & Snarey, 1984) and is considered to be one of the most expensive mental health issues (Kazdin, 1994).

For some authors, they defined deviant behaviours to be characterised by the individual refusing to follow the rules set but it does not mean these violations necessarily break the law or warrant legal punishment (Emler & Reicher, 1995, 2005). Deviant and problematic behaviours is a societal construct as each society defines what is acceptable socially. Such behaviours include acts that break the law such as the use of weapons, dealing with drugs, theft or acts that infringe the social standards set by the society like smoking or consumption of alcohol (Sanches, Gouveia-Pereira, & Carugati, 2012).

As discussed previously, adolescent development involves a process of exercising independence, and discovering one’s identity and the social roles one plays in the environment (Allen et al, 1990; Irwin, 1993; Jessor & Jessor, 1977; Lavery et al, 1993). Adolescents engage in behaviours that represent the status of an adult they want to be during this developmental stage (e.g. drinking and smoking) (Maxwell, 2002). However, these at risk activities like drug abuse, sexual acts without protection, and other problematic behaviours can compromise health, and at the same time be detrimental to adolescents’ physical and psychological development (Jessor & Jessor, 1977).

As adolescents grow and form their own identity, they tend to test boundaries set by their parents and resist complying with the rules and expectations set by their parents. Their disobedience may escalate into more severe behavioural problems and increase the risk of their behaviour spiralling beyond control.

Later delinquency is predicted by the form and type of early problematic behaviours such as aggression or lying (Stouthammer-Loeber & Loeber, 1988).
According to Stouthammer-Loeber and Loeber (1988), the state and condition of how these problematic behaviours take place can be an indicator of an increased risk for problematic behaviours. Stouthammer-Loeber and Loeber (1988) also reported that aggression (especially with hyperactivity), lying, drug use, truancy, stealing and general problematic behaviours (e.g. destructiveness, daring, and disruptive behaviours at school) predicted later delinquency.

As mentioned earlier in Chapter one, a study conducted by Tam and colleagues (2007) with 54 juvenile offenders incarcerated at Singapore’s Kaki Bukit Prison Education Center reported that the motivation for the offenders to engage in problematic behaviours and commit offenses were largely due to provocation by others, anger, boredom, thrill seeking, alcohol, drugs, and money. Furthermore, Loeber (1982) stated that early onset of problematic behaviours, together with high frequency and variety of problematic behaviours, occurring in multiple settings could increase the likelihood of problematic behaviours continuing in children. In Glueck and Glueck (1959), early onset seems to be associated with repeat offending, higher problematic behaviours rate per time interval, and the severity of crimes committed by these juveniles.

According to Stouthammer-Loeber and Loeber (1988), children who participate in problematic behaviours in their early years are more at-risk to continue with problematic behaviours. Previous studies have regarded problematic behaviours as following a single pathway, focusing on the type of the behaviour disorders such as not respecting the rights of others (e.g. theft) or conforming to social norms (e.g. runaway repeatedly or for a long period of time) (e.g. Chaiken & Chaiken, 1984; Hare, Hart, & Harpur, 1991; Jesness & Haapanen, 1982). However, later studies explained the development of these behaviours using different trajectories (e.g. Farrington, 1991;
Moffitt, 1993; Patterson et al, 1992). One of the well-known theories is Moffitt’s differentiation between life-course persistent and adolescence-limited problematic behaviours (Moffitt, 1993; Moffitt et al., 1996). Moffitt (1993) presented an explanation and key difference between the two groups. According to Moffitt (1993), the childhood-onset group is likely to begin problem behaviours early, repeat delinquent activities during adolescence and continue throughout adulthood but the adolescent-onset group is likely to discontinue delinquent activities during late adolescence and early adulthood (Moffitt, 1993).

Moffitt’s theory posits that the life-course persistent offenders start their problematic behaviours early in childhood and tend to have neurodevelopmental impairments. This group of children will likely have under controlled temperament, limited and poor verbal abilities or delayed development of motor skills (Moffitt, 1993; Moffitt et al., 1996). They may have suffered from a host of biological and psychological deficits, and behavioural disorders such as, attention-deficit/hyperactivity disorder (ADHD) and oppositional defiant disorder (ODD) (Loeber, Green, Keenan, & Lahey, 1995; White, Moffitt, Earls, Robins, & Silva, 1990) and impulsivity (White, et al., 1994). These disadvantaged conditions inhibit their acquisition of skills and compromise their ability to negotiate interpersonal conflict and regulate emotions (Moffitt, 1993). There is no lack of evidence from previous studies that documented children with deficit in these skills from birth, displaying a higher propensity to engage in behaviour problems across the life span (e.g. Farrington, 1989; Hawkins et al., 1998; Mannuzza, Klein, Konig, & Giampino, 1989).

Moffitt (1993) described a second trajectory, represented by a large majority of young people who displayed adolescent-limited problematic behaviours. Problematic behaviours start in adolescence and are thought to be temporal for this group of

71
adolescents (Farrington et al., 1990; Moffitt, 1993). For this same group, Fortin (2003) explained that the problematic behaviours are not due to psychological deficiencies in the individual or adversity experienced during childhood, but were associated with risk factors that are related to participating in the social environment of adolescent peers (Fortin, 2003).

According to Maxwell (2002), the adolescent-limited type has strong tendencies towards rejection of authority and status quo. Past research has shown that they are likely to be motivated by adult privileges (e.g., alcohol, drug and cigarette use) (e.g., Allen et al., 1990; Jessor & Jessor, 1977). These adult privileged behaviours enable them to achieve autonomy (Allen et al., 1990; Irwin, 1993; Jessor & Jessor, 1977; Lavery et al., 1993). In addition, the adolescence-limited type is thought to develop primarily through close association with, and copying the behaviours of deviant peers (Moffitt, 1993).

Adolescents are attracted to new challenges and ideas and tend to experiment more during this stage of their life (Chambers et al., 2003; Rice & Dolgin, 2005). They have a higher propensity to seek feelings of sensation, thrill and are more susceptible to boredom (Mannaa et al., 2013). Behaviour problems can be a consequence of indulging in behaviours that are arousing, stimulating, new or sensation-seeking in early years of life (Albert & Steinberg, 2011; Eisenberg, Fabes, Guthrie, & Resiser, 2000; Morris et al., 2007; Oshri, Tubman, Morgan-Lopez, Saavedra, & Csizmadia, 2013; Zuckerman, 2007).

Adolescents may also be easily influenced by their peers because of their need for acceptance from these peers in their social environment (Beyers et al., 2003). Hence, they indulge in risk-taking behaviours (e.g., sexual activities, dating, alcohol consumption and smoking) to attain peer acceptance (Johnson et al., 2008; Muss &
Porton, 1998; Rolison & Scherman, 2003). Thus, it is evident that adolescents are likely to take more risks and participate in activities associated with high sensation-seeking (Johnson et al., 2008). Due to the volatile and uncertain outcomes, these risk-taking behaviours could have negative consequences (Furby & Beyth-Marom, 1992; Igra & Irwin, 1996; Irwin, 1990).

A substantial amount of literature and research has documented the additional factors or variables associated with the development of problematic behaviours in adolescents. Apart from the biological and genetic influences, the familial and events happenings in the environment (e.g., persistent conflict in the family, harsh punishment and negative parenting, rejection by parents, financial difficulties) around the adolescent could play a crucial role in adolescent problematic behaviour development (e.g., Gardner, Ward, Burton, & Wilson, 2003; LoeberShaw et al., 2003; Scaramella & Leve, 2004; Shaw, Keenan, & Vondra, 1994).

Therefore, a better understanding of the variables associated with the development of problematic behaviours among adolescents is needed. These findings from this study will have implications for further research, prevention, and treatment in adolescent behaviour development.

Relationship between Prosocial and Problematic Behaviours

It is not unusual to think that the relationship between prosocial and problematic behaviours as direct opposites or antithetical (Hastings, Utendale, & Sullivan, 2008). The former includes caring about and acting toward the well-being of others (Eisenberg et al., 2006). However, the latter comprises a display of damaging, hurtful, and denigrating actions due to resentment and hostility towards others (Hawkins, Catalano, & Miller, 1992; Siegel & Senna, 1994). Therefore, it is not surprising that individuals
who engage in more prosocial behaviours than their peers, also engage in fewer problematic behaviours (Hastings et al., 2008).

On the other hand, there are also studies reporting the co-occurrence of both prosocial and problematic behaviours in the same person (Hastings, Utendale, & Sullivan, 2008). It is also evident in developmental research that young children could also exhibit both types of behaviours (Hastings, Utendale, & Sullivan, 2008). In addition, Miller and Eisenberg (1988) reported in their meta-analysis that there is a negative correlation between empathy and sympathy with antisocial characteristics since childhood and this connection continues to increase with age. However, the study also reported that empathy and aggression were positively correlated in younger children, supporting other studies which demonstrated that the relationship between early prosocial and antisocial behaviours can be positive (Gill & Calkins, 2003; Miller & Eisenberg, 1988). Studies have reported that children from age 6 to age 10 may act in a more aggressive manner in their interactions with others (Eron, Huesmann, Brice, Fischer, Mermelstein, 1983; Hartup, 1974). However, it is also during this same period, these children display more prosocial behaviours like sharing (Rushton & Weiner, 1975) and helping others (Green & Schneider, 1974). Hence, these studies provide evidence that prosocial and problematic behaviours do not necessarily have a mutually exclusive relationship during the early developmental years.

The results of previous studies also suggested that early onset problematic behaviours can be a risk factor for later impairment in the ability to display prosocial behaviours, and early prosocial behaviours prevents later problematic behaviours (Haapasalo, Tremblay, Boulerice, & Vitaro, 2000; Hay & Pawlby, 2003; Keane & Calkins, 2004).
According to symbolic interaction and social cognitive theories, individuals strive for consistency in their behaviours (Bandura, 1986; Carlo & Randall, 2002). For example, when an individual engage in high levels of prosocial behaviours, he/she will be less likely to engage antisocially, in the future to maintain consistency in their beliefs, attitudes, and behaviours.

There is substantial evidence that problematic and prosocial behaviours are inversely related (Crick, 1996; Eron & Huesmann, 1984; McGinley & Carlo, 2007). Moreover, youth who engage in relatively high levels of prosocial behaviors score lower on problematic behaviours (e.g., Ellis & Zarbatany, 2007; Mason, Hitchings, McMahon, & Spoth, 2007).

Taken together, the accumulating evidence suggests that the characteristics for both prosocial and problematic behaviours could be placed on a continuum as informed by prior research literature in this area (Carlo, Mestre, McGinley, Tur-Porcar, Samper & Opal, 2014). Hence, having a good understanding of the association and relationship between prosocial and problematic behaviours and the variables that influences these behaviours will enable us to intervene accordingly.

**Theoretical Framework**

**Attachment Theory**

Attachment theory has its beginnings based on the evolutionary theory of social behaviour for the human lifespan (Bowlby, 1979). Although original works of the theory focused on how infant survival depended on the different components of attachments, later works shed light on the changes of attachment relationships across lifespan (Simpson & Belsky, 2008) and how these changes influence the development of behaviours. These new theoretical insights are important as they explain how early
life experiences could be related to later life outcomes, and how the caregiver and child relationship impacts the subsequent psychological and behavioural development of the child.

It is essential to note the core principles of attachment theory. Grounded in systems thinking, attachment theory is concerned with close and warm human relationships (e.g., what connects people, what alienates them, how they handle conflicts and how these relationships impact the satisfactory condition of existence of the individual) (Rothbaum, Rosen, Ujiie & Uchida, 2002). It pays attention to motivating or driving forces involving protection, care, felt security which contribute to children’s development (Cassidy & Shaver, 2008).

The child’s development and well-being is compromised when close enduring bonds formed between infants and primary care givers are disrupted or disturbed, (Armsden & Greenberg, 1987; Kobak & Sceery, 1988; Strong, Devault, & Sayad, 1998). Having an insecure attachment will place the child or adolescent on a difficult and challenging development pathway throughout life (Malekpour, 2007).

The adolescence stage is a critical period to investigate the changes brought about by the new development of the adolescents and how these changes may influence the dynamics in their attachment relationships. Moreover, adolescence is a transitional period where there are changes in their physical, social and cognitive development and this is particularly true with respect to the attachment system because adolescents start to be less dependent on their primary attachment figures (i.e. their parents) during this developmental phase (Allen, 2008). It is also proposed in previous literature that during this period, adolescents develop the ability to conceptualize attachment experiences and relationships because of their developing cognitive capacity in formal operational
thinking, including their abilities to reason in a logically and abstract manner (Keating, 1990).

These growing capacities allow the adolescent to make meaning and sense of the attachment experiences with their caregivers (Main, Kaplan, & Cassidy, 1985). For example, when the adolescents mature physically and are forming their gender identities, a change in the form and attention in interactions between the parent and child results (Ainsworth, 1989; Cooper et al., 2013; Lee, 2008). They tend to steer towards their peers looking to form attachment and relationships. They also grow in their individuation and become less dependent on their parents (Hay & Ashman, 2003).

Furthermore, the development in cognitive and emotional abilities during adolescence allows an adolescent to rethink and make sense of their attachment to their caregivers (Selman, 1980). During this development phase, adolescents experience heightened cognitive developments which means they have the capacity to achieve more autonomy, engage in decision-making with their parents, and to be able to reflect on their experiences with others. These competencies allow them to reflect and evaluate their relationships with the parents critically (Allen, McElhaney, Kuperminc, & Jodl, 2004; Ammaniti, van IJzendoorn, Speranza, & Tambelli, 2000; Furman, Simon, Shaffer, & Bouchey, 2002; Hill, Bromell, Tyson, & Flint, 2007).

The significant developments enable the adolescents to connect with their parents and at the same time are less dependent on them (Buist, Dekovic, Meeus, & van Aken, 2002; Hay & Ashman, 2003). More importantly, adolescents are capable of viewing their caregivers in positive and negative ways (Steinberg, 2005). The perception of their relationship with their caregivers will determine how adolescents regulate their behaviours and interact with others (Allen, 2008; Pearson, Cohn, Cowan, & Cowan, 1994).
Attachment plays an important role when one needs to regulate stress during times of distress, poor health and anxiety (van Ijzendoorn, 2007; Siegel, 2012). Children develop competencies to help them cope with any stress that stems from negative events when they have parents who respond and are supportive (Kullik & Petermann, 2013). On the other hand, when children’s interaction with parents are characterised by insensitivity and lacking in responsiveness, they tend to be easily susceptible to maladjustment and interpersonal related problems (Laible, Carlo, & Raffaelli, 2000; Wei, Vogel, Ku, & Zakalik, 2005).

Several other studies have evaluated whether children who form insecure attachments with caregivers are more likely to show problematic behaviours (Easterbrooks & Abeles, 2000; Easterbrooks, Davidson, & Chazan, 1993; Finnegan, Hodges, & Perry, 1996; Yunger, Corby, & Perry, 2005). These studies have found insecure attachments to be linked to problematic behaviours (e.g., Granot & Mayseless, 2001) and security in attachment has been associated with lower incidences of problematic behaviours (e.g., Davies, Harold, Goeke-Morey, & Cummings, 2004; El-Sheikh & Buckhalt, 2003).

Attachment problems during childhood are significantly associated with the onset of childhood behaviour problems which could escalate to more severe delinquent and aggressive behaviours in later years (Fonagy, Target, Steele & Steele, 1998). It is also linked to the impaired development of empathetic response and ability to connect with others (Fonagy et al., 1997). Also, the quality of attachment can predict the behaviours and attitudes of adolescents who offend and those who do not (Cota-Robles & Gamble, 2006; Utting, 1996).

Two studies have examined attachment in middle childhood in clinical populations. Wright, Binney and Smith (1995) found that children from a clinical
sample were less secure and more avoidant in their attachments when compared to children from a community sample. Similarly, in another study, it was reported that children with problematic behaviours were more likely to have insecure attachment than those without problematic behaviours (Clarke, Ungerer, Chahoud, Johnson, & Stiefel, 2002). Furthermore, studies have documented that the widespread of insecure-unresolved attachment issues in adolescents were often found to be associated with problems in psychosocial functioning and different types of problematic behaviours (Allen et al., 1996; Wallis & Steele, 2001).

The feeling of security in children is strongly influenced by how they perceived the availability of their attachment figures, even when they become adolescents. An inconsistent availability or unstable presence of attachment figures will result in feelings of anxiety, anger, and despair (Kobak, 1999). This also suggests that pain, anxiety, or sorrow caused by disruptions of attachment in older children and adolescents may be a strong contributor to problematic behaviours and psychopathology in them. Insecure attachment from parent figures may have a negative impact for adolescent adaptation to any particular condition not only during their initial developmental years. Hence, it is worth reiterating that attachment is likely to be one of the critical factors that may impact the development of behaviours in children and adolescents (DeKlyen & Greenberg, 2008).

If void of attachment security, the child may look for other means to fill the void. The children or adolescent may develop an attachment disorder that can affect their problem-solving ability and willingness to take responsibility (e.g., Hay & Ashman, 2003). These children and adolescents may become manipulative, exhibit hostile behaviour, have problems in empathy and in trusting others. Also, they find it difficult to accept love and display problems with closeness. They also manifest other
negative behaviours like lying, low self-control, impulsivity, addictive behaviour, and agitation (e.g., Wei et al., 2005).

As mentioned earlier, security in attachment has the same effect on children and adolescents; in that this secure base allows the individual to explore with confidence and enable the individual to develop competency in their cognitive, social and emotional domains (Hershenberg & Davila, 2010; Moretti & Peled, 2004; Sroufe, Carlson, Levy, & Egeland, 1999). Adolescents who have an insecure attachment with their parents are likely to make up for it by participating in problematic behaviours (Karavasilis, Boyle, & Markiewicsz, 2003).

There is definitely no lack of support from empirical research on the importance of secure parental attachment on social and psychological functioning in the human development stages (Kenny & Barton, 2002). The sense of security supports the adolescents in negotiating the transitions during the development stages and the challenges that comes with them. This attachment security is known to buffer them from stress and mental health related problems (e.g., depression) and developing assertiveness and coping skills during times of stress (Kobak, Sudler, & Gamble, 1991; Larose & Boivin, 1997; Rice, FitzGerald, Whaley, & Gibbs, 1995).

Prior research and theory suggest that attachment differs for every adolescent and that attachment in earlier developmental years may not be similar to attachment in later years (Aikins et al., 2009). In this regard, the literature reported that there were specific factors associated with adolescent attachment outcomes. For example, research suggests that security in attachment is linked to positive experiences with caregivers, which include sensitivity, affection and availability in responding to the needs of the child, provision of positive affective support by significant or primary caregivers, positive attitude from parents, and parent and child relationship (Ainsworth, 1979;

During adolescence, the correlation between the variables such as parent and child perception on their relationship and support from parents with attachment appear to be significantly influential. Parents’ attitude and connection between parent and child from infancy to early childhood are positively associated with adolescent attachment security (Erich, Hall, Kanenberg, & Case, 2009). For instance, how the adolescent perceive his/her relationship or state of satisfaction with mother and father is linked to less anxiety in attachment (Roberto, Carlyle, Goodall, & Castle, 2009).

Likewise, support from parent (e.g., guidance from father, advice from parents, encouragement in development, being available) is related to secure adolescent attachment outcomes (e.g., Allen et al., 2004; Azam & Hanif, 2011; Mullis, Hill, & Readdick, 1999). A longitudinal study showed that an increase in parental support will likely lead to an increase in secure attachment for children and adolescents (Beijersbergen et al., 2012). Parental involvement and being securely attached to parents are factors that can protect the adolescent against juvenile delinquency (Hirschi, 1969). This attachment will ensure that adolescents stay out of trouble when the parents are not present to supervise their behaviours (Hirschi, 1969).

Although satisfaction with parents and the availability of parental support are crucial for adolescent development (i.e., approval by parents, parental companionship, willing disclosure by children and adolescents), they may also be related to adolescent attachment. For instance, the perception of their parents’ acceptance and approval for the adolescents are positively correlated to parental attachment security (Gallarin & Alonso-Arbiol, 2012; Richaud de Minzi, 2006; Sirvanli-Ozen, 2004). Furthermore, acceptance from mother predicts an increase in attachment security in adolescent (Allen
et al., 2004). Research also found that parent and child companionship plays a role in adolescent attachment outcomes. For example, feelings of closeness and connectedness during their interactions and the perceived quality of parent and child interactions are related to child’s and adolescent’s attachment to parents (Kerns & Stevens, 1996). Specifically, being open to sharing and communicating with parents are linked to how adolescents seek closeness with their parents when they experience emotions that are stressful (e.g., being lonely, depression, anxiety) (Armsden & Greenberg, 1987).

Adolescents’ experience of negative relationship with their parents (i.e., conflict with either father or mother, receiving criticism from either parents, parental pressure) are linked to attachment outcomes. One research reported that enmeshed and overt conflicts between mothers and adolescents predicted a decline in attachment security for adolescents (Allen et al., 2004). Other research also found that frequent and repeated interpersonal conflicts (e.g., hostility between parent and child, expression of anger openly) in parent and child relationships are associated with lower adolescent attachment security (Armsden & Greenberg, 1987; Davila, Burge, & Hammen, 1997; Van Ryzin & Leve, 2012). Criticism from parents is also associated with lower attachment security (Anhalt & Morris, 2008). For example, adolescents’ who experienced harsh criticism from their parents tend to avoid attachment and exhibit higher levels of anxiety (Rice, Lopez, & Vergara, 2005). Furthermore, parents who display negative affects with their children result in adolescents who are less securely attached (Scott, Briskman, Woolgar, Humavun, & O’Connor, 2011).

In addition, unreasonable parental pressure on adolescents to behave in a certain manner can influence attachment outcomes negatively because these children will avoid attachment and shut off their feelings and thoughts in order to manage the pressure (Jacobsen & Miller, 1998). Additionally, verbal, physical, and psychological pressure
from parents are correlated with less security in attachment to both parents (Gallarin & Alonso-Arbiol, 2012). Uninvolvement by parents and aggressive parental behaviour have been linked to problematic behaviours in children (Allen et al., 2004; Cota-Robles & Gamble, 2006; Demuth & Brown, 2004).

Although it is documented in past literature about the existence of strong bond between mothers and adolescents (e.g., Collins & Laursen, 2004; Paterson, Field, & Pryor, 1994; Youniss & Smollar, 1985), the importance of fathers should also be taken into consideration. There are research studies that suggest fathers as significant attachment figures for adolescents (Williams & Kelly, 2005). It is also reported in studies that father and adolescent relationship is closely linked to the attachment constructs like warmth, closeness and being available (Cabrrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000). This attachment with fathers is significant in predicting adolescents’ conflict with others (e.g., their peers) (Lieberman, Doyle, & Markiewiez, 1999). Thus, the attachment between father and adolescent influence adolescents differently when compared to attachment between mother and adolescent.

Previous empirical research demonstrated that a child’s attachment to fathers and mothers take on a different interaction pattern in how they involve themselves in caring for the children (Lucassen et al., 2011). Paternal and maternal attachment is independent of each other and each has different characteristics (Dumont & Paquette 2013; Richaud de Minzi, 2010). It is evident in previous studies that paternal and maternal attachment predict behaviour problems differently (Al-Yagon, 2014). For instance, maternal attachment has a significant association with adolescent loneliness, whereas, attachment with fathers is associated with depressive symptoms in adolescents (Richaud de Minzi, 2010).
The distinctive results suggest that paternal and maternal attachment may influence behaviour problems in adolescents uniquely (Al-Yagon, 2014; Richaud de Minzi, 2010). Therefore, paternal and maternal attachment (e.g., relationship with father or mother) can be examined separately as potential moderators. In addition, recent studies has found that paternal attachment exerts a moderation effect between peer relational skills and psychological well-being (Papadaki & Giovazolias, 2015). At the same time, parental attachment was found to moderate the relationship between maternal rejection and depression as well as between, maternal rejection and school bullying in children (Papadaki & Giovazolias, 2015).

More recently, researchers have attempted to use attachment theory to better understand maladaptive behaviours and its respective treatment and interventions for the behaviours where relationship factors are seemed to play a significant role in these behaviours (Cicchetti, Toth, & Lynch, 1995). Attachment theory forms a crucial developmental framework for making sense of influencing factors in relationships with caregivers that were thought to be critical to the development of psychopathy (for example, the capacity for emotional and behavioural regulation) in people (e.g., Dozier, Stovall, & Albus, 2008; Kobak & Madsen, 2008). Psychopathic individuals lack the ability in appropriate decision-making and the inhibition in emotional processing (Koenings, Krepke, & Newman, 2010). This ability to control and regulate emotion and behaviour plays a central part in various forms of psychopathology across the lifespan (Carlson & Sroufe, 1995; Chaplin & Cole, 2005; Fonagy et al., 1995; Izard, Youngstrom, Fine, Mostow, & Trenta-costa, 2006).

In the discussion above, it is irrefutable that the quality of the attachment relationship between parent and child plays an important role in helping the youth manage and deal with adverse events in his/her environment (Bowlby, 1969).
Therefore, adverse events or conditions like loss or separation from significant figures or chronic conflicts can have a negative impact or emotional, behavioural, and psychological development of the child (Bowlby, 1951).

Thus, support and care built on secure relationships with the primary caregiver will enable youth to be less vulnerable in the face of adversity (Massimo, Van Ijzendoor, Speranza, & Tambelli, 2000; Siqueira, Betts, & Dell’Aglio, 2006). This discussion is relevant if we consider these relationships to act as protective factors against the development of deviant behaviours (Harland, Reijneveld, Brugman, Verloove-Vanhorick, & Verhulst, 2002; Lerner, Walsh, & Howard, 1998; Sandberg & Rutter, 2005).

Greenberg’s Risk Model Emphasizing Attachment Insecurity - Risk Factors and Behaviours

Over the many decades, there is no lack of theoretical review nor empirical studies to examine the role of risk and protective factors (e.g., familial variables like parental relationships, individual variables like psychopathy, coping competencies, contextual variables neighbours and schools variables) on psychological and behavioural development of adolescents (e.g., Bronfenbrenner, 1979; Costa, Jessor, Turbin, Zhang, & Wang, 2005; Dumont & Paquette, 2013; Greenberg, Speltz, & DeKlyen, 1993; Kobak et al., 2006; Parke, 2004; Richaud de Minzi, 2010).

Past literature conceptualized the potential risk factors present in the ecological system that have the potential to impact behaviour, health and other related outcomes of the individual negatively (Deater-Deckard, Dodge, Bates, & Pettit, 1998). In the individual’s environment (e.g., in the family, in the school, in the neighbourhood and community), the risk factors are present in different contexts and at different levels of
severity and consequences. Some of these factors include being from a low income family, or poor neighbourhood. Other factors could include being in a non-achieving school system or subjected to bad peer influence and exhibiting problematic behaviours as well (e.g., Durlak, 1998; Fosco et al., 2012; McEvoy & Welker, 2000; McLoyd, 1990; Repetti et al., 2002).

On the other hand, there are also protective factors that may minimise the impact of risk factors present in the children’s or adolescents’ personal or social environment (e.g., supportive parents, having an extended family that provides resources to assist, significant others apart from the primary caregivers, school support, and other community resources) (Reese, Vera, Simon, & Ikeda, 2000). This means that the protective factors could be made available in the different contexts to support the individual to counter the impact of the risks present in his/her environment (e.g., in the family, school or community) (e.g., Durlak, 1998; Proctor, 2006; Reese et al., 2000).

Many prior studies discussed the important roles of families and significant caregivers of youths that can serve as a protective factor (Proctor, 2006; Reese et al., 2000). For example, the lack of parents’ supervision or poor monitoring from parents has been related to increase risks among the male adolescents to engage in problematic behaviours (Aalsma, Liu, & Wiehe, 2011).

Research on risk factors suggested that it is not likely that a single risk will cause pathology in human behaviour (Greenberg et al., 1993). Hence, it is proposed that attachment insecurity in itself will not lead to problematic behaviours, although it may increase the likelihood (Sroufe, 1990). According to Cicchetti and Rogosch (1997), there are multiple pathways that exist that lead to problematic behaviours. Problem behaviours do not exist in isolation and often overlap with one another (DeKlyen & Greenberg, 2008). It is important to pay attention to other variables such as moderators
and mediators in the study of behaviours. Risk factors may occur at multiple levels, in the individual, the caregiver, and the broader environmental context (Bronfenbrenner, 1979; Kellam, 1990; Kobak et al., 2006; Weissberg & Greenberg, 1998).

With reference to the graphic model (Figure 1) of the Greenberg’s risk domains proposed in Chapter 1, the model posits that different combinations of risk factors may result in different types of behaviours or disorders. In turn, these disorders would require different types of interventions and treatments.

In view of the framework proposed by Greenberg and colleagues (2001), it is important to note that one risk domain alone will not directly inhibit the development of prosocial behaviours or promote the development of problematic behaviours (Manassis & Bradley, 1994; Rubin, Hymel, Mills, & Rose-Krasnor, 1991; Shaw & Bell, 1993).
Early Development and Child Outcomes

Psychopathy

There is increasing interest to examine the psychopathy construct to understand adolescents involved in youth behaviour especially in their involvement with crime related activities (Vaughn & Howard, 2005). There has been mounting evidence showing the correlation between the stability and frequency of traits in this construct with violence and more severe problematic behaviours in adolescents (e.g., onset of criminal activity, arrests by police and conviction by the law at an early age) (e.g., Forth & Book, 2010; Kruh, Frick, & Clements, 2005; Van Baardewijk, Vermeiren, Stegge, & Doreleijers, 2011).

In this study, we will investigate psychopathy as one of the characteristics in a child that influences behaviours and because previous literature has repeatedly reported that psychopathic traits emerged as one of the strongest predictor of later antisocial behaviour (Loeber, Burke & Lahey, 2002) in particular, poor developmental outcomes in children and adolescents (Forth et al., 2003; Frick, Stickle, Dandreaux, Farrell & Kimonis, 2005; Frick & Marsee, 2006; Hyde, Shaw, Burt, Donnellan, & Forbes, 2015). With personality traits such as lack of empathy, lack of guilt, shallow affect and manipulation of others, the individual has difficulty forming associations between stimulus and punishment, and engaging in prosocial behaviours (Blair, 2006).

Psychopathy in an individual is found in a range of extreme social, emotional, behavioural and psychological traits. Individuals with psychopathic traits are likely to exhibit proactive violent behaviours more frequently, and they are motivated by gains in material returns and seeking revenge (e.g., Serin, 1991). Individuals with such psychopathic traits can be manipulative, deceitful, callous and lack remorse. These are characteristics associated with serious, persistent and early-onset violent and antisocial
behaviour, together with engaging in thrill seeking and dangerous activities (e.g., Andershed, Gustafson, Kerr, & Stattin, 2002; Frick et al., 2003; Vitacco, Neumann, Robertson, & Durrant, 2002).

There are two components of psychopathy: primary and secondary (Hare, 1998; Harpur, Hare, & Hakstian, 1989). Individuals who have primary psychopathic traits are manipulative, cruel, dishonest, and fearless (Fowles, 1980; Harpur et al., 1989). Individuals with secondary psychopathy traits have no capacity to regulate their emotion (e.g., they are impulsive and cannot manage anxiety). They lack tolerance for frustration, have quick changes in their moods, and can only plan for short-term and not long term goals (Harpur et al., 1989). These deficits result from poor and dysfunctional family processes that are correlated with attachment insecurity.

Pardini, Lochman, and Frick (2003) sought to clarify the association of psychopathic traits with social cognitive problems in adolescents who are imprisoned. For this group of participants, they found that the girls have higher level of conduct problems and impulsivity but they do not have callous and unemotional traits. However, their findings also reported the correlation between callous and unemotional traits and lower levels of emotional distress.

Using a sample 226 incarcerated adolescent (both male and female) offenders, Campbell, Porter, and Santor (2004) investigated the clinical, psychosocial and criminal correlates of psychopathic traits. There were no significant differences in psychopathic traits scores found between males and females. However, higher psychopathic traits scores were positively correlated with self-reported delinquency and aggressive behaviour. In their study, no relationship between psychopathic traits scores and emotional difficulties was found (Campbell et al., 2004).
Marsee, Silverthorn, and Frick (2005) also examined the association of psychopathic traits with aggression and delinquency in a non-clinical sample of boys and girls. In their study, psychopathic traits (callous and unemotional, narcissism, and impulsivity dimensions) was associated with aggression and problematic behaviour. Also, psychopathic traits predicted aggression and delinquency for both boys and girls. However, other studies reported that worry and anxiety were also linked to psychopathic features in early developmental years (Salekin, Leistico, Trobst, Schrum, & Lochman, 2005) while callous and unemotional traits predicted conduct disorder and antisocial behaviour (Dadds et al., 2005).

The deficits in the ability to recognise emotion in psychopathy are thought to be the result of amygdala hypoactivity which are believed to be the primary cause of callous lack of empathy in individuals with psychopathic traits (Blair, 2007). Individuals who have psychopathic traits have impairment in emotional empathy (Keysers, Meffert, & Gazzola, 2014).

According to developmental psychologists, empathy and sympathetic concern for others inhibit aggressive behaviours toward others (Eisenberg, 2005; Hoffman, 1990). Empathy is considered one of the factors that motivates prosocial behaviour and discourages antisocial behaviour (Batson, Batson, & Slingsby, et al., 1991). Other researchers have proposed that theoretically there is a correlation between lack of empathy and aggression (Zahn-Waxler, Cole, & Richardson, et al., 1995).

It was hypothesised in some studies that aggressive behaviour in an individual is a reflection of the inability to respond empathetically when others are suffering (Blair, 2006; Blair et al., 2001). Other studies explained that the lack of ability for empathy is the result of not being able to feel the distress of other individuals (Raine, 1997). It has been proposed that aggressive behaviour is due to an abnormality in the coding and
decoding of affective information. This results in a deficient lack of fear, empathic response, and guilt that inhibit the display of impulsive violent acts (Herpertz & Sass, 2000).

Other studies have also investigated the relationship between psychopathy and prosocial behaviours (Koenings et al., 2010). High psychopathy participants have various deficits in decision-making and emotional processing (Koenings et al., 2010). For example, in a study which assesses relationships based on reciprocal altruism amongst individuals with high psychopathy, these participants are more likely to betray their partners during the ‘‘Prisoner’s Dilemma’’ game. (Rilling et al., 2007). In addition, these individuals also display lower physiological responses to various social stimuli (e.g., pictures of sad or angry faces), when compared to those with lower psychopathy (e.g., Birbaumer et al., 2005; Flor, Birbaumer, Hermann, Ziegler, & Patrick, 2002; Levenson, Patrick, Bradley, & Lang, 2000).

Furthermore, many studies have examined the relationship between juvenile psychopathy and juvenile offending. These studies found correlations between psychopathy and problematic behaviours in juvenile offenders (e.g., Campbell et al., 2004; Corrado et al. 2004; Forth et al. 1990; Kosson et al. 2002; Lynam, 1997). For example, Lynam (1997) reported that juvenile psychopathy was moderately correlated with previous and present problematic behaviours, and is related to more serious offending and over a consistent period of time.

Christian and colleagues (1997), using the Antisocial Personality Screening Device (APSD) to screen for psychopathic traits in a sample of 120 clinic-referred children, reported that children with psychopathic traits have a greater variety of conduct problems and a greater number of arrests by the police. The APSD is a 20-item self-report instrument administered to children and youths. In their study on youths,
Frick and his colleagues reported high scores on callous and unemotional traits and thrill-seeking behaviour. These youths were also unable to feel guilt concerning their antisocial behaviour (Barry et al., 2000; Frick, 1998; Frick et al., 1994). Likewise, youths who exhibited conduct problems also scored high on callous and unemotional traits, regardless of the type of parenting received (Wootton, Frick, Shelton, & Silverthorn, 1997).

Several of these studies have attempted to explain the validity provided by the construct of juvenile psychopathy in predicting problematic behaviours. The studies showed that psychopathy predicted future problematic behaviours beyond current problematic/antisocial behaviour (Lynam, 1997; Salekin, Leistico, Neumann, DiCicco, & Duros, 2004). To illustrate, Frick and colleagues (2003), in a community sample of 98 children, found that high scores on the callous and unemotional traits scale of the Antisocial Personality Screening Device (APSD) predicted later delinquency.

Frick and Hare (2001) conceptualized psychopathy as consisting of three key characteristics, namely, callous unemotional traits, narcissism, and impulsivity. All three features conjointly describe psychopathic individual as one who lacks empathy for others, has a grandiose view of himself or herself, can be exploitative of others, and is impulsive.

Callous and unemotional traits have been considered to be the key features of psychopathy (Frick, Ray, Thornton, & Kahn, 2014). Callous and unemotional traits describe characteristics that include the inability to feel guilt or remorse, empathy and compassion for others, with limited emotions that inhibit the formation of meaningful attachments (American Psychiatric Association, 2013; Barry et al., 2000; Cleckley, 1988). Research has shown that children with callous and unemotional traits participate in the most serious and violent offenses (Frick & Marsee, 2006). These children were
found to engage in the most intentional and predatory forms of aggression (Frick, Kimonis, Dandreaux, & Farell, 2003).

Individuals with high levels of callous and unemotional behaviour lack the ability for guilt and empathetic responses (Cleckley, 1988). Furthermore, when the youth has high levels of callous and unemotional behaviour, he/she is likely to have reduced response and physiological arousal to punishment, or to others’ display of distress and is genetically more susceptible to antisocial behaviour (Frick et al., 2014; Viding & McCrory, 2012). They are simply not sensitive to punishment and reward.

From past research, it is documented that children with conduct problems with callous and unemotional traits tend to seek more adventurous activities (Frick et al., 2003; Frick, Lilienfeld, Ellis, Loney, & Silverthorn, 1999). This group of children were less sensitive to prompts of punishment (Fisher & Blair, 1998; Frick et al., 2003; O’Brien & Frick, 1996). Also, they had lower reactivity to situations or conditions that threatens and distresses them (Blair, 1999; Frick et al., 2003; Loney, Frick, Clements, Ellis, & Kerlin, 2003).

Furthermore, children with problematic behaviours who display callous and unemotional traits are less reactive to aversive stimuli and respond poorly to stimulus of punishment (Kagan & Snidman, 1991). This can inhibit the development of the emotional components related to conscience (Barry, et al., 2000; Blair, 1999; Frick, 1998; Frick et al., 2003; Kochanska, 1993).

Frick and Dickens (2006) reviewed 24 published studies using child and adolescent samples. They reported psychopathic traits in general, but, specifically, callous and unemotional traits, were associated with more serious types of conduct problems, problematic behaviours, and aggression. Ten of these studies were cross-sectional studies reporting relationship between psychopathic traits and antisocial
behaviours while twelve were longitudinal studies supporting predictive relationships between these two constructs (Frick & Dickens, 2006).

Also, the findings discussed above strongly suggested that antisocial youth who exhibited callous and unemotional traits are capable of severe, aggressive, and repeated acts of problematic behaviours (Frick & Dickens, 2006). A review by Frick and colleagues (2014) highlighted that callous and unemotional traits is only one of the dimensions of the bigger construct of psychopathy which also includes narcissism and impulsive antisocial behaviour (Frick et al., 2014; Patrick, 2010).

Although significant literature on childhood psychopathy has highlighted the construct of callous and unemotional traits (Essau, Sasagawa, & Frick, 2006; Frick & Ellis 1999), research studies have reiterated that narcissism is a relatively less discussed but an important predictor of conduct problems in children (Barry et al., 2000). Narcissism includes traits of grandiosity, a sense of entitlement and self-centeredness, and vanity (Washburn, McMahon, King, Reinecke, & Silver, 2004) which is correlated with acting out behaviours. For example, Barry, Frick, and Killian (2003) found that maladaptive narcissism was related to callous-emotionality and aggressive behaviour in children. In some research, a strong relationship between narcissism and children’s antisocial behaviour was shown (Barry et al., 2007).

There are two forms of narcissism that is identified in empirical literature: grandiose and vulnerable narcissism (Wink, 1991). Grandiose narcissism is a common personality trait found mostly in the general population, whereas vulnerable narcissism is manifested mostly in the clinical population (Cain, Pincus, & Ansell, 2008). Moreover, grandiose narcissism is linked to greater social poise, self-assurance, self-enhancing traits and the tendency to manipulate others to achieve one’s own goal, while
vulnerable narcissism is related to sensitivity in the affect domain, including poor self-worth and agitation (Pincus et al., 2009; Wink, 1991).

Several research studies show that narcissism has been associated with alcohol consumption, illicit drug use, and risk taking behaviours (Buelow & Brunell, 2014; Ellison, Levy, Cain, Ansell, & Pincus, 2013; Goldberg, Serper, Sheets, Beech, Dill, & Duffy, 2007; Hill, 2015; Luhtanen & Crocker, 2005; MacLaren & Best, 2013; Mowlaie, Abolghasemi, & Aghababaei, 2016). Among research samples involving students, aggression was associated with narcissistic traits (Bushman & Baumeister, 1998; Fossati, Borroni, Eisenberg, & Maffei, 2010; Krizan & Johar, 2015; Lobbestael, Baumeister, Fiebig, & Eckel, 2014).

Narcissism is positively related to aggression (e.g., Barry & Kauten, 2014; Barry & Wallace, 2010; Bushman & Baumeister, 1998; Pincus et al., 2009). Recent research has also shown correlations of narcissism with positive attributes (e.g., prosocial behaviour, empathy) (Barry, Kauten, & Lui, 2014; Kauten & Barry, 2014). Researchers have advocated that it is necessary to continue the examination of possible moderating variables that might connect narcissism more strongly with positive and desirable behaviours. In self-reports, the relation between adolescent narcissism and prosocial behaviour is sometimes found, and it shows that individuals with narcissistic traits see their behaviours towards others as positive (Kauten & Barry, 2014).

Individuals who have narcissism traits tend to exploit others. They have a sense of superiority and are preoccupied by the need to have others appraise their self-worth. Although there is a consistent association between this type of narcissism with problematic behaviours and aggression, narcissism has also been known to have a positive relation with adolescents’ self-esteem (Barry & Wallace, 2010; Miller & Campbell, 2011; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004). Narcissism
traits have a negative correlation with anxiety, depression, stress, and one’s perception of relationships with other individuals (Barry & Kauten, 2014). It is also suggested that narcissism individuals display both antagonistic and prosocial behaviours so they can keep up a particular view of themselves that they want to present to others (Morf & Rhodewalt, 2001).

The association between narcissism and prosocial behaviour is not unexpected. Individuals who has narcissistic traits exudes charisma to obtain admiration from others (Campbell, Foster, & Finkel, 2002; Pincus et al., 2009). Such characteristics are likely to encourage the individuals to exhibit beneficial social behaviours for social approval and appraisal. These individuals are also skilled in perceiving the needs of others and they may also have the means to meet these needs (Kauten & Barry, 2014). Other authors reported that narcissistic individuals may seek out thrill and sensation-seeking behaviours to lessen their humiliation or to fight emptiness (Grosch, 1994; Kernberg, 1984).

Empirical evidence reported that individual differences in narcissism in children and adolescents can be identified. High scores on narcissism measures is linked to behavioural and emotional difficulties (Barry & Wallace, 2010; Washburn et al., 2004). Narcissism has been found to relate to conduct problems (e.g. Barry, Frick, & Killian, 2003; Ha, Petersen, & Sharp, 2008), low peer preference (Barry, Barry, Deming, & Lochman, 2008), and internalizing problems (Washburn et al., 2004) during middle childhood and early adolescence, but in late adolescence, narcissism was associated with aggressive behaviour and problematic behaviours (e.g. Barry, Frick, Adler, & Grafeman, 2007; Golmaryami & Barry, 2010; Thomaes, Bushman, Stegge & Olthof, 2008).
A study conducted by Barry and Wallace (2010) summarized the research on youth narcissism. They investigated the relationship between how youth narcissism was measured and the different indicators of behavioural, emotional, and social functioning. In the study, data was collected from 117 adolescents ages 16 to 19 who were attending a residential program. The results demonstrated a relatively moderate level of association across three measures of youth narcissism with each of the measures, capturing unique variance in different indicators of behavioural and social functioning. From the study, narcissism was measured using the Antisocial Personality Screening Device (APSD), and it appeared to be particularly predictive of problematic behaviours (Barry & Wallace, 2010). The findings reported a moderate association between narcissism and self-reported delinquency. This provided evidence that narcissism is significantly positively correlated with conduct problems reported by parents (Barry & Wallace, 2010).

Previous research has documented the impulsivity, as lack of self-control, disinhibition, or sensation-seeking. It has been found to be a strong influence for the development of problematic behaviours and delinquency (Jolliffe & Farrington, 2009; Lynam, 2011; Zuckerman, 2006). There is no lack of studies to confirm the correlation of lack of self-control and impulsive behaviours with behavioural problems and criminal acts (Jolliffe & Farrington, 2009; Jones, Miller, & Lynam, 2011; Pratt & Cullen, 2000). This significant relationship between impulsivity and antisocial behaviour is replicated in adolescent population (Caspi, 2000; Luengo, Carrillo, Otero, & Romero, 1994; Romero, Luengo, & Sobral, 2001).

According to Hollander and Evers (2001), impulsive characteristics in an individual may result in one not being able to resist an impulse, drive, or temptation and the consequences can be harmful to oneself and others. It is characterized by behaviours
such as inability to delay gratification, carelessness, risk-taking, sensation and pleasure seeking, under estimating the sense of harm, and being concerned primarily with things outside of one self (Hollander & Evers, 2001). The authors state that impulsivity is a core symptom of a broad range of varied but related psychiatric disorders that includes disorders of impulse control (e.g., pathological gambling, intermittent explosive disorder, pyromania, kleptomania, and trichotillomania), impulsive aggressive personality disorders (borderline, antisocial, histrionic, and narcissistic), neurological disorders that are associated with behaviours, and substance abuse (Hollander & Evers, 2001).

Greater impulsivity has been associated with a range of problem behaviours such as substance use and addiction, pathological gambling, poor health, and antisocial personality disorder (Alessi & Petry, 2003; Bobova, Finn, Rickert, & Lucas, 2009; Kirby & Petry, 2004; MacKillop, Amlung, Few, Ray, Sweet, & Munafo, 2011; Petry, 2002; Verdejo-Garcia, Bechara, Recknor, & Perez-Garcia, 2006). Impulsivity has influenced behaviours that affect the individual’s daily functioning (Sharma, Markon, & Clark, 2014). For example, it is evident that higher levels of impulsivity predicts psychopathology (Chamorro et al., 2012) or offending behaviour (Leverso, Bielby, & Hoelter, 2015).

Similarly, in other studies, impulsivity is part of a range of self-regulating behaviours (Baumeister & Vohs, 2004; Eysenck & McGurk, 1980; Huddy et al., 2017). From this perspective, adolescents who are prone to be impulsivity and are rash in emotion related contexts (Cyders & Smith, 2008; Whiteside & Lynam, 2001) may display a higher tendency towards problematic behaviours. Therefore, it could be assumed that the occurrence of problematic or risky behaviours is related to differences in an individual’s ability to exercise control (e.g. inhibition functions, the central
executive of the working memory) and how these individual experiences respond to the degree of emotions (Nock, Wedig, Holmberg, & Hooley, 2008).

There is substantial empirical evidence that impulsivity, or the inability to regulate self-control, is a strong predictor of problematic behaviours (Farrington et al., 1990; Gottfredson & Hirschi, 1990; Kindlon, Mezzacappa, & Earls, 1995; Vitacco & Rogers, 2001; White et al., 1994). For instance, Vitacco, Neumann, Robertson, and Durrant (2002) found that a high score on impulsivity predicted higher levels of antisocial behaviour among the convicted male adolescents on a post 18 month follow up. There is enough evidence that supports impulsivity as a feature of juvenile offenders, since it is linked to risk-taking behaviours (Carroll et al., 2006; Eysenck & Eysenck, 1977).

Family Adversity

There is substantial evidence from previous studies that examines the family role and its environment in adolescent development that highlight the importance of this familial variable in influencing adolescent’s psychological adaptation, adjustment and competencies in problem solving (Aydin, & Oztutuncu, 2001; Jarvis, & Lohman, 2000). This familial variable is also closely related to their well-being (DuBois, Felner, Brand, Adan, & Evans, 1992), confidence in oneself and having the ability to set goals related to their personal and career future (Strage, 1998). Many studies have documented the correlations between adolescents’ internalizing and externalizing behavioural problems with how they perceived their family environment (e.g., Gutman & Eccles, 2007; Henderson et al., 2006; Lau & Kwok, 2000).

Cohesion and supportive relationships among family members will facilitate psychological adaptation and reduce the likelihood of depressive symptoms in
adolescents (Aydin & Oztutuncu, 2001; Herman, Ostrander, & Tucker, 2007; Jewell & Stark, 2003; Lau & Kwok, 2000; Strage, 1998). Likewise, positive family environment is associated with a decrease in negative influence of stressful events on their well-being (DuBois et al., 1992; Jarvis & Lohman, 2000). A stable, cohesive and predictable family environment is essential in supporting the adolescents’ needs to cope with the many demands and challenges during their developmental years (Forman & Davies, 2003). Hence, such a family environment acts as a secure base for adolescents in developing effective coping skills and strategies to manage the challenges that they face. For most of the adolescents, the family is a stable and safe environment but there are some adolescents who will experience adversity in the family environment.

In this study, we explore prosocial and problematic behaviours among adolescents and the extent to which factors within the family adversity variable negatively influence the development of adolescents.

In a study conducted by Rutter and colleagues (1975b), they found that the prevalence in child adjustment problems was associated with the increase in the number of stressors in the family. Indicators of adversity include large household size, parents’ prior criminal records, parents’ mental health, family’s socioeconomic status, and foster-living arrangements (Rutter & Quinton, 1987).

In their study of two diverse communities in Great Britain, Rutter and Quinton (1977) reported that the higher the number of adversity indicators, the higher the propensity for the child to engage in problematic behaviours. The researchers revealed that when there are two or more adverse indicators in the families, the chances of child exhibiting behaviour problems increased two- to four-fold (Rutter, Cox, Tupling, Berger, & Yule, 1975b). Likewise, Sameroff and his colleagues (1987) compared children living in families with a higher number of environment stressors with those
who reported a lower number of environment stressors. They concluded that the group
with higher number of stressors displayed more negative outcomes.

In two longitudinal studies on boys starting in infancy, Shaw, Vondra, Hommerding, Keenan, and Dunn (1994) demonstrated that high family adversity index contributes to an increase in problematic behaviours in early childhood. They showed that boys’ problematic behaviours at ages 2 to 3.5 increased as the number of family stressors increased. Other studies stressed that the associations between specific risk factors and particular types of behavioural problems is weak but it is the cumulative additions of risks that has a strong influence on children’s adjustment and behaviours (Biederman et al., 1995; Luster & McAdoo, 1994; Rutter & Quinton, 1977; Shaw et al., 1994).

As previously discussed briefly in Chapter one, there is no lack of literature nor empirical studies that support the strong association between the factors that form the adversity variable in our study and its influence on adolescent behaviours.

*Family size.* There are many studies that report the negative impact of large family size with children and adolescent development. Large families significantly predict delinquency and problematic behaviours (Fischer, 1984). In one study by Wadsworth (1979), the findings reported that the risk for delinquency rose from 9% for families with one child to a significant 24% for families with more than 4 children. Similarly, the researchers in one study in Nottingham found that large family size was a strong predictor of delinquency (Newson, Newson, & Adams, 1993).

In another study conducted in the West, a Cambridge study found that boys with 4 or more siblings in the family had a double increase in risk to be convicted for a crime (West & Farrington, 1973). Large family size is also related to self-reported
delinquency and convictions during juvenile years (Farrington, 1992). This effect is repeated in many other studies in the West (Farrington & Loeber, 1999).

Also, other theories advocated that in a large family, parental resources will likely be diluted for each child in a family (e.g., Downey, 1995). The actual amount of parental resources available to be shared by the children in the family also differs across different families (Cáceres-Delpiano, 2006; Downey, 1995; Sandra, Devereux, & Salvanes, 2005).

One other interesting theory proposed birth order as a key important factor. It was proposed that children born later to large families tend to have an increased risk in delinquency as they have a possibility of being exposed to older siblings who are delinquents. One example was a study showing a trend for brothers to co-offend. The study showed that boys had a high risk of committing the crime with their brothers if they were about the same age (Reiss & Farrington, 1991).

*Family separation.* Just as the framework of attachment theory posits, a strong bonding or attachment relationship with parents facilitates the overall healthy development in children and adolescents by providing them with the sense of security and comfort to discover themselves and to explore the world (Vivona, 2000). However, in a situation or context when the figures of attachment lack sound perception and cannot be present psychologically, emotionally or physically for the children, as in the case of separation or divorce, the attachment between the child and parents is compromised (Vivona, 2000).

The consistent and widespread occurrence of the influence of parent and child relationship as the core of strong attachment is evident. Research has long associated insecure attachment with various maladjustment problems like distress, antisocial behaviours and illegal substance use in adolescents (Vivona, 2000).
There are also numerous studies that reported separation of parents be it divorces and remarriages, have brought about new or different living arrangements for children and this phenomenon has become increasingly widespread in many societies (Amato, 2005; Brown, 2006; Cavanagh, 2008). In addition, earlier separation at a young age increased the possibilities of transitions in family structure and childhood experiences (e.g., remarriage of the parents, a possible second separation). These children have to adapt to new living arrangements or family make-up. Similarly, there were studies that revealed psychological and social difficulties experienced by children whose parents were divorced (Wallerstein & Blakeslee, 2000).

Many research studies examined the influences of familial transitions on child well-being (e.g., Fergusson, Horwood, & Lynskey, 1994; Vivona, 2000). Some studies had investigated the short term effects of familial transitions on children’s adjustment (e.g. Amato, 2006; Hetherington, 2006; Osborne & McLanahan, 2007; Walper & Beckh, 2006), while others had examined the long-term effects and how the latter had affected children in terms of their achievement in education, problematic behaviours, and in their physical and mental health (e.g. Amato, 2006; Bumpass & Sweet, 1972; Li & Wu, 2008; Teachman, 2002, 2003; Wolfinger, 1999).

Likewise, there were longitudinal studies that reported an increase in adolescent anxiety and depression just before their parents’ divorce and after the divorce has taken place (Strohschein, 2005). In one longitudinal study, divorce between parents predicted conduct disorder in adolescents more strongly than having a mother who was never married (Velez, Johnson, & Cohen, 1989). Furthermore, parents’ separation resulting in the child residing in a single parent home increases the risk for conduct disorder in children and adolescents (Velez et al., 1989).
Poverty resulting in dependence on welfare support was also closely associated with single parent family who experienced separation (Blum, Boyle, & Offord, 1988). Another related study revealed that boys from single families had the highest risk to be convicted of a violent crime compared to nonviolent offenders and boys who were not convicted (Henry, Capsi, Moffitt, & Silva, 1996).

Many other studies have reported evidence that non-intact homes or disrupted families resulting from familial separation are strongly related to delinquency and problematic behaviours (Wells & Rankin, 1991). Similarly, another study undertaken by Henry and colleagues (1993) reported that when children were exposed to discord between parents and had many caregiving changes, they were more likely to display antisocial behaviours acts (Henry, Moffitt, Robins, Earls, & Silva, 1993).

It is highly possible that youths exhibit problematic behaviours due to emotional disturbances they experienced in high conflict families before, during or after their parents separate or divorce (Amato, 2000). Individuals who experienced the absence of father also face challenges related to family disruptions and conflicts between parents. As a consequence of a dissolved family structure, this individual is more likely to exhibit internalised and problematic behaviours (Amato, 2000; Hetherington, Bridges, & Insabella, 1998; Lansford, 2009). In the absence of a father figure in the families, the adolescents will also receive less supervision from parents, thus giving them greater opportunities to participate in risky activities (Hetherington et al., 1998; Lansford, 2009).

Findings from past studies demonstrated that children from separated or divorced families tend to have higher levels of negative well-being and this was often followed by negative influences on their personality (e.g., aggressive behaviour, higher levels of disobedience, high levels of anxiety, symptoms of depression, insecure
emotion, early sexual-related risks and experience) (Amato, 2006; Amato & Keith, 1991; Brown, 2006; Cavanagh, 2008; Cavanagh & Huston, 2006; Davies & Cummings, 1994; Hetherington, 2006; Kiernan & Hobcraft, 1997; Reid & Crisafulli, 1990; Wallerstein & Blakeslee, 2000).

Additionally, the frequent conflict in the family as a result of the family disruption can be a push factor for children to run away from their problems. Findings of one Nigeria study reported that regardless of the family type, most adolescents from non-intact homes tended to have a higher score for deviant behaviour compared to others residing in homes of intact families (Ogwo, 2017).

The developmental challenges and problems (e.g., low level of education achievement and subsequent low earnings, having to depend on welfare, poor quality relationship with their partners in marriage) follow them through to adulthood (Amato & Keith, 1991; Amato, Loomis, & Booth, 1995; Dube, Anda, Felitti, Croft, Edwards, & Giles, 2001; Dube, Anda, Felitti, Edwards, & Croft, 2002). It is not surprising that these individuals tend to continue their problematic behaviours into their adulthood. For example, one study in United States found that participants who had a drinking problem were more likely to experience parental divorce in their childhood (Wolfinger, 1998) and similarly in another British study, participants who experienced parental divorce before the age of sixteen had increased risk of drinking problems (Hope, Power, & Rodgers, 1998). Although these two studies mentioned earlier did not control for alcoholism in parents in their analysis, there were studies that documented that individuals experiencing parental divorce during childhood showed a higher risk of adult drinking problem after controlling for parents’ alcoholism (Dube et al., 2002).

The physical absence of adults (e.g., a single-parent family due to parents’
separation) is related to behavioural problems of children (Coleman, 1988; Freistadt, & Strohschein, 2012; Hofferth, Boisjoy, & Duncan, 1998; Parcel & Menaghan, 1993; Wright, Cullen, & Miller, 2001). One explanation is because the absence of low monitoring of youths increases the opportunities for them to participate in at-risk activities and problematic behaviour. In addition, being exposed to emotional disruption that are associated with conflict and distress between parents could increase both internalizing behaviours (e.g., symptoms of depression) and externalizing ones (e.g., violent behaviour and substance abuse).

**Physical and mental health of the parents.** Even though the majority of adolescents will go through this phase without much difficulty (Steinberg, 2011), some adolescents however may be facing challenges in developing and forming positive identities simply because of the inadequate support at home. This could include having physical or mentally ill parents who may have limited ability to provide the same support as healthy parents can (e.g., Roustit, Campoy, Chaix, & Chauvin, 2010).

Living with parents who have physical or mental health issues can be challenging as it might affect the children’s’ development negatively. Having health problems impact on the interaction and increases the opportunities for conflict among all members in the family. This interaction goes beyond just the parent and child but it also affects the cohesion and commitment in the family. Parents’ health and illness have been found to correlate with lower levels of cohesion in the family (e.g., Nomura, Wickramaratne, Warner, Mufson, & Weissman, 2002). In turn, Farrell and colleagues (1999) also found that lower levels of cohesion in the family are likely to increase distress, problematic behaviours, and heavy drinking in adolescence.

Prior empirical research showed that children are at risk of mirroring their parents’ problems, specifically, their parent’s illness (Biederman et al., 2001;
Friedmann et al., 1997). For instance, they are more likely to be exposed to internalizing problems, such as depression (e.g., Weissman et al., 2006), or externalizing problems, such as aggressive behaviour (e.g., Merikangas, Dierker, & Szatmarie, 1998). For example, having a mother with mental illness puts the child or adolescent at four times the risk in participating in serious criminal behaviour (Preski & Shelton, 2001).

Additionally, children with parents who have a history of mental illness are more likely to be at a greater risk of developing psychological or mental related problems in their later developmental years (Hosman, Van Doesum, & Van Santvoort, 2009; Maybery, Ling, Szakacs, & Reupert, 2005). Past studies reported a 50% more chance for these children to develop problematic behaviours too (Van Santvoort, 2012). It is also reported that these children may have to care for their mentally ill parent or help out with family-related matters. This means that they will not be able to join their peers in activities, hence, they become socially isolated from their peers (Aldridge & Becker, 2003).

One other effect that children or adolescents will likely experience when their parents are ill or have poor mental health is parentification. Although this is not the focus of our study, a brief discussion on its influences on adolescents could explain how having parents who are dysfunctional in the family impact the development of adolescents. Little is known of the direct influence of parentification during adolescence on adolescent internalizing and externalizing problems (e.g., Hooper, Doehler, Jankowski, & Tomek, 2012; Sang, Cederbaum, & Hurlburt, 2013). Past studies have reported children or adolescents playing the role of the parents in families that are stressful, apart from parents’ poor health or illness, also faced increased problematic behaviours during adolescence (e.g., Peris, Goeke-Morey, Cummings, & Emery, 2008; Stein, Riedel, & Rotheram-Borus, 1999).
To illustrate, in one quantitative study that investigated the outcomes of adolescents found that their role in taking care of the family was related to more symptoms of anxiety and depression related symptoms (Champion et al., 2009). A separate qualitative study examining the experiences of adolescents living with mentally ill parents revealed that adolescents took up the care-giving responsibility in the family to cope and manage the mental illness of their parents (Trondsen, 2012).

In addition, living with a mentally ill parent may increase the frequency of exposing the adolescent to emotions that are negative (e.g., anger, fear, and sadness). Therefore, these negative emotions put them at greater risk of developing internalizing problems (e.g., symptoms of depression and anxiety) (e.g., Beidel & Turner, 1997; Eisenberg et al., 2001; Weissman et al., 2006), and externalizing behaviours (e.g., aggression and inability to adhere to rules) (e.g., Aunola & Nurmi, 2005). These internalizing and externalizing behaviours during childhood are closely correlated to disorders (e.g., mood and anxiety disorders) (Kessler, 2012; Roza, Hofstra, Van der Ende, & Verhulst, 2003) and antisocial and problematic behaviours (McGue & Iacono, 2005) in later development years.

Parental mental illnesses are varied and diverse, which can have different effects on parenting behaviours and child problems (e.g., Biederman et al., 2001). Familial factors such as parent and child interaction, and the family environment can help explain the influence of mental illness in parents on adolescent behavioural development. The relationships within the family and between family members have a mediating strength and is associated with parent and adolescent psychological problems (e.g., Davies & Windle, 1997; Leinonen et al., 2003). It is a known fact that parents who suffer from mental illnesses are likely to have interaction problems and challenges with
their children as they tend to exhibit less positive interaction and usually express higher levels of criticism of their children (Oyserman, Mowbray, Meares, & Firminger, 2000).

This lack in competency to monitor their children effectively may increase the risk of their children exhibiting problematic behaviours, in particular, externalizing problems like antisocial behaviour in adolescent boys and internalizing problems in adolescent girls (Jacobson & Crockett, 2000; Patterson, 1993). The parents will not be able to engage the child enough to get voluntary disclosure from the child or actively seek information about what their child does and with whom (Fletcher, Steinberg, & Williams-Wheeler, 2004). Also, children may be less willing to share information about their whereabouts and activities with a depressed parent who displays disinterest.

Poor health and mental illness may affect the parents’ availability and capability to provide the support for their children. In the literature, mentally ill parents were found to be less able to be available to their child emotionally (Duncan & Reder, 2000; Hammen, 1991). Likewise, they were less able to nurture and care for their children (Elgar, Mills, McGrath, Waschbusch, & Brownridge, 2007). Additionally, some observational studies that investigated the parent and child interaction found depressed mothers exhibiting negative behaviours towards their children compared to mothers without symptoms of depression (Lovejoy, Graczyk, O’Hare, & Neuman, 2000). To provide the child with parents’ support is critical in discouraging problematic behaviours in adolescents (Roustit et al., 2010; Stice, Barrera, & Chassin, 1993; Wills & Cleary, 1996). For example, the findings from a study on psychological distress in parents for non-clinical families, revealed that lack of parental support is associated with poor psychosocial adjustment in children (Roustit et al., 2010).

Poor physical health and mental illness is also linked to lower ability to express emotions and opinions (i.e., open communication) in the family (Horwitz, Briggs-
Gowan, Storfer-Isser, & Carter, 2007). Past research examining the correlation of expressiveness in families with adolescent problematic behaviours was inconclusive. For example, one study did not report that family expressiveness was associated with depression in adolescents (Cole & McPherson, 1993). On the other hand, in a study by Kleinman and colleagues (1989), they found low familial expressiveness was linked to distress in adolescent boys only. Also, adolescent boys who participated in delinquent behaviours reported less family expressiveness compared to adolescent boys who were not engaged in delinquent behaviours (Bischof & Stith, 1995).

One important familial variable, family conflict, is able to explain the relationship between parental health and adolescent development. To illustrate, when the parent is mentally ill, there is a higher level of conflict present in the family compared to families without a mentally ill parent (Chang, Blasey, Ketter, & Steiner, 2001). As mentioned earlier, conflict in the family has been consistently documented to be related to the development of problematic behaviour in children (Burt, Krueger, Mcgue, & Iacono, 2005).

The parenting behaviours influencing their children’s behaviours in depressed parents compared to those who do not have depression symptoms are starkly different. For instance, parents who are depressed tend show less warmth towards their children and exhibit more hostility (Cummings & Davies, 1999; Marchand-Reilly, 2012). They are not able to function as a warm parent, to keep a child feeling loved and supported so the child will have a higher risk for internalized behavioural problems (Wilson & Durbin, 2010; Waller, Shaw, Forbes, & Hyde, 2015). These children whose parents have depression do not have the protective factor against problematic behaviours because children have a higher tendency to share information about their activities and whereabouts to parents who demonstrate warmth (Fletcher, Steinberg, &
Williams-Wheeler, 2004). In contrast, the depressed parent will most likely resort to negative parenting practices, such as displaying hostility which has a direct negative effect on children. These children are likely to experience instability in their feelings (Padilla-Walker, Nielson, & Day, 2016).

There is evidence in some research that men express their symptoms of depression externally through behaviours like violence, aggression, anger, withdrawal or substance misuse (Addis, 2008). To a large extent, fathers’ mental health problems are more visible to the children compared to mothers’ mental health problems. Paternal behaviours were also significantly associated with problematic behaviours in children and adolescents (e.g., Kahn, Brandt, & Whitaker, 2004).

Beyond the limited focus on parental health on adolescents’ psychological and behavioural development, the above studies have evaluated the influence of parents’ physical and mental health symptoms on their children. It is evident that much needs to be examined in terms of early support for parents and families in such contexts. Behavioural and psychological problems can manifest in early childhood and continue into adolescent years and adulthood. Hence, a greater understanding of how these risk factors impact children and parents will be useful for further intervention in the long run.

*Criminal records of the parents.* There is enough research that show the association between parental criminal involvement and incarceration with adolescent problematic behaviour and even into adulthood later on. Children whose parents are incarcerated or have prior criminal records have a higher risk of emotional disorders compared to their peers (Phillips, Burns, Wagner, Kramer, & Robbins, 2002). Moreover, past studies recorded that children with incarcerated parents tend to experience insecure home environments which caused them stress (Fritsch & Burkhead,
Children whose parents have a prior criminal record or who have been incarcerated, were two times more likely to have problematic behaviours compared with children whose parents have no prior criminal records (Murray, Farrington, Sekol, & Olsen, 2009).

Research has found that the ways parental incarceration influence children and adolescents, can be complex and consequences may vary. It is known from the risk perspective that parents’ prior criminal records do not cause the onset of problems for the individual and family, but it could possibly be a contributing factor that continued from a negative familial situation. The family could be experiencing poverty, social disadvantage, instability in the home, drug abuse difficulties, mental health issues, violence and abuse (Johnston, 1995; Kjellstrand & Eddy, 2011; Myers et al., 1999; Poehlmann, 2005; Travis & Waul, 2003). The accumulation of these negative issues are likely to increase the child’s propensity to develop a series of behavioural problems (e.g., abuse of substance, delinquent behaviours, violent temperaments and behaviours, and other antisocial behaviours) (Dallaire, 2007; Farrington, Joliffe, Loeber, Stouthamer-Loeber, & Kalb, 2001; Poehlmann, 2005).

Crime related behaviour can result in high, long term costs socially because it has a negative influence on the children of criminally involved parents. Specifically, children whose parents are involved in the criminal justice system for crimes they have committed will likely be exposed to negative social environment which lacks stability (Geller, Garfinkel, Cooper, & Mincy, 2009). This negative environment is strongly linked to emotional difficulties and higher risks of offending for these children and adolescents (e.g. Geller et al., 2009; Van de Rakt, Ruiter, De Graaf, & Nieuwbeerta, 2010; Wilbur et al., 2007). For example, parents’ abuse of substance or drugs and prior
criminal record are linked to early onset for adolescents’ use of illicit drugs and substances (Sommers & Baskin, 1991). Another longitudinal study over a span of nineteen years with children and adolescents reported that parents’ involvement in crime related activities is likely to go from one generation to the next (Kandel & Wu, 1995). When parents are involved in crime, their children are exposed to, and have contact with the criminal justice system.

It also highly possible that these children live in an environment that is socially and economically unstable which can lead to emotional distress (Cunha & Heckman, 2007; Greene et al., 2000; Fritsch & Burkhead, 1981; Johnson & Waldfogel, 2002; Myers et al., 1999; Parke & Clarke-Stewart, 2002). In homes characterised by instability, the risk for the children and adolescents to develop maladjustment and emotional-related issues as a result of lack of safety and security is high (Greene et al., 2000). Residing in such negative environments may also impact the cognitive and other skills development in these children (Cunha & Heckman, 2007).

These children who experienced their parents’ incarceration have a higher probability to be diagnosed with emotional disorders compared to their peers whose parents are not involved in the criminal justice system (Phillips et al., 2002). For example, children of incarcerated mothers are at risk of suffering from Post-Traumatic Stress Disorder (PTSD). They also tend to have mood disorders, afflicted thinking and lack of attentiveness, feelings of suicidal thoughts, and withdrawal from others (Young & Smith, 2000). Many of these adolescents with parents who are incarcerated may endure years of being exposed to violent behaviours in the household, experiencing grief, or insecure relationship, or being exploited by family members. They may also exhibit delinquent behaviours as well as having neglectful parents (Myers et al., 1999).
In addition, children whose parents are involved in crime related convictions are very often stigmatized by their peers at school (Nesmith & Ruhland, 2008; Sack, Seidler, & Thomas, 1976). They are likely to be isolated and rejected by their peers (Bernstein, 2007; Nesmith & Ruhland, 2008; Sack et al., 1976) and they tend to face challenges in school related problems as well (Hungerford, 1993; Peniston, 2006).

There is substantial discussion in the current literature that emphasises the negative outcomes of parents’ offending or criminal history on the development of their children and adolescents. During their childhood and adolescence developmental years, children whose parents are involved in crimes have a higher risk of experiencing financial strain and hardship and they are likely to be exposed to inconsistent, harsh and punitive parenting practices (Thornberry Freeman-Gallant, Lizotte, Krohn, & Smith, 2003) during the times when one or both parents are not present due to imprisonment (Murray, Loeber, & Pardini, 2012). They are also at higher risks of coming into contact with social networks that may include many other offenders (Junger, Greene, Schipper, Hesper, & Estourgie, 2013).

Unfortunately, these consequences have a spill over effect into later adult years as these children who had parents involved in crimes are also at a higher risk of being involved in criminal acts and become offenders themselves (Farrington et al., 2001; Van de Weijer, 2014). Other negative consequences for these children and adolescents include being exposed to parental unemployment at different points of their lives or increased risks of divorce between their parents (Lageson & Uggen, 2013; Uggen & Wakefield, 2008).

Adolescents whose parents are involved in crime have mostly disadvantaged backgrounds to begin with, which makes them more vulnerable to violence and being exposed earlier adult-related activities (Hagan & Foster, 2001), such as early pregnancy.
and becoming parents themselves at an early age (Haynie, Petts, Maimon, & Piquero, 2009) and early marriage (Kuhl, Warner & Wilczak, 2012). For instance, Huschek and Bijleveld (2015) found that children whose parents were involved in crime do not follow the normal life span developmental course as their peers (i.e., they have an earlier transition into adult roles, and they may experience unstable living arrangement arising from multiple entry and exits in marriage).

These children may also have a lower competency to cope and manage their social relationships and environment. It is well documented in literature that a safe, responsive and stimulating environment, is able to cultivate cognitive and language development in their children as well as help increase their emotional and behavioural health during a stressful period (Eddy & Chamberlain, 2000; Knutson, DeGarmo, & Reid, 2004; Martinez & Forgatch, 2002; Reid & Patterson, 1989). Likewise, these children of incarcerated parents need similar protective roles in the family environment (Hanlon, O’Grady, Bennett-Sears, & Callaman, 2005; Mackintosh, Myers, & Kennon, 2006; Poehlmann, 2005).

It is also not surprising that one study found that most of these children were vulnerable to more than four risk factors present in the family (Poehlmann, 2005). There is also increasing research that shows that the multiple risk factors present in the environment are associated with an increase in the child’s risk of developing problematic behaviours (Dallaire, 2007; Farrington et al., 2001; Poehlmann, 2005).

The link and association in the existing literature regarding incarceration of parents and its influence on children’s insecure attachment, emotional disruption and problematic behaviours is a clear illustration of attachment theory at work. According to attachment theory, strong parent and child bond is important (Ainsworth & Bowlby, 1991) and when parents are incarcerated and become unavailable to the children, the
attachment relationship between parent and child is affected (Parke & Clarke-Stewart, 2002). Since it has been established that parent and child relationship influences the awareness of the child while interacting with others, an insecure bond arising from parental incarceration will result in the child having lower levels of moral principles (Ainsworth & Bowlby, 1991; Johnson & Waldfogel, 2002).

However, due to the presence of other risks, parental incarceration can be a risk marker that extends beyond the other risks present in the children’s familial environment, and it can act as a mechanism for more risks to add on to the current situation. There were a few studies that reported the risk factors that children of incarcerated parents were exposed to, while other studies explored the direct influence of parental incarceration on children’s poor outcomes, and the extent other risk factors in the family can worsen the situation of having one parent or both parents in incarceration.

It is well-known in empirical studies that children who have antisocial traits are likely to have parents who are antisocial as well (Lipsey & Derzon, 1998). Previous studies that examine the antisocial personality disorder in parents, found that it was a good predictor for conduct disorder in childhood (Frick et al., 1992) while parents’ substance abuse was a strong predictor for the onset of conduct disorder (Loeber et al., 1998; Loeber et al., 1995). Also, in a similar longitudinal study in New York, parents’ antisocial personality was strongly associated with children’s problematic behaviours (Cohen, Brook, Cohen, Velez, & Garcia, 1990).

Prior studies of children who had parents involved in crime were found to have a higher risk for adjustment problems and were more likely to be involved in some form of problematic behaviour (Keller, Catalano, Haggerty, & Fleming, 2002; Lowenstein, 1986; Phillips et al., 2002; Young & Smith, 2000). Also, there were studies that
reported children who experienced trauma due to their parents’ crime and incarceration, or were exposed to drug and substance abuse and mental illnesses tend to be engaged in smoking behaviours, illegal alcohol consumption and in the use of marijuana (Francis-Smith, 2007).

In some studies, criminal behaviour of parents was significantly associated with delinquent behaviours in their boys (Robins, West, & Herjanic, 1975). In one Cambridge study, the researchers found 6% of the 400 families surveyed was found to be responsible for half of the criminal convictions involving members in the families (parents and their children) (Farrington, Barnes, & Lambert, 1996). Convicted parents were strongly linked to offending in their children (Farrington et al., 2001). In the same study, Farrington and colleagues (2001) found that arrests of fathers were the best predictors for delinquency in boys compared to all other relatives.

Farrington and colleagues (2001) explained that the transmission of criminal behaviours from generation to generation is a result of the continual exposure to the same risks in the environment for these individuals such as, poverty, disruption in the family, and living in deprived neighbourhoods. One other explanation was the poor parenting practices used by the criminally involved parents which did not efficiently supervise or provide children with the necessary support for healthy development (Farrington et al., 2001). Other explanations include genetic hereditary mechanisms at work, choice of marrying and partnering with antisocial mates, negative influences from family members due to close associations and biased labelling by the police (Farrington et al., 2001).

One research previously mentioned that a history of family criminal behaviour would predict delinquent behaviour in children up to the age of 32 (Kemper & Rivara, 1993). Findings from some research revealed that children (12 to 17 years of age)
whose mothers were incarcerated had a higher risk (up to 40%) of being involved in crime related behaviour (Crawford, 2003).

Some results suggested that the wider psychosocial risks in families such as low income and poverty, poor mental health in parents, and poor parenting styles had a greater influence than just using parents’ incarceration alone, to explain subsequent problematic behaviours in children. Research conducted with non-clinical or non-offending populations of individuals, found similar risks associations with poor child adjustment, in particular, problematic behaviours (Ackerman, Brown, & Izard, 2004; Jones, Forehand, Brody, & Armistead, 2002; Palusci, Crum, Bliss, & Bavolek, 2008; Votruba-Drzal, 2006).

In past research, an association between education and crime was found and it was suggested that criminal behaviour and attainment of education was negatively correlated (e.g. Groot & Maassen van den Brink, 2010; Hjalmarsson, Holmlund, & Lindquist, 2011; Lochner & Moretti, 2004; Machin, Marie, & Vujic’, 2011). Furthermore, findings from these past studies suggested that children whose parents were involved in crime tended to have lower levels of education attainment. This leads us to examine the educational levels of parents as a risk variable in the next section.

*Parents’ Educational level.* Parents’ education is considered an important index of socioeconomic status and parents’ educational level is a significant predictor of educational and behavioural outcomes in children (Davis-Kean, 2005; Dearing, McCartney, & Taylor, 2002; Duncan, Brooks-Gunn, & Klebanov, 1994; Haveman & Wolfe, 1995; Nagin & Tremblay, 2001).

Interestingly, there is evidence in studies related to parent and child attachment that revealed the differences in the literacy of children with secure and insecure attachments that parents' education level is related to their perceptions of child security.
(Bus & van IJzendoorn, 1988; Tavecchio & van IJzendoorn, 1987). One explanation for this relationship could be the association of adverse conditions with lower parental educational. Hence, parental education level may be linked to differences in parents’ sensitivity to respond to a child's needs, in turn, causing differences in child attachment.

Compared with less educated fathers, better educated fathers are more involved because they have greater knowledgeable about children’s developmental need for positive parenting (Yeung, Sandberg, Davis-Kean, & Hofferth, 2001). For example, fathers’ educational level is associated with children’s psychological adjustment. They also tend to belong to higher socioeconomic groups which are found to correlate with positive child outcomes (Bradley & Corwyn, 2002).

There are enough studies investigating the transmission of criminal behaviour and education between generations: from parents to children. The results from empirical research suggest a plausible causal relationship between the education level of parents’ and children’s attainment in education (De Haan & Plug, 2009; Ermisch & Pronzato, 2010; Holmlund, Lindahl, & Plug, 2011). For example, one study by Meghir, Palme, and Schnabel (2012) reported that parents’ higher education levels were associated with the decline in probability of delinquent and problematic behaviour in children and adolescents.

*Presence of conflict in the family.* During family conflict, there is the presence of physical and verbal aggressive exchanges, criticism, anger, continual quarrels between members and across multiple relationships (i.e., not only between parent and child but between parents) in the family (Cummings & Schatz, 2012; Van Ryzin & Dishion, 2012). Past research suggested that high level of conflict between parents was linked to the lack of security and mental distress in adolescents. This has a negative impact on the adolescents’ self-confidence (Dunkle, Fondacaro, & Pathak, 1998).
Aggression and conduct disorder are associated with family environments where conflict is high, or where the adolescent exhibits avoidant coping behaviour and is depressed (George et al., 2006; Jarvis, & Lohman, 2000, Herman et al., 2007; Jenkins et al., 2005). Families that are in high cohesiveness, expressiveness and structure with minimal or moderate levels of parental control are linked to positive outcomes in adolescent development (Hamid, Leung, & Yue, 2003). However, the presence of high conflict and control in families which are not cohesive and expressive are related to poor developmental outcomes in children and adolescents (Hamid et al., 2003).

Consistently, studies have found that conflict between parents is strongly negatively associated with the well-being of the adolescent (Davies & Cummings, 2006). Over the course of lifespan development, being exposed to frequent conflicts between parents in the household is closely related to higher levels of emotional and behavioural issues in children and adolescents (Hamid et al., 2003; Juby & Farrington, 2001). On the other hand, a family climate free from conflicts will provide a positive support for the adolescent to explore in a secure environment, and to figure out his/her self-identity, values and beliefs. Such an environment will also help the adolescent to adapt to changes, and to face the demands of growing up with confidence (Gutman & Eccles, 2007; Pratt, Hunsberger, Pancer, & Alisat, 2003).

Theoretical literature on family systems and social learning associate marital dissatisfaction as one of the core reasons for conflicts (Margolin, Christensen, & John, 1996). In families, when parents cannot communicate effectively with one another, tension bred from this dissatisfaction will consequently be redirected towards parent and child dyads (Margolin et al., 1996). One consequence of this tension is spilled over into the family environment, resulting in dysfunctional communication styles (Bertoni & Bodenmann, 2010), negative emotions and lack of cohesion amongst members in the
family (Kitzmann, 2000), parenting (Faircloth, Schermerhorn, Mitchell, Cummings, & Cummings, 2011; Finger, Eiden, Edwards, Leonard, & Kachadourian, 2010).

Family members could model these negative behaviours and use the same interaction patterns when they are not satisfied with the members or events happening in the family (Margolin et al., 1996). As a result, there will likely be an increase in family conflicts. The adolescence period is also marked by a higher level of family conflict because the family is navigating and negotiating issues related to adolescent autonomy (Margolin et al., 1996).

To the child and adolescent, conflict between their parents is a stressor as they attempt to make sense of the conflict and cope with it (Grych & Fincham, 1990). If the children or adolescents think of themselves as the cause of the conflict, it could create in them a distorted interpretation of the familial situation (Grych & Fincham, 2000). Parenting is also compromised by conflict between parents (Erel & Burman, 1995; Krishnakumar, & Buehler, 2000).

It is important to note that when children are exposed to continuous, unstable and threatening family situations, the security for the children is compromised even if there is protection and support from other family members. In order to cope and to secure emotional stability during hostile family conflicts, these children may distort their reality (Cummings & Davies, 1996; Davies & Forman, 2002). They may also exhibit high levels of avoidance and dismissive emotions, and disengaging themselves from the family and play down the importance of the event or situation (Davies, Cummings, & Winter, 2004; Davies & Forman, 2002; Forman & Davies, 2005).

Furthermore, there are studies that highlighted the link between security within the family and symptoms of depression, anxiety, social withdrawal and problematic behaviours from childhood through to late adolescence (Davies et al., 2004; Davies &
Consistently, high levels of conflict in the family are correlated with psychological problems in adolescents and the effect tends to continue into adulthood (Laursen & Collins, 1994). Conflicts can continue and become difficult communication situations in the family, which worsen relationships. The emotions evoked during conflicts are never positive and will contribute to negative outcomes in children and adolescent development. Adolescents who experienced moderate conflict with their parents were reported to have fewer problematic behaviours and better school outcomes compared to those who reported absence of conflict and high conflict frequency (Adams & Laursens, 2001).

In a study conducted by Guassi Moreira and Telzer (2018), the influences of social context on adolescents’ risk-taking decisions and behaviours were examined. The findings revealed that adolescents who experienced high levels of conflict in the family were more likely to make risky decisions and engaged in risk-taking. On the other hand, adolescents who reported low levels of conflict in the family have lower tendency to make risky decisions (Guassi Moreira & Telzer, 2018). These findings suggested that adolescents may modify their decision-making behaviours when the risks implicate their family. Such findings shed crucial light to understanding the theories of risk-taking behaviours in adolescents.

Moreover, being involved in parental conflict is associated with internalizing behaviours (Kerig, 2001; O’Brien, Bahadur, Gee, & Balto, 1997). However, there are some studies that reported that adolescents’ disengagement (e.g., avoidance, denial, and wishful thinking) from conflict can be positive as it helps them cope with the conflicts (O’Brien, Margolin, & John, 1995). Other studies disagreed and found that adolescents disengaged from parental conflict demonstrated poor outcomes (Wadsworth & Compas, 2002; Wadsworth, Raviv, Compas, & Connor-Smith, 2005).
There is little doubt that conflicts between parents and in the family are closely associated with antisocial and problematic behaviours in adolescents (Buehler et al., 1997; Jenkins & Smith, 1991; Loeber et al., 1998; West & Farrington, 1993). For example, in one study in New Zealand, children who observed their parents engaging in violent behaviours during conflicts, had a higher tendency to commit violent and property related offences (Fergusson & Horwood, 1998).

Other studies also found low conflict and high levels of cohesion in the family environment to associate with less aggression in childhood and adolescence (Andreas & Watson, 2009). Greater family conflict was linked to higher tendency in violent behaviour for urban youths aged 11 to 19 years (DuRant, Cadenhead, Pendergrast, Slavens, & Linder, 1994). Specifically, conflict among family members was associated with adolescent problematic behaviours (e.g., Caples & Barrera, 2006; Garbarino, Sebes, & Schellenbach, 1984; Gerard, Krishnakumar, & Buehler, 2006).

Likewise, Cui and colleagues (2007) reported that higher levels of conflict or disengagement between parents which arose over child rearing issues is a predictor for delinquent behaviour for adolescents aged 12 to 14 years old. Delinquent behaviours in 12 to 15 years were linked to higher level of conflict between parents. In one study, the researchers found that marital conflict is correlated with higher tendency of problematic behaviours and in turn, caused a further aggravation in marital conflict (Jenkins et al., 2005). The findings from these research studies reinforced the mutuality in the relationship between adolescents’ problematic behaviours and family conflict.

Over the years, research has taken a new perspective in investigating the mechanisms and processes involved in the conflict between parents and maladjustment in children and adolescents (Fincham, 1994). Conflict is perceived as an essential element while interacting in a relationship and it can have a constructive role. Conflicts
can promote change, allowing individuals to express their feelings and it also motivates person to person interaction (Cummings & Davies, 2010; Davies, Myers, Cummings, & Heindel, 1999). Disagreement between parents need not be negative, it can be constructive if parents use positive conflict resolution strategies and problem solving skills (Cummings & Davies, 2010; Davies et al., 1999).

Where communication is flexible and open, families are more able to adapt to changes according to the needs of the family members and hence, a lower level of conflict in the family. Thus, it is assumed that adolescents from families with less conflict and more cohesion would tend to engage in lesser aggression and fewer problematic behaviours compared to adolescents whose families are less capable to negotiate and navigate around these issues and challenges (Richmond & Stocker, 2006).

As mentioned in the previous section on theoretical underpinnings of attachment theory, security is essential in the healthy development of children’s and adolescents’. The experience with the caregivers has an impact on the children’s confidence towards the responsiveness of their parents in the relationship (Bowlby, 1980). Hence, children who do not experience responsive, sensitive or consistent care from their caregiver do not trust their environment (Davies, Harold, Goeke- Morey, & Cummings, 2002; Forman & Davies, 2005; Mikulincer & Shaver, 2003). This is especially critical in times of family conflicts. The security and confidence in their attachment figures provide a safety net, support, and sense of stability.

Another factor that results in conflicts in the family is the presence of economic or financial pressure that leads to distress among the family members (Conger, Rueter, & Elder, 1999). Family conflict revolving around stress caused by low financial resources has a negative impact on children’s and adolescents’ development. Poverty and financial strain result in family conflict and are indirectly associated with mental
health problems (Conger et al., 1999; Voydanoff & Donnelly, 1988). Children and adolescents in low income families that are also conflictual are confronted with a higher level of risk (Voydanoff & Donnelly, 1988). Thus, in the next section, the influence of financial stressors like parents’ unemployment and socioeconomic status on adolescents’ behaviour are discussed.

_Socioeconomic status and parents’ unemployment._ There is no lack of research that documents the impact of financial challenges, economic difficulties and cumulative socio-economic disadvantage, the physical, psychological and behavioural developmental outcomes on children and adolescents (Barnett, 2008; Bauman, Silver, & Stein, 2006; Gershoff, Aber, Raver, & Lennon, 2007; Lee, Lee, & August, 2011; McLoyd, 1998; Mistry, Lowe, Benner, & Chien, 2008; Schafer, Ferraro, & Mustillo, 2011). Poverty is highlighted to have an impact on families as parents are less able to cope with adverse life events. Stress directly resulting from the lack of resources together with stressors like transitions in the family, exposure to violence, and being discriminated, are more likely to exist in low income families (McLoyd, 1990; Wadsworth & Berger, 2006).

Past research has shown that children’s behaviour problems is closely linked to social and economic disadvantage (Rutter, Giller, & Hagell, 1998). There were earlier studies that showed no significant impact of income differences on children’s emotional wellbeing (Rutter, Tizard, & Whitmore, 1970). On the other hand, findings from one child and adolescent mental health study in the United Kingdom suggested significant correlations of adolescents’ emotional problems with family income and socioeconomic status (Kind & Haisken-DeNew, 2012; Reinhardt, Madsen, Kohler, 2005; Varga, Piko, & Fitzpatrick, 2014). The study revealed that adolescents from low-income families had higher risk for emotional difficulties compared to their peers from affluent families.
In one study in New Zealand, Fergusson and colleagues (1994) examined a group of adolescents with multiple problem behaviours at 15 years of age. These participants suffered from conduct disorder, had suicidal ideation, mood disorders and lower self-esteem, police arrests, substance abuse, with early onset sexual related activity. Their families were also severely disadvantaged, lack functioning and organization in structure and roles.

One other well-known study by Glen Elder (1998) reported the negative influence of financial strain and difficulties during the Great Depression on children’s life course developmental outcomes. Likewise in the Iowa study, the researchers showed that financial difficulties and poor economic status helped increase the stress levels in parents, thus impacting the parents’ nurturing abilities and parenting negatively (Conger et al., 1992, 1994).

Most researchers will agree that financial difficulties induced stress negatively influencing the parents’ mental health. As a result, it may compromise their parenting and relationship with their adolescents which can have significant consequences for children and adolescents behavioural development. Other researchers encouraged greater investigation into parenting in bad economic conditions (McLeod & Shanahan, 1993; Vernon-Feagans & Cox, 2013).

In addition, there were empirical findings that supported the hypothesis that economic situations with limited economic resources in the family can greatly influence parenting behaviours and practices which subsequently affect children’s and adolescents’ outcomes (Conger & Elder, 1994). The negative impact of financial stress on parents and children breeds worries and insecurities and is linked to psychological distress among parents (Conger & Conger, 2002; Conger, Ge, Elder, Lorenz, & Simons, 1994; Gershoff et al., 2007; McConnell, Breitkreuz, & Savage, 2011).
As a consequence, this poor mental functioning state does not promote optimal or consistent parenting behaviours (Conger, Conger, & Martin, 2010). Hence, these parents may not employ the best parenting strategies to manage their children’s behaviours. As a result of their frustration and lack of ability to regulate themselves as a consequence of higher level of stress and low levels of resources in families, they could be using more punitive discipline resources to manage their children’s behaviours (Lansford et al., 2009). For example, one study by Dodge, Pettit, and Bates (1994) showed that parents who experienced distress due to financial difficulties tend to use harsher discipline and less warmth in parenting which research has clearly shown that it is a good predictor for development of problematic behaviours in children.

In some parts of the world, recent economic recession has led to greater unemployment and the impact extends beyond the socioeconomic contexts in several countries. In countries affected by the recession and poor economic conditions, there were negative outcomes documented of families and adolescents’ well-being over a period of time (Amrock & Weitzman, 2014; Conger & Conger, 2008; Conger, Rueter, & Conger, 2000; Kalil, 2013; Reiss, 2013; Mattejat & Remschmidt, 2008; Solantaus, Leinonen, & Punamaki, 2004).

In lower income families, adolescents also tend to have fewer experiences of success in school, with less investment in academic efforts (Lee, Vandell, & Posner, 1998). Similarly, in Singapore, students who scored higher in education performance are likely to come from more affluent families as they benefit from the resources available to support their learning (Teng, 2017). Students who come from disadvantaged families do not have this kind of support and this affects their academic performance (Teng, 2017).

Adolescents are vulnerable to poor outcomes and have a higher tendency to
develop mental health related problems which could last to adulthood when there is
stress and socioeconomic difficulties in their family environment (Reiss, 2013; Singh &
Ghandour, 2012). Unemployment has a significant relationship on mental health
problems in adults too (McKee-Ryan, Song, Wanberg, Kinicki, 2005; Paul & Moser,

Existing theoretical models that discussed the family process had posited the
correlation of family adversity variables such as financial difficulties, and unstable
employment as well as, stress related parenting and family relationships on child related
outcomes (e.g., Conger et al., 2002; Mistry, Vanderwater, Huston, & McLoyd, 2002).
These familial variables such as parents’ education level and family income may
influence the interaction levels between members in the family, and the children’s
behaviour.

Research has also demonstrated the importance of availability of financial
resources to support the different needs in the family. With more resources available in
the family, parents will have more opportunities and support for positive strategies in
parenting (Mistry et al., 2002). This could result in a more functioning family
environment with fewer opportunities for conflict amongst family members (Copeland,
Shanahan, Costello, & Angold, 2009; Costello, Compton, Keeler, & Angold, 2003).
Parents with greater financial ability may have the resources to deal with difficult and
challenging behaviours. They are able to explore and employ a broader range of support
and parenting practices rather than applying limited strategies such as punitive
punishments. They also have more opportunities to communicate with their children
and address the consequences of their defiance towards parental authority or engaging

It was established in prior literature of the effects of environmental stressors on
the individual’s development and well-being being most evident when he/she experienced these hardships over multiple time points (DeBellis & Zisk, 2014; English, Graham, Litrownik, Everson, & Bangdiwala, 2005; Hammen, 2005; Jaffee & Maikovich-Fong, 2011; Lupien, McEwen, Gunnar, & Heim, 2009). There is evidence that reported the negative effects of long term chronic and continuous stress (Shonkoff et al., 2012). The prolonged exposure to stress can result in maladaptive physiological responses (De Bellis & Zisk, 2014; Heim, Newport, Mletzko, Miller, & Nemeroff, 2008). As a consequence, this individual will be at-risk in developing physical and mental health disorders (De Bellis & Zisk, 2014; McEwen, 2000, 2007; Miller, Chen, & Zhou, 2007; Odgers & Jaffee, 2013; Shonkoff et al., 2012) and ultimately, inability to function normally (e.g. parenting behaviours will be affected).

Adverse environment and stressors in that environment during childhood and adolescence increase the propensity of risk for child and adolescent maladjustment (McLoyd, 1998). There is considerable work done to establish the underpinning family processes and mechanisms related to these stressors and how these variables will influence children and adolescent development across cultures (Conger et al., 2010).

Hence, warm, cohesive and non-conflictual family relationships are thought to promote children’s wellbeing and healthy development of competencies to cope with stress in the face of family adversity, together with the support given by significant caregivers in the families (Kobak, Cole, Ferenz-Gillies, Fleming, & Gamble, 1993). Therefore, parents who are able to work out their disagreements will contribute to harmony in the family. This, in turn, will increase the confidence in their children, seeing the family as a secure base to return to, in times of stress and adversity (Ackerman, Kogos, Youngstrom, Schoff, & Izard, 1999).

In addition, these parents will be able to provide support and nurturance for their
children. On the contrary, when the family is disrupted and dysfunctional, parents may not be able to provide as much support and in this context, the family becomes a source of stress (Barnett, 2008; Conger et al., 2010; Mistry et al., 2008).

Bearing in mind that high risk children are exposed to an accumulation of disadvantaged family variables, it seems essential to examine how generally adverse family conditions (e.g. parents’ prior criminal involvement, parents’ unemployment, low financial resource, parents’ health issues) are related to behaviours (Adam & Chase-Lansdale 2002; Fergusson & Horwood, 2003; Forman & Davies 2003). Thus, multiple family adversity conditions experienced by the adolescent will present a range of challenges for adolescents during their developmental years. This study therefore aimed to provide further evidence in establishing the link between adolescent’s behaviours (problematic and prosocial behaviour) and familial-related factors (family adversity).

Parental Dimension

Quality of Parent-Child Relationship

According to Romano, Kohen and Findlay (2010), the family without doubt plays an important role during the developmental phases of the child and it affects the child’s functioning for a long period of time. Studies have long documented the fact that family relationships are key contributors to health (Thoits, 2010; Umberson, Crosnoe, & Reczek, 2010). The parent and child relationship is one important family bond, if positive, is strongly associated with overall well-being in children (Fingerman, Pitzer, Lefkowitz, Birditt, & Mroczek, 2008; Suitor, Pillemer, & Sechrist, 2006).

The importance of the role of parents to function as attachment figures, as a resource for coping, and helping the child to socialize in the environment is well-
documented in literature (Bowlby, 1969; Bowlby, 1979; Giannotta, & Rydell, 2016; Maccoby, 1992; Maccoby & Martin, 1983; Sroufe, 1996; Zeanah, Smyke, Koga, & Carlson, 2005). Earlier on, attachment theory proposed that parents are like secure bases on which a child can feel safe going about exploring their environment and then returning to the base for emotional and physical support when needed (Bowlby, 1988).

The quality of attachment between parent and child plays a key role in the development of the child’s behaviour even though many other factors are implicated in the development of children’s and adolescent’s behaviours (Belsky, 1984; Sroufe, 1997). The supportive relationship between parents and child promotes resilience, self-regulation of emotions, and a positive sense of self (Maccoby, 1992). According to Mahler, Pine and Bergman (1975), children and their parents go through a series of child and adolescent developmental phases that enable the children to learn about themselves and establish their identities in the process.

Also, other studies have shown that the quality of parent-child relationship (e.g., attachment security and parental discipline) predicts emotional and behavioural problems in the child (Greenberg, Lengua, Coie, & Pinderhughes, 1999; Patterson, Forgatch, Yoerger, & Stoolmiller, 1998).

For example, adolescents who communicate less openly, engage in less satisfactory relationships, and experience less closeness with their parents, were found to have poorer coping skills when navigating the transitions of adolescence (Collins, 1990). These adolescents also experienced more academic difficulties and behavioural problems (Collins, 1990). Compared with adolescents who reported better relationships with their parents, this group of adolescents were more likely to develop problematic behaviours and be less able to use sophisticated analyses for working out moral situations in different contexts (Johnston et al., 2002).
It is evident that the affective nature in a parent and child relationship, such as levels of acceptance, supportiveness, rejection, and conflict have been reported to have an impact on the adolescent’s socio-emotional and behavioural adjustment (Sentse & Laird, 2010). Previous research has found that parental acceptance and support are associated with higher self-esteem and social competence within the adolescent (Kerns, Klepac, & Cole, 1996; Robertson & Simons, 1989; Rhoner & Britner, 2002). Adolescents who have lower rates of depression and behavioural problems received greater acceptance and support from parents (Kerns et al., 1996; Robertson & Simons, 1989; Rhoner & Britner, 2002).

Low levels of parental acceptance and support coupled with high levels of conflict and rejection from parents were linked to higher levels of externalizing problems (e.g., aggressive and antisocial behaviours) and internalizing problems (e.g., anxiety and depression) in adolescents (Buehler & Gerard, 2002; Rohner & Britner, 2002; Rothbaum & Weisz, 1994). Similarly, increased aggressive, hostile, and depressed behaviours, and a negative worldview in an adolescent were linked to high levels of conflict between parents and children (Sentse, Veenstra, Lindenberg, Verhulst, & Ormel, 2009).

In positive parent and child relationships, children who enjoyed the benefits of sensitive care and support were more receptive to their parents’ influences and socialization incentives because they could identify with the adults’ goals and behaviours (Waters, Kondo-Ikemura, Posada, & Richters, 1991). A positive relationship between parent and child has been associated with children adopting a more positive attitude towards life issues. They are also more willing to comply, display higher levels of positive affect and lower levels of frustration and aggression (Matas, Arend, & Sroufe, 1978; Slade, 1987).
Interestingly, mothers who have positive relationships with their children were more sensitive and supportive and showed greater support for their children (Slade, 1987). Maccoby (1984) called this “mutual interpersonal orientation of positive reciprocity” between parent and child. This foundation is crucial for cooperation, and value acquisition in helping the child to respond positively to the parent’s socialization incentives (Kochanska, 2002). Although evidence stating the importance of good relationships with parents mainly stems from research on young children, there is evidence that this relationship continues its influence into early adolescence (Steinberg, 2005).

A positive parent and child relationship protects the child from risk factors and disruptive behaviour problems. For example, Lavi and Slone (2012) reported that not being exposed to violence, together with high warmth from parents were associated with lower behavioural and social difficulties among Israeli children and adolescents. Likewise, a study to investigate the pathways of externalizing behaviours among at-risk children, Montague and colleagues found that a positive parent and child relationship was associated with lower levels of problematic behaviours at age 16 years (Montague, Cavendish, Enders, & Dietz, 2010). Additionally, in another study, Rutter (1978) found that a good parent and child relationship reduced the child’s risk of developing conduct disorder even when he/she is exposed to family conflict. Overall, a positive parent and child relationship may lessen the gravity of the negative effects of adverse life conditions on the development of the child.

Several studies have confirmed the correlation between regulatory disturbances and disorders in a parent and child relationship. For example, Skovgaard and colleagues (2007) found a rate of 8.5% for child and parent relationship disorders in a Danish population sample, with a significant association to regulatory disorder, hyperactivity
and attention deficit disorder, reactive attachment disorder, conduct disorder, and emotions related disorder. Recent work on the affect regulation has confirmed the importance of parent and child interaction on the child’s mental health, as the child’s ability to regulate his/her self depends on the parent’s intuitive coregulatory competence which may be inhibited by the parents’ psychiatric or relationship disorders (Fonagy, Gergely, Jurist, & Target, 2002; Schore, 2003).

According to a range of diverse theoretical perspectives, problematic parent and child relationships have been associated with children’s and adolescents’ participation and involvement in delinquency (Loeber & Dishion, 1983; Reid & Patterson, 1989; Stattin & Kerr, 2000). However, the changing nature and quality of these relationships from childhood into late adolescence is documented in developmental research (Conger, Lorenz, & Wickrama, 2004).

For non-offending adolescents, their relationship negotiation and transition in families are believed to be a relatively smooth process leading to greater independence for the adolescents (Collins, 1990; Steinberg, 1990). As children enter high school, the role and influence of the peer group increase, while the time spent in joint activities with their parents decreases (Larson, Richards, Moneta, Holmbeck, & Duckett, 1996). Thus, the parents will have to depend on their adolescents’ disclosures regarding their leisure time to keep track of their whereabouts and activities (Keijsers, Branje, Van der Valk, & Meeus, 2010; Keijsers & Laird, 2010; Kerr & Stattin, 2000; Laird, Marrero, & Sentse, 2010; Marshall, Tilton-Weaver, & Bosdet, 2005; Racz & McMahon, 2011; Smetana, Metzger, Gettman, & Campione-Barr, 2006).

Adolescent disclosures can be facilitated by joint activities with parents (Keijsers et al., 2010; Willoughby & Hamza, 2010) and a parent and child relationship that has good affective quality (Keijsers, Branje, Frijns, Finkenauer, & Meeus, 2010;
Keijsers, Frijns, Branje, & Meeus, 2009; Kerr & Stattin, 1999). Hence, the two aspects of parent and child relationships: joint activities and the affective quality, are realigned in the normative development of the child.

A decline in parent and child activities is assumed to take place as the adolescents mature (Larson et al., 1996). For example, previous empirical studies using general population samples demonstrate that the affective quality of the parent and child relationship is stable during adolescence (Loeber et al., 2000) but shows a small decline from early to middle adolescence (De Goede, Branje, & Meeus, 2009; Keijsers, Loeber, Branje, & Meeus, 2011).

Parent and child relationships undergo transformations for different types of offenders. Moreover, the transformations in the parent and child relationship may evolve differently for boys belonging to different offending pathways. Adolescent-limited offenders are thought to have warm and close relationships with their parents during childhood. However, they may have encountered problematic relationships with their parents during their adolescent years (Moffitt, 1993; Patterson & Stouthamer-Loeber, 1984; Patterson & Yoerger, 1997; Stattin & Kerr, 2000).

Their delinquency which emerge in adolescence, has been argued to reflect their need to cut off their childhood bonds with their parents (e.g., Moffitt, 1993). Adolescents exhibiting moderate levels of delinquency spend less time in joint activities with their parents compared to non-delinquent adolescents. They also have poorer quality relationships with their parents (e.g., Keijsers, Branje, Van der Valk et al., 2010; Laird, Pettit, Bates, & Dodge, 2003). In summary, both theory and research findings suggest that the initial high-quality parent and child relationship of adolescent-limited offenders deteriorates rapidly in adolescence.
For children who exhibit early-onset and persistent conduct problems, the parent and child relationships may develop differently. It is possible that the earlier behavioural problems exhibited by the boys, together with the presence of disrupted family processes result in problematic parent and child relationships during adolescence. For example, past studies show that the involvement of parents decreases more rapidly for children with early problematic behaviours than children who did not exhibit early problematic behaviours (e.g., Patterson, Bank, & Stoolmiller, 1990; Pettit, Keiley, Laird, Bates, & Dodge, 2007).

In particular, the quality of relationship with parents (e.g., less support, more control and ready responsiveness from parents, interactions with parents are negative and frequent conflicts) is strongly correlated to higher attachment avoidance and anxiety in adolescents (e.g., Brenning, Van Petegem, Vanhalst, & Soenens, 2014; Shomaker & Furman, 2009). Also, these adolescents were not as willing to look to their parents for support compared to their counterparts (Dujardin et al., 2016). Another longitudinal study on adolescents with attachment avoidance and anxiety found that changes reported by the adolescents were associated with both changes in the positive characteristics of parent and child relationship (e.g., satisfaction of the parent and child relationship, approval from parents) and negative characteristics as well (e.g., unreasonable control and pressure from parents, criticism from parents) (Ruhl, Dolan, & Buhrmester, 2015).

It has been repeatedly discussed in previous sections regarding the developmental phase of adolescence which requires the adolescents to explore and re-organise his/her environment. As they transit into the adolescent stage, these children will spend less time with their parents and need their parents less, but their attachment and need for their peers’ acceptance increase during this period (Larson & Richards,
In this study, our focus is not to examine peer influence and attachment, but we take into account their importance and how it may possibly affect adolescents’ behaviours and attachment with parents (Brechwald & Prinstein, 2011; Cillessen & Rose, 2005; Hawker & Boulton, 2000; Rose & Rudolph, 2006).

There were similar findings to previous studies that suggested close correlations between feelings and perception towards parents and peers during the adolescence stage (Laghi et al., 2015; Lee & Park, 2017). Supported by attachment theory, the prior findings suggest that the quality of peer relationship is extended from the quality of relationship with parents (Cooper & Cooper, 1992). Hence, the quality of parental relationship is crucial to the social development of children and adolescents which has a great link to peer acceptance and rejection (Zimmermann, 2004). Indirectly, this poor acceptance from peers could result in the adolescent seeking attachment outside the norm functioning peers and find themselves associating with deviant peers who engage in problematic behaviours.

Interestingly, there are findings that suggest that paternal attachment may be a main underlying factor that enhances or buffers poor peer relationship and behavioural problems (Lee & Park, 2017). Similarly, in a study by Roelofs and colleagues (2006), children’s reports of insecure attachment with fathers and negative paternal parenting behaviours were significantly associated with greater aggression. Hence, there is a need to understand about the roles of fathers in parent and adolescent relationship which leads us to further discuss the importance of fathers in the subsequent section of this study. The detrimental and beneficial effects of the father and adolescent relationship will also be discussed in greater detail subsequently.

Finally, the present study also aims to examine if paternal attachment, in
particular, father and adolescent quality of relationship (in terms of support and conflict) will moderate the relationship between variables examined in this study and the adolescent’s behaviour.

The Importance of Father – Relationship between Father and Child

Maternal relationships have been the focus of attachment theory research for a very long time (E.g., Ainsworth, Blehar, Waters, & Wall, 1978; Brisch, 2002; Parkes, Stevenson-Hinde, & Marris, 1995). Previous studies on maternal relationships shaped the theoretical and empirical cognitive framework for understanding children’s social and emotional development (Ainsworth et al., 1978; Brisch, 2002; Parkes et al., 1995).

There has been a focus on the relationship with the mother figure as the core source of the child’s positive emotional, cognitive and social development in many studies. Greater attention is often given to the influences of mother and child relationship as compared to father and child relationship (Steele, 2002). The attention on maternal attachment is evident in the literature and has been the focus of research for some time. Other research focuses only on parent-child conflict and how these conflicts result in children’s detachment from their parents. These conflicts were discussed mainly in relation to the adolescent group, focusing on mother and adolescent relationship instead of father and adolescent relationship (Martin, Sturge-Apple, Davies, & Romero, 2017). However, the fact is the contribution of the father is ignored in most of the child detachment from parents research (Korelitz & Garber, 2016).

Yet, it is clear that the importance of fathers in a child’s development cannot be disputed. The child is considered to be ‘half of their father’ (Geddes, 2008). The interaction between the child and father is crucial and significant in the child’s
development. In this research, I would like to focus on the role of fathers, specifically, through understanding their influences on their children’s behaviours.

The function of family relationships in the social environment varies over time. This is largely due to the social and economic forces present in the environment which resulted in different expectations on the roles of parents (Lamb, 2004). Today, the new definitions of marriage and family composition in society further disrupt and interfere the functioning of the family unit and the roles of its members in it. In addition, the changes in culture and new world influences make the fathers’ roles more complicated and complex (Lamb, 2004). Having said that, there may be common denominators in the role of a father which are consistent across cultures (Geddes, 2008). Likewise, the role of a father in Singapore will be subjected to the societal changes and cultural influences.

It well-known that mothers will engage their children and build closer attachment bonds with them by investing more time. Compared to the traditional role of fathers, fathers of today are beginning to be more actively involved in the rearing and caring of their children (Lewis & Lamb, 2003; Nielson, 2012, 2014). At present, both parents may contribute to financial commitments of the families. Hence the role of the father has also evolved following this trend. Likewise, Singapore fathers today are more engaged than any generation in history. Research shows they spend three times the amount of time on childcare than dads did in 1965 (The Sunday Times, 2018). There is an expectation on fathers to devote more time on their children now and to make themselves more available. They are also expected to participate in similar responsibilities as mothers do, in the family (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000; Lamb, 2000; Marsiglio, Amato, Day, & Lamb, 2000). As
discussed in Chapter one, due to changing roles in the family, fathers in Singapore will also have to share the parenting load of the mothers.

The traditional theoretical models on parenting that was used to guide research on the role of mothers cannot be used to explain the role of fathers in the same way (Day & Mackey, 1989; Popenoe, 1996). In recent years, researchers have relooked at fathers in terms of the moral leadership of the father, or as a gender role model. Fathers’ absence in the family regarding the more specific investigations on the types of parenting behaviours in fathers were also examined (Cabrera, Fitzgerald, Bradley, & Roggman, 2014; Grossmann, Grossmann, Kindler, & Zimmermann, 2008; Lamb & Lewis, 2010; Lamb & Tamis-LeMonda, 2004).

This trend in social, cultural and legal contextual shifts for parents today pushes the need to review, reassess and reinvent the role of fathers across cultures (i.e., includes both western and eastern cultures). The new rules and conditions in the family and parenting style require the father to extend beyond the mother’s role, and not just a support in the basic care process (Lewis & Lamb, 2007; Nielson, 2014). Therefore, various pieces of evidence indicate that fathers’ responsive parenting behaviours are impactful, with a broad spectrum of implications on children’s development and adjustment from infancy to adulthood (e.g., Fagan & Inglesias, 1999; Flouri & Buchanon, 2004).

It is necessary to include the father in the examination of the parent and child relationship. As the studies mostly revolve around the role of the mother, it could give a false impression that the role of fathers are not as crucial in children and adolescent development. Extensive studies have shown that how children perceived the importance of parents in their lives, were fundamentally important. For example, one study by Schenck and colleagues (2009) reported that in families with stepfathers, the perception
of the adolescent towards his/her significant caregivers in the household like the mother, stepfather and biological fathers who reside outside the household, was significantly linked to adolescents’ internalizing and externalizing problematic behaviours. Likewise, Velez and colleagues (2015) reported similar findings for families which are intact. More importantly, both research studies highlighted the child’s perception of the importance of their fathers to have a strong correlation with their mental health compared to their perception of the importance of their mothers.

There is enough research that discusses the importance of fathers and their roles in the family. It is reported in various literature that father involvement is associated with better outcomes for children and adolescents in education and in particular, achievement (Amato, 1993; Fagan & Inglesias, 1999; Flouri & Buchanon, 2004). A study by National Child Development Study collected data involving a sample of 17,000 children since their birth year in 1953, confirmed the importance of fathers in children’s lives (NCDS, 2001). The findings reported that the involvement of father in childhood, whether he was present within the family or not, was associated with the following: good relationships between parent-child in adolescence was linked to good relationships in adult life, fewer reports of behavioural difficulties in adolescence, particularly for boys, less participation in delinquent acts that violated the law (NCDS, 2001). The support from father and their involvement in their children’s lives were also associated with academic motivation (NCDS, 2001). In non-intact families, support from father provided protection for the adolescents from psychological problems and against mental health problems in later years (NCDS, 2001).

However, some studies found that the presence of fathers is closely linked to adolescents’ overall wellbeing and academic outcomes (Amato, 2004; Downer & Mendez, 2005). Fathers are reported to have greater influence on adolescents’
happiness than mothers do (Flouri & Buchanan, 2003). Studies also showed that in living separately from their biological fathers, children and adolescents have a higher risk of negative outcomes regardless of differences in education, race or their mothers remarrying (Amato, 2000; Cherlin, 1999; McLanahan & Sandefur, 1994). Fathers’ absence and non-involvement were also associated with at risk behaviours, unlawful activities, and poor school outcomes in adolescents (Booth, Scott, & King, 2010; Carlson, 2006). Similarly, these findings extend to fathers not living with the adolescents (Amato, 2004).

In an earlier research conducted in Britain, early fathers’ involvement was found to protect against psychological distress in daughters during their adulthood after controlling for mother’s involvement (Flouri & Buchanan, 2003). In another study, early fathers’ involvement was found to protect against adolescents’ psychological maladjustment from non-intact families and linked to positive outcomes in personal relationships later in their life (Flouri & Buchanan, 2003).

In a meta-analysis conducted on father’s involvement by Adamson and Johnson’s (2013), having a positive father and child relationship was strongly linked to the well-being of the child (the measures used included closeness between father and child, trust, and support from father). Acceptance from father was associated with lower levels of anxiety and depressive symptoms reported by the adolescents (Leidy et al., 2011). While rejection by father was linked to higher levels of anxiety and depressive symptoms (Leidy et al., 2011), several other studies also highlighted the importance of the presence of fathers and their roles in their children’s lives (Carlson & Corcoran, 2001; D’Onofrio et al., 2005, 2006; Hao & Xie, 2002). Thus, it is evident that the importance of fathers goes beyond basic daily care giving. Being active and responsive remained critical to the psychological well-being of their children. Therefore, this
current study seeks to examine the constructs of attachment on father and child relationship.

Stemming from the core understanding of attachment theory, there is a close relationship between insecure attachment, unresponsive parents, poor parental communication, and children’s behaviours (Bowlby, 1988; Shaw & Dallos, 2005). A meta-analytic research examining relationships between father and infant confirmed the association between sensitivity from parents and attachment security (Lucassen et al., 2011). Furthermore, both fathers and children stressed the importance of the father being available and responsive (Roy 1999). Bowlby (1988) mentioned that the lack of parental responsiveness and being available is one crucial aspect of the attachment relationship which could result in insecure bonds between parents and adolescents.

Poorly rated father and adolescent relationships were associated with problematic behaviours (Allen et al., 2006; Brennan et al., 2002; Hale et al., 2005; Leidy et al., 2011; Shiner & Marmorstein, 1998) and mental health issues in adolescents (Cummings et al. 2010; Marmorstein, Malone, & Iacono, 2004). A study by Day and Padilla-Walker (2009) which aimed to examine the differences between fathers’ and mothers’ roles on the well-being of their adolescents, highlighted the importance of studying fathers and mothers separately. For this group of early adolescent boys and girls, fathers’ parenting was shown to have a strong association with young adolescents’ internalizing behaviours after controlling for mothers’ parenting. In contrast, mothers’ parenting was more related to the sense of hope for the adolescents.

Based on the above, there is clear evidence that the unavailability of fathers affects the development of children’s and adolescents’ emotion demonstrating an increased probability that they will be affected by the poor outcomes like lack of confidence in self-image, fear of rejection, higher risks for depression, more prone to
violence, and other issues that affect their development (Charity, 2003). Other similar studies which examined the different influences of fathers and mothers on the child and adolescent (Ducharme et al., 2002; Lieberman et al., 1999), found that fathers were particularly important in helping them to socialize with others and having less conflictual relationships with their peers (Evans & Fogarty, 1999; Green, 2002).

Furthermore, from the perspective of family systems, each individual in the family interacts with other members. In turn, the individual will influence and is also influenced by the other members in the family (Tamis-LeMonda et al., 2004). These social interactions provide a socialization process for parents to share and encourage certain desirable behaviours they would like to develop in their children. Although the research on the role of fathers has increased, there could be greater research parallel to this with regards to the role of fathers in Asian contexts (Chuang & Moreno, 2008).

Just as important, there is also a need to understand the role of fathers in our local context.

In Asian contexts, most fathers control the familial financial resources and decide on the important matters about the family and the children. Traditionally, fathers have a more powerful presence than mothers in the family and these men often do not discuss or talk about domestic issues. On a similar vein, women do not speak about issues outside the domestic realm. Thus, in such familial settings, fathers were perceived to be distant and not approachable (Ho, 1987; Shek, 2001). In terms of parent-child relationships, “History has suggested that the father and son relationship was the most structurally important relationship in the social system” (Hsu, 1967, p.63). Hsu (1967) “termed this relationship father and son identification, in which whatever one is, the other is; and whatever the one has, the other has” (p. 63).
One longitudinal study by Shek and Ma (2001) discussed the relationships between parent-adolescent conflict and problematic and prosocial behaviours in Chinese adolescents. Their study stressed that parent-adolescent conflict was related to adolescents’ problematic and prosocial behaviours. Specifically, the study showed that father and adolescent conflict was closely associated with problematic and prosocial behaviour across time (Shek & Ma, 2001). Most importantly, their findings suggested that the link between father-adolescent conflict and adolescent behaviours is stronger than that of mother-adolescent conflict and adolescent behaviour (Shek & Ma, 2001).

Furthermore, Amato (1993) claimed that good relationship and closeness with fathers was associated with opportunities in education and occupation for children in their adulthood. The involvement and nurturance from fathers were positively associated with children’s cognitive development, social competence, internal locus of control and ability to empathise with others (Fagan & Inglesias, 1999). Similarly, Pleck (2004) reported that individuals who had a good relationship with their fathers displayed higher self-esteem, a greater internal locus of control and the capacity to control what was happening in their lives. Children who had a good relationship with their fathers were found to be well-adjusted psychologically and do better at school (Flouri & Buchanon, 2004).

Although such positive outcomes are often demonstrating that good father and child relationships happen no matter if the father is living in the household or apart from the family, there is also no lack of data supporting the negative impact of lack of father involvement. The absence of father is often associated with an increased risk of child problems (Amato, 1993). Subsequent research also showed that poor paternal engagement was associated with undesirable outcomes (Gorrell Barnes, Thompson, Daniel, & Burchardt, 1998; Kraemer, 2005). When children do not see their fathers
much, they form unhealthy and undesirable ideation of the fathers or sometimes blame themselves for their absence. Many children feel distressed, angry and even develop self-doubt when fathers are absent in their lives (Fortin, Ritchie, & Buchanon, 2006).

The powerful influence of the father whether absent or present, is evident in child developmental outcomes. Further emphasis in the literature shows that the emotional, cognitive and social development of the child is strongly supported by the presence of the father and undermined by the absence of the father (Solomon & George, 1999). Having a secure relationship with the father has great importance and influence over the child, whether or not the father is working in partnership with the mother (Obholzer, 2003).

Literature and past research has repeatedly confirmed that fathers are key to the emotional health of their children (Rosenberg & Wilcox, 2006). They should be encouraged and equipped to be capable caretakers and disciplinarians. Studies suggest that fathers who are affectionate, supportive, and involved, contribute to the child’s mental, emotional, language, and social development (Allen & Daly, 2007; Garfield & Isacco, 2006). He is also a positive contributor to the healthy development of a child’s inner, sense of well-being, self-esteem, and authenticity in character (Rosenberg & Wilcox, 2006).

There are a few studies that demonstrate the positive influence of fathers’ involvement on the development of adolescents (Michiels, Grietens, Onghena, & Kuppens, 2010; Newland, Chen, & Coyl-Shepherd, 2013; Sarkadi, Kristiansson, Oberklaid, & Bremberg, 2008). Some research also reported that fathers have greater contribution to the adolescents’ level of happiness, satisfaction in life and consumption of alcohol than mothers do (Flouri & Buchanan, 2003; Gonye & van Dulmen, 2010). In some literature, there are suggestions that attachment to fathers is crucial in adolescents’
social competence, especially in the development of their peer interaction and relationship skills (Lamb & Lewis, 2010). There is a growing agreement among researchers that the association between sensitive parental support for autonomy and adolescent social competence is stronger and more significant for fathers compared to mothers (Grossman et al., 2002; Marsiglio et al., 2000; Paquette, 2004).

Research shows amongst the different significant caregivers in a child’s life—father is an important attachment figure to understand the significant factors that will predict the child’s developmental outcomes (Cowan, 1997; Lamb, 2004).

Although it is often assumed that fathers have an impact on the development of their children, evidence is however, not easily available (Lewis & Lamb, 2003). There seems to be evidence showing that fathers tend to interact less sensitively with their children when compared to mothers. Hence, it is no wonder that many children seem to be more attached to their mothers when compared to their fathers (Gorrell Barnes et al., 1998; Kraemer, 2005).

In some cases, fathers are involved in specific roles in the family. In some Western cultures fathers play the role of a playmate to their children (Leavell, Tamis-LeMonda, Ruble, Zosuls, & Cabrera, 2012; Lewis & Lamb, 2003). Although interaction with fathers predict for later socio-emotional development, father’s involvement was also found to predict adult adjustment better than involvement from mothers (Lewis & Lamb, 2003). One other factor involves the indirect contribution or influence of fathers’ role in the larger environment because of the multiple roles that fathers play in the family. Secure attachment relationships with fathers can strongly impact the psychological adjustment and development of their children (Lamb, 2004).

The father figure in the family may be regarded as an important resource for the development of self-regulation skills which is considered to be very important in at-risk
families. It is evident that the interactions between father and child give children different meaningful experiences compared to the interactions between mother and child. These interactions are typically characterised to be high in energy and engaging. Unpredicted play with father figures also provide a context for practicing self-regulation skills (Grossmann et al., 2008; Lamb, 2004).

Hence, the fathers’ role in influencing behaviours is critical. There were studies that documented the correlations between self-regulation and behaviours (e.g., Carlo et al., 2012; Metin, Harma, Gökçay, & Bahçivan-Saydam, 2017; Moilanen, Padilla-Walker, & Blaacker, 2018). To illustrate, Chika and colleagues (2013) conducted a study to examine adolescents’ social self-regulation in four cultures and investigated the relationships between social self-regulation and antisocial behaviour. The participants included 1,270 adolescents from Japan, Korea, China, and the United States. Findings from the study indicated that for adolescents from Korea, China, and United States, the main effect of self-inhibition on antisocial behaviour was observed. However, for adolescents from Japan, an interaction effect of self-assertion and self-inhibition on antisocial behaviour was observed. The result also indicated that the influence of fathers’ role on behaviours may differ in different cultures.

Progressively and over the past few decades, there is greater interest in the influence of fathers on children and adolescents' development and outcomes which differ from the influence of mothers (Bolkan, Sano, De Costa, Acock, & Day, 2010; Gamble, Ramakumar, & Diaz, 2007; Lamb, 2010). Specifically, the influence of fathers is not unidimensional as it works through different mechanisms, effecting different outcomes. Equally important, fathers were reported to have equal and unique contributions to children and adolescents development (Day & Lamb, 2003; Lamb, 2010; Pleck, 2010; Pleck & Masciadrelli, 2004). For example, some studies advocate
father’s presence and being involved in their children’s lives as factors which protect the child or youth from deviancy (Cobb-Clark & Tekin, 2014; Coley & Medeiros, 2007). At the same time, these protective factors also put the adolescents at a safe distance from violence and aggressive acts (Caldwell, Ward, Reischl, & Deloney, 2011).

To fully understand the importance of fathers, we need to examine the impact of the absent father. According to socialization theory, the absent father affects the adolescent behaviour by modelling a negative behaviour, which is by not being present in the child’s life. More specifically, the father’s absence is often linked to preceding parental conflicts and these conflicts put the children at risk of negative outcomes such as poor emotional adaptive behaviours, bad coping strategies and facilitate behaviours that are impulsive (Amato & DeBoer, 2001; Hetherington et al., 1998; Single-Rushton & McLanahan, 2002). They will continue with these behaviours in their adolescent years (Amato & DeBoer, 2001; Hetherington et al., 1998; Single-Rushton & McLanahan, 2002). At the same time, the absence of fathers is also repeatedly linked to children’s participation in delinquent activities, having anxiety and depression, and exhibiting problematic behaviours (Carlson & Corcoran, 2001; Le Roux, 2009).

High quality father parenting has been documented to be associated with the different areas of children's cognitive development such as having higher cognitive ability, and achieving better arithmetic and reading scores, independent of maternal parenting (Amato & Rivera, 1999; Coley, Lewin-Bizan, & Carrano, 2011). This shows that the quality of fathers’ involvement is more important than the quantity of time the father has with his child (Easterbrooks & Goldberg, 1984).

During adolescence, positive communication between father and child is
significantly linked to greater self-esteem, positive adjustment in school and, lower levels of depression, and substance abuse (Bireda & Pillay, 2018; Roberts & Bengtson, 1996). Cross-sectional studies conducted in this area also indicate that higher level of involvement of fathers was closely related to increased levels of adolescent’s psychological well-being (Flouri & Buchanan, 2003; Videon, 2005), with fewer incidents of problematic behaviours (Flouri, 2005b; Flouri & Buchanan, 2003). At the same time, previous research showed that fathers’ support and involvement were negatively correlated with child’s problematic behaviours (Cheadle, Amato, & King, 2010; Cummings & Davies, 2002; Greene & Moore, 2000; King, 1994).

There is existing research which examined how father and child relationships influence the developmental outcomes of children in the areas of social, cognitive, emotional, behavioural, and physical development (Day & Padilla-Walker, 2009; Flouri, 2005). Research also showed that the relationship between father and child can often explain the difference in child outcomes and in some cases, over and above the relationship between mother and child (e.g., Flouri & Buchanan, 2003; Nielson, 2014; Rohner, 1998; Videon, 2005).

Furthermore, there is evidence from western countries emphasizing how father and daughter relationship is significantly associated with positive child adjustment (Nielson, 2012, 2014). The quality of father and daughter bond or relationship is linked to a number of outcomes in later adult years for daughters. For example, it is linked to outcomes such as better academic performance and career success, better quality partner attachment, higher levels of satisfaction in romantic relationships, higher levels of self-esteem, able to make better sex-related decisions, lower levels of depressive symptoms, lower anxiety levels, fewer stress related problems, and eating disorders (Nielson,
Generally, the quality of father and child relationships has critical impact on the adjustment of children in various domains, specifically, for daughters.

This distinction of fathers’ parenting role is important, as these roles are considered to be weaker when compared to the parenting role of mothers (Goeke-Morey & Cummings, 2007). To illustrate, Amato and Gilbreth (1999) showed in their seminal meta-analysis, that the quality of involvement and support by non-residential fathers, in particular, encouragement given by fathers, support from and closeness to father, were correlated with the social, emotional, and psychological well-being of children (Adamsons & Johnson, 2013; Amato & Gilbreth, 1999).

It is also documented in research literature on early intervention that fathers play an important role in interventions involving parents. Children are able to achieve better developmental outcomes and keep up with those improvements over time (Ajzen & Fishbein, 1980; Bagner & Eyberg, 2003; De Luccie, 1996).

A few studies have compared fatherhood in Asia and the West. The results reported that Asian fathers are different in their use of time, attitude, and functions in caring for their children, compared to fathers in Western cultures (e.g., Lamb 2004; Spinks & Ho, 1993). For example, Asian fathers are likely to be uninvolved and spend less time in child rearing duties, household related chores and activities in the family compared to Western fathers (e.g., Kwon & Roy, 2007). Moreover, a study conducted previously, highlighted that Asian children mostly viewed and described their fathers as being busy, returning home late, and working very hard. These children shared little concern about not having communication with their fathers (e.g., Lamb 2004; Yang, 1981). Taking these results into consideration, Asian adolescents’ perception about their paternal attachment was shown to be consistent. For adolescents who reported more secure attachments with their fathers, this relationship served as a protective factor for
negative influences from the environment. To a large extent, such findings have great implications in understanding the development of children and adolescents in Asia.

According to studies discussed above, the quality of fathers’ relationship and attachment with the adolescents may influence children’s coping and development in the context of other familial relationships (Day & Lamb, 2004; Oh, Lee, & Park, 2011).

Therefore, a further investigation is needed to investigate whether the moderating effect of paternal attachment (e.g., perceived paternal support and conflict) will support the many significant influences of fathers in adolescence.

Parenting and Conflict - The Detrimental Effects of Father and Child Conflict

During adolescence, transformations in the family relationships result in changes in expectations that the parents and adolescents have about each other (Lerner & Galambos, 1998). Adolescents begin to challenge rules, opinions, and traditions that seem to be imposed on them rather than negotiated (Smetana, 1989). During adolescence, parents and adolescents renegotiate their relationship so that they can adapt to the physical maturation changes as well as new development in their cognitive, social, and emotional faculties (Baumrind, 1991; Collins, Gleason, & Sesma, 1997; Smetana, 2005).

During the renegotiation process, parents often reassess and change their parenting practices. There are three possible ways for parents to adapt and manage their adolescents during this stage. One suggestion is for parents to involve their adolescents in decision-making moments in the family (Lamborn, Dornbusch, & Steinberg, 1996). Alternatively, parents can use more logical reasoning and explanation approaches to justify their positions, so as to accommodate the adolescents’ increased intellectual ability in complex and abstract reasoning (Baumrind, 2005). Parents can also choose to
give up control and grant autonomy to the adolescent so as to enable him/her to function without parental supervision (Smetana, 2002). In adolescence literature, there is common agreement that the negotiation between parent and adolescent results in greater conflict compared to the late childhood stage. These are challenges faced by parents during the child’s transition years in development (Allison & Schultz, 2004; Laursen et al., 1998).

As children enter adolescence, they resent parental authority in being overtly involved in their activities (Collins & Laursen, 2006; Steinberg & Silk, 2002). They tend to disagree openly with their parents which leads to increased opportunities for conflict between parent and adolescent. Increased conflict with parents has been associated with various negative outcomes for youths such as running away, moving out, getting married early, becoming pregnant early, developing mental illness, attempting suicide, and abusing drugs (Laursen & Collins, 1994; Petersen, 1988). More recently, Laursen, Coy, and Collins (1998) found the frequency of parent-child conflict to be more intense in mid adolescence than in early adolescence. In late adolescence, the frequency of parent and child conflict is lower (Laursen et al., 1998).

Some researchers reported that conflict in a supportive environment can lead to positive outcomes such as in character development and in conflict-management skills (e.g., conflict resolution and management) (Von der Lippe, 1998). In secure relationships with parents, conflict, if not excessive, can facilitate the process of adolescents challenging and forming their own ideas and opinions. On the other hand, high frequency of conflicts that do not aid psychological growth, can be detrimental to the adolescent, resulting in problematic behaviours like running away from home, engaging in early marriage and associating with antisocial peers (Sampson & Laub, 1993).
Most researchers concur that adolescents do not suddenly become defiant and argumentative (Eberly & Montemayor, 1998). Prior studies advocated that the emotional quality in a parent and adolescent relationship begins earlier, and before the early adolescence stage. The quality of this relationship strongly determines the relationship the parents have with their adolescents. It is not surprising that in a warm and caring relationship, the adolescents are less likely to argue with their parents (Steinberg, 2001). Hence, in a warm and secure home environment where they are allowed to express themselves freely and to forge their identity, especially when the rules and expectations are sound, the adolescent will thrive.

The existing literature has shown that parent and adolescent conflict is associated with poor adjustments like depression, problematic behaviours, poor academic performance, low self-esteem, anxiety and poor self-control in adolescents (Forehand, Brody, Slotkin, Fauber, McCombs, & Long, 1988; Forehand, Long, Brody, & Fauber, 1986).

There is a consistent link between poor parent and child interactions and the deterioration of adolescent problematic behaviours (e.g., Hoeve et al., 2009; Hoskins, 2014; Klahr et al., 2014). In particular, the lack of management skills and how parents react towards adolescent’s challenging behaviours (e.g., irritation, frustration and anger) was significantly related to the development of adolescent problematic behaviours including involvement in sexual-related activities (Brand & Klimes-Dougan, 2010; Crosswhite & Kerpelman, 2009; Crum et al., 2015; Hoeve et al., 2009; Patterson et al., 1990).

Conflicts between fathers and adolescents are connected to serious fights or violence (Johnson, Cohen, Gould, Kasen, Brown, & Brook, 2002). Criticism from parents (Allison, Pearce, Martin, Miller, & Long, 1995), and unresolved conflicts
between adolescents and their parents (Toumbourou & Gregg, 2002) are likely to
differentiate adolescents who are suicidal from their peers who are non-suicidal. In
addition, parent and adolescent conflict is closely associated with outcomes in
adolescents’ mental health (Gould, Greenberg, Velting, & Shaffer, 2003). Furthermore,
in other studies, the conflict between parent and adolescent has been associated with a
variety of mental health related issues and substance use outcomes (Burt, Krueger,
McGue, & Iacono, 2003; Repetti et al., 2002).

High levels of parent and adolescent conflicts are widely regarded as a
prominent marker of poor adaptive functioning in family and exacerbate the risk for a
substantial range of youth related problems in families (Keefe & Padilla, 1987; Repetti
et al., 2002). In a study related to Latino youths, high levels of parent and adolescent
conflict were linked to higher risk for problematic behaviours and drug/substance
misuse (Johnston, O’Malley, Bachman, & Schulenberg, 2004; McLaughlin, Hilt, &

Finally, consistency in the quality of parent-child interaction (e.g., warmth,
responsiveness, support and conflicts in the relationship) over time is often mediated by
parenting practices (Barber et al., 2005; Baumrind, 1991) and intervening events (e.g.
family adversity) such as family stress or significant changes in family circumstances
(Forman & Davies, 2003). Thus, the following section on parenting styles will further
discuss how these factors affect relationships and behaviours of adolescents.
Parenting Styles

Apart from genetic features and characteristics, children also learn values, social interaction patterns and perspectives of the world from their parents. Thus, the adolescent’s attachment to his/her parent is closely tied to his/her self-identity because how the caregiver perceives the adolescent will have a strong influence on how they see themselves in the world (Morley & Moran, 2011).

There is a vast amount of studies that have been conducted to emphasise and promote the influence of parenting on all aspects of growth, adjustment and development of adolescents (e.g., Becker, Ginsburg, Domingues, & Tein, 2010; Martini, Knappe, Beesdo-Baum, & Wittchen, 2010). The dynamic relationship between a child and his/her caregiver has also been the focus and key interest of many theories (e.g. Freud, 1965). Parent and child attachment serves as an initial springboard to facilitate and improve relations with peers through the internal mechanisms of relationships (Ladd & Pettit, 2002).

It is evident in previous empirical findings that children who describe their parents with characteristics such as being responsive, show warm affect, and express care, are more likely to have secure attachment relationships with their parents (Kerns, Tomich, Aspelmeier, & Contreras, 2000). Conversely, there is a negative correlation between secure attachment and parental rejection (Kerns et al., 2000). Also, the theoretical frameworks of parenting and attachment styles were thought to have a bidirectional relationship which meant that a child who perceived his parents as rejecting, might likely develop a coexistence of positive and negative feelings toward the caregiver (Bowlby, 1973; Zeanah, Boris, & Lieberman, 2000).

It was discussed in the previous section the importance of how the quality of the adolescent and parent relationship would aid or disrupt the adolescent’s well-being
which in turn, will influence the quality of attachment between parent and child. There are a number of parenting aspects which may aid or prevent the forming of secure adolescent and parent attachments. Parenting styles can affect how children feel about their attachment with their primary caregivers. In turn, this will affect their confidence in the responsiveness of their parents being available during their times of distress and need.

Parenting style refers to the specific behaviours and strategies parents used to control and socialize their children (Lightfoot, Cole, & Cole, 2009). To understand social adjustment amongst young children, parenting styles were conceptualized to explain the influences of the parents (Baumrind, 1967). Baumrind (1971) also identified three distinct parenting styles namely authoritarian, authoritative, and permissive.

Previous literature discussed authoritative, authoritarian, and permissive, in particular, the qualitative differences in the parents’ behaviours (psychological control and support) (Baumrind, 1968). In specific, highly in control is one key feature of both authoritative and authoritarian parenting. One key difference underscored the communication characteristics in these two types of parenting styles: In authoritative parenting, communication about rules is encouraged, whereas in authoritarian parenting, there is absence of communication (Kerr, Stattin, & Özdemir, 2012).

Authoritative parenting is characterised by high levels of warmth, structure for functioning and autonomy support (Bornstein, 2006). Although authoritative parents exert control over their children and adolescents, they are open to communication and will encourage and allow their children to have an opinion or right of argument. It is agreed that as the child grows older, the need for more freedom and autonomy from his parents will increase as the child exerts his/her rights to maintain their independence. Consequently, there is great strain and conflict present in the parent and child
relationship during this growth and development period (Collins & Russell, 1991). A large volume of research literature concurs that parent and child relationship has a deep impact on the psychosocial functioning of the children and adolescents (e.g., Baumrind, 1967).

Adolescence is a period heightened with stress as the adolescent experiences changes in physical maturation together with a high drive to attain autonomous functioning (e.g., Alsaker & Dick-Niederhauser, 2006; Blakemore, 2008; Casey, Getz, & Galvan, 2008; Casey, Jones, & Hare, 2008; Dekovic & Meeus, 2006; Dixon, Scheidegger, & Mc Whirter, 2009; Stark, Hargrave, Hersh, Michelle, Herren, & Fisher, 2008). Besides these new experiences which are accompanied by different challenges, the adolescent is also expected to adjust and adapt to responses and expectations of other people in relation to these changes (Archibald, Graber, & Brooks-Gunn, 2003).

Hence, it is not unusual that research findings highlight a surge in problematic behaviours during this transition (Alsaker & Dick-Niederhauser, 2006) as the adolescent seeks behaviour autonomy. Behaviour autonomy is defined as the “extent to which adolescents acquire freedom of action from parents” (Peterson, 1986, p.232). To explain it simply, it means to have self-control and direction in making one’s decision after deliberating the consequences and outcomes (e.g., choice of friends, dressing, leisure activities, educational interest and career aspirations).

Researchers have documented this developmental pathway to explain the adolescents’ autonomous functioning (Holmbeck & Wandrei, 1993; Peterson, Cobas, Bush, Supple & Wilson, 2004; Peterson, Steinmetz, & Wilson, 2005; Smetana, 2002), and claimed it to be an indicator of mental health (Jahoda, 1958). Other researchers and theorists postulate that this autonomy is associated with the forming of identity in an
individual (Blos, 1979; Erikson, 1959, 1968) which is indispensable to the adolescent’s developmental pathway of adjusting and adapting.

It is evident in research that an individual who has the opportunity to exercise autonomy in a supportive environment has better mental health and, higher self-esteem. He/she is also more competent to motivate, show initiative, and self-regulate (Cohler & Geyer, 1982; Ryan & Deci, 2000; Zimmer-Gembeck, 2001). This opportunity to practise independence in a structured and safe context is the hallmark of authoritative parenting.

Consistent with Grusec and Davidov's (2010) report that when the parent gives space for flexibility and self-regulation, the child may develop prosocial tendencies toward others. The findings from previous studies show the increasing importance of autonomy and attaining independence during adolescence (Moilanen, Rasmussen, & Padilla-Walker, 2015). Given that adolescence is portrayed as a developmental period which the parent and adolescent conflict temporarily increases, it is recommended that parents adopt parenting approaches that encourage autonomy, together with a suitable amount of control and a reasonable amount of choice (Branje, Laursen, & Collins, 2013). In turn, these behaviours are likely to inculcate children's independence, competence, and relatedness (Deci & Ryan, 2000), which are closely related to prosocial behaviours.

On the contrary, the lack of opportunity to take part in decision-making results in low autonomy among adolescents (Dornbusch et al., 1985; Kobak et al., 1991; Litovsky & Dusek, 1985). Adolescents fail to learn to assert their individuality or express their opinions when their autonomy is undermined, and often they end up depending on others for decision-making (Steinberg, 1990). Researchers have reported that adolescents experience frustration in the process of negotiating for autonomy when
it is undermined by their parents (Hagan, Hollier, O’Connor, & Eisenberg, 1992; Kobak & Ferenz-Gillies, 1995). For example, lower levels of autonomy is found to predict higher levels of internalizing symptoms (Beck, 1983; Edidin & Gaylord-Harden, 2009). Other studies also indicated that adolescents who were not allowed to exercise autonomy by their parents exhibited negative behaviour such as depression, unhealthy relationships with peers, and externalizing symptoms (Allen et al., 2006; Eberhart & Hammen, 2006; Lee & Bell, 2003; McClanahan & Holmbeck, 1992; Quintana & Kerr, 1993; Soenens & Vansteenkiste, 2005). Hence, over time, it is important for parents to change their response according to adolescent’s increasing needs and permit adolescents to share in their decision making (Baumrind, 1991; Eccles et al., 1991; Holmbeck et al., 1995; Steinberg, 1990).

Also, other theoretical reviews proposed that the quality of parent-child interaction and how they shared the responsibility of decision making will help the children and adolescents develop competencies that facilitate independent and responsible behaviour (Collins et al., 1997; Darling & Steinberg, 1993; Grotevant & Cooper, 1986; Hauser et al., 1991). These children will be competent in the development of their ego and in their identity formation (Collins et al., 1997; Darling & Steinberg, 1993; Grotevant & Cooper, 1986; Hauser et al., 1991). They are also more capable of having their own views and less likely to have the herd mentality (Collins et al., 1997; Darling & Steinberg, 1993; Grotevant & Cooper, 1986; Hauser et al., 1991). More importantly, they are also able to form healthy bonds with other members in the family (Allen, Hauser, Bell, & O’Connor, 1994; Lamborn, Mounts, Steinberg & Dornbusch, 1991).

Thus, parents’ authoritative parenting marked by appropriate use of control and
effective two-way communication, combined with warmth and acceptance were
correlated with higher maturity level, and positive social and responsible behaviours in
children and adolescents (Baumrind, 1991; Lamborn et al., 1991). Similarly, in other
studies, prosocial behaviours in children were associated with effective and clear
communication of parents’ expectations of behaviours together with giving autonomy to
the child (Eisenberg, 1990; Grotevant & Cooper, 1998). Allen et al. (1994) found that
parents’ behaviours which do not encourage discussion or sharing of opinions by other
members in the family were strongly linked to a lower competency in ego development
and self-esteem for adolescents aged 14 to 16. This is especially significant for fathers’
behaviours.

Children whose parents use authoritative parenting style tend to be more
socially, emotionally, and academically competent as compared with children whose
parents use authoritarian and indulgent parenting styles (e.g., Pomerantz, Grolnick, &
Price, 2005; Steinberg et al., 1994). Authoritative parenting with appropriate
psychological or behavioural control predicts higher levels of well-being in adolescents
(Bornstein, 2006). For example, studies have shown that for adolescents whose parents
practised authoritative parenting style, they would not commonly participate in smoking
(Huver, Engels, Vermulst, & De Vries, 2007; Pierce et al., 2002) and drinking (Jackson,
2002).

There were positive and negative outcomes reported for both authoritarian and
permissive families. Thus, their contributions to youth outcomes are not clear.
Authoritarian parenting is rigid, strict, demanding, controlling and less responsive.
These parents exert excessive control and their children are expected to follow the
instructions set by them. For example, authoritarian parents are strict but lack warmth in
their interactions. They demand obedience from their adolescents to conform to their
rules (García & Gracia, 2009). Hence, their adolescents are more likely to achieve in
school and less likely to be involved in problematic behaviours when compared with
their peers (García & Gracia, 2009). However, these adolescents were also characterised
to have higher reliance with lower competence, and experienced greater psychological
and somatic distress (García & Gracia, 2009).

Adolescents who experienced permissive parenting (parents are warm and less
strict) displayed greater capability of self-reliance and self-competence. However, they
also displayed high levels of problematic behaviours (Steinberg et al., 1994). Permissive
parents tended to respond and express low levels of demandingness, lacking in
discipline and supervision. In contrast, neglectful parents displayed low parental
expectations, showed little involvement, displayed rejection and unresponsive attitude,
which were closely related to high levels of problematic behaviours (e.g., Lamborn et
al., 1991; Steinberg et al., 1994).

In both permissive and neglectful parenting, there is lax supervision of the
adolescents. The lack of supervision or inconsistent supervision has implications on
adolescents’ behaviour and their engagement with antisocial peers. When parents do
not know the whereabouts of their children, the adolescents are more likely to join the
company of undesirable peers and are more likely to succumb to pressure from these
negative influences (Katz, 1997). It has been documented in previous studies that lax or
weak parental supervision together with being rejected by peers can push the
adolescents to associate with deviant and non-conforming peers (Dishion, Patterson,
Stoolmiller, & Skinner, 1991). In addition, weak supervision also predicted serious
problematic behaviours and increased the risk of drug use (Chamberlain & Patterson,
1995).
A number of studies documenting similarities between authoritarian and permissive parenting showed that adolescents from these two parenting styles had lower levels of self-esteem, higher levels of anxiety, displayed greater likelihood of aggressive behaviour, had disturbed and disrupted sleep pattern, and symptoms of depression (Brand, Hatzinger, Beck, & Holsboer-Trachsler, 2009; Erozkan, 2012; Ostrov & Crick, 2006).

Strict and demanding parents are likely to set high behavioural standards and may put in place more practices to supervise their children. The demanding characteristic of a parent has been found to encourage strong internalized values (Grusec & Goodnow, 1994). On the other hand, aloof and hostile parents are harsh and neglect their children which will subsequently encourage aggressive and antisocial behaviours (Maccoby & Martin, 1983). Even though there are other variables influencing and disrupting the development of prosocial behaviours, a parent who is supportive and demanding is considered an important protective factor in adolescent development.

Given the importance of prosocial behavioural development in adolescence, the factors that may influence the development of such behaviours in adolescents are attracting increasing interest from researchers (Brief, Motowidlo, & Motowidlo, 2016). As such, many researchers have investigated the importance of parenting in adolescent development and, in particular, the link between parenting and adolescents' prosocial behaviour (Hastings, Rubin, & DeRose, 2005; Knafo & Plomin, 2006; Mikulincer & Shaver, 2005; Padilla-Walker et al., 2016). Thus, the research reported that parenting that is characterised by warmth and responsiveness (i.e., having higher level of support and care) has been linked to perspective-taking in children, which may facilitate sympathy and prosocial behaviours (Padilla-Walker et al., 2016).
Padilla-Walker and colleagues (2016) also reported that children who experienced warm, responsiveness, and care from their parents were better at perceiving and responding to other people's suffering compared to children who experienced cold, rejecting, or overprotective treatments from their parents. Furthermore, supportive parents may also help develop prosocial behaviour by providing a caring model for their children (Knafo & Plomin, 2006; Pastorelli et al., 2016).

In contrast, negative parenting practices like power assertive parenting (i.e., a high level of control) may reduce prosocial behaviours because parents force their children to comply with the rules instead of allowing the children to internalize moral standards (Knafo & Plomin, 2006). Adolescents with controlling parents are used to being criticized and punished for their actions (Hastings et al., 2005). These adolescents may think that they are not capable of engaging in prosocial behaviours. Other studies have shown that support, care and autonomy contribute to increased prosocial behaviour while lack of support, interest and overt control may decrease prosocial behaviour development (Carlo, 2014; Gryczkowski, Jordan, & Mercer, 2017).

In their research, Carlo, McGinley, Hayes, Batenhorst, and Wilkinson (2007) studied 233 adolescents from public high schools in the Midwestern region of the United States to examine the relationships among parenting styles, parental practices, sympathy, and prosocial behaviours in adolescents. The results from their study demonstrated that parenting practices were significantly linked to adolescents’ prosocial behaviours.

Parental control and monitoring have been reported to protect adolescents against problematic behaviours (Ennett et al., 2008). Parental supervision impacts youth’s behaviour through reducing the opportunities for at risk situations and preventing their children from interacting and connecting with deviant peers (Li,
Feigelman, & Stanton, 2000). Also, parental monitoring is an effective way of allowing the adolescents to learn the right behavioural norms (Pettit, Laird, Dodge, Bates, & Criss, 2001). Overall, parenting styles play a crucial role in helping children to develop the ability to self-regulate which has an impact on their adjustment and behavioural outcomes (Finkenauer, Engels, & Baumeister, 2005).

Lower levels of monitoring from parents are related to higher risks of adolescent substance misuse (Sommers & Baskin, 1991). On the contrary, higher levels of monitoring from parents are related to lower risks of problematic behaviours and delinquency (Griffin, Botvin, Scheier, Díaz, & Miller, 2000; Parker & Benson, 2004). Likewise, higher levels of monitoring from parents is linked to less drinking problems in males. However, spending more time without supervision from parents is associated with cigarette smoking in girls (Griffin et al., 2000). Additionally, a lack of support from parents has also been associated with delinquent behaviours (Bartlett et al., 2006).

Although many investigators have supported the consequences in child development of these parenting styles, other researchers have pushed for more study to investigate the specific parenting practices found in different types of parenting styles, and in turn, how such practices are related to the development of social behaviours in adolescents (Grusec & Goodnow, 1994; Hoffman, 2000). Scholars examining moral socialization have emphasized the practice of discipline in parenting as important in influencing and shaping children's moral behaviours (Hoffman, 2000; Kochanska, Aksan, & Nichols, 2003). The cognitive-developmental and social cognitive theorists proposed and identified the mechanisms that could explain the relations between parenting and prosocial behaviours.

However, there has been not enough investigation into the specific associations
between different types of parenting and behaviours, and the results have been inconclusive (e.g., Carlo et al., 2011). In particular, under certain cultural influences, it is possible that different manifestations of behaviours are associated with different parenting behaviours. For example, Gryczkowski and colleagues (2017) found that, as a result of differences in culture between Caucasian and African Americans, more positive parenting behaviour was related to more prosocial behaviour in Caucasian American children but not for the African American children.

The parenting of African Americans were described to be less warm and less sensitive compared to the parenting of European Americans (Pinderhughes et al., 2000). African American parents tended to establish themselves as authority figures (Gonzales, Hiraga, & Cauce, 1998). Also, there was the negative impact of lower socioeconomic status on low-income African Americans families that consistently led to their parenting to be identified as punitive, less consistent, authoritarian, and may include physical punishment (McLoyd, 1990).

Furthermore, in Asian culture, emphasis is placed on social conformity, respect towards elders, with relatively less verbalized expression of care from parents (e.g., Zhang, Wei, Ji, Chen, & Deater-Deckard, 2017). This is a contrast to the belief from the West that overprotection is over-controlling and that the child's autonomy and independence is being restrained (Leung, 2016). On the contrary, cultures from the West emphasise more on independence, self-expression, and competitiveness (Li, Costanzo, & Putallaz, 2010). Such inconclusive findings suggest that adolescents’ behaviours may differ under the influence of parenting from different cultures.

It is unclear to what extent relations between parenting, attachment, and youth outcomes are universal. Even though research suggests that there are differences in parenting practices in different cultures, the role of these parenting practices in
adolescent development may remain the same across cultures (McBride-Chang & Chang, 1998). Further, there is available evidence to suggest that the construct of attachment and the need to relate to a significant other is universal (van IJzendoorn & Sagi-Schwartz, 2008).

Until now, most of the research on parenting styles and behaviours have been conducted in the West. However, the differences and variations in the results and findings may be present across different societies, and are influenced by the particular characteristics found in that social context (Eisenberg et al., 2015). Besides, a few Western studies have found that parenting styles that promote autonomy functioning are more likely to enhance prosocial behaviour compared to parenting styles that lack warmth and support. The latter is more likely to encourage more antisocial and problematic behaviours (Carlo et al., 2010; Gagn'e, 2003).

Positive and Optimal Parenting Style for Fathers - Authoritative Parenting Style

The research documented that authoritative parenting styles predicted higher academic scores (Nyarko, 2011), better mental health (Uji, Sakamoto, Adachi, & Kitamura, 2014), and higher social competence (Lamborn, Mounts, Steinberg, & Dornbusch, 1991).

Similarly, other studies also reported similar findings for authoritative parenting and associated this type of parenting style with higher levels of academic, psychological, or social adjustment, as compared to other parenting styles (Lamborn et al., 1991; Maccoby & Martin, 1983; Steinberg, Elmen, & Mounts 1989; Steinberg et al., 1991). Most importantly, its positive effects is not limited by cultural and environmental factors (Gray & Steinberg, 1999). Many findings concurred that authoritative parenting is the most ideal type of parenting style, and there was no other
large-scale systematic study to advocate better outcomes in adolescent development were found in other types of parenting styles (Chao, 2001; Gray & Steinberg, 1999; Steinberg, 2001).

There were studies that examined the components related to authoritative parenting (e.g., parental warmth, psychological autonomy granting, and firm behavioural control) and investigated the influences of these variables on child outcomes (Gray & Steinberg, 1999; Steinberg et al., 1989). Gray and Steinberg (1999) argued that parental warmth and psychological autonomy were associated with a broad range of positive outcomes and adjustments among children and adolescents.

One explanation proposed is that parenting styles involve the teaching of different skills. Parents who encourage autonomy and warm relationship are facilitating the development of competent prosocial skills in children (Hauser et al., 1991). The interaction between parent and child provides the child opportunities to acquire skills that will enable him/her to meet the challenges and demands of adolescence and later on, adulthood.

Another explanation is that sensitive and responsive parenting of children and adolescents create healthy bonding that encourages the children and adolescent to regard their parents positively and in turn, more receptive towards their values and beliefs. Studies have shown that when adolescents perceived their parents as being warm and receptive, they have a sense of security in the relationship and this bodes well for their confidence, exploration of self and in their interactions with others outside of the family (Jackson, Dunham, & Kidwell, 1990; Kamptner, 1988).

Based on mutual agreement and communication, adolescents who self-disclose their activities to their parents are better adjusted compared to those whose parents use control and tracking to learn about their children’s activities (Statin & Kerr, 2000).
The warmth and acceptance characteristics of authoritative parenting seem to allow parents to positively influence their adolescents (Barnes & Olson, 1985; Darling & Steinberg, 1993).

It is without doubt that parental responsiveness, one of two important dimensions of parenting denoting parental warmth and acceptance, bring about the best child and adolescent outcomes across cultures (Chen, Liu, & Li, 2000; Laible & Carlo, 2004; Lim & Lim, 2003; Maccoby, 1980; Steinberg et al., 1989). Parental responsiveness is characterized by “parental warmth, acceptance, cognitive independence, and egalitarianism” (Barber & Thomas, 1986; Laible & Carlo 2004). According to Grusec and Goodnow (1994), parents who are warm, supportive, and sensitive are more likely to raise children who are outgoing, independent, creative, and spontaneous.

Longitudinal research has reported that authoritative parenting helps to reduce children’s negative behaviour when they are difficult or parental coercion escalates and reinforces their negative behaviours (Woodward, Taylor, & Dowdney, 1998). Other studies continued to posit that authoritative parenting style has been found to be directly related to fewer children’s problematic behaviours (Alizadeh et al., 2011).

Research by Furthermore and Odubote (2008) reported the correlation between authoritarian parenting and delinquent behaviours. In the same study, they posited that authoritative parenting brought about positive outcomes for the child (Odubote, 2008). Other studies have also documented the poor outcomes of authoritarian parenting and how it contributes to poor child outcomes like lower self-confidence, more aggression and problematic behaviours (Slicker, 1998; Steinberg et al., 1994). Overall, authoritative parenting style has been demonstrated in most research to be the most optimal in influencing positive outcomes for children (Lamborn et al., 1991; Steinberg et al., 1994).
Adding to the positive tributes of authoritative parenting style is the suggestion that in the broad overview of the literature, the socialisation of prosocial behaviour is largely related to the positive parenting characteristics of the parenting style. This is especially true if authoritative parenting style is combined with techniques such as appropriate parent modelling of care and prosocial behaviours, using punishment methods that are inductive in reasoning and not punitive in nature, and setting high but achievable behavioural expectations for their children (Eisenberg & Fabes, 1998).

The findings for the above positive attributes of authoritative parenting are consistent across many studies (e.g. Cornell & Frick, 2007; Kiang, Moreno, & Robinson, 2004; Kochanska, Forman, Aksan, & Dunbar, 2005). For example, parents’ use of inductive reasoning to discipline is correlated with prosocial behaviours such as empathetic and sympathetic responding in preadolescents and adolescents (Bar-Tal, Nadler, & Belechman, 1980; Dlugokinski & Firestone, 1973; Krevans & Gibbs, 1996).

Furthermore, it has been extensively discussed in the previous section about the importance of autonomy (one of the attributes in authoritative parenting) and that prosocial behaviour is significantly associated with parents’ emphatic use of autonomy in their parenting (Bar-Tal et al., 1980). One other feature of authoritative parenting is the availability of parents to participate in joint activities allowing for interdependence in their interactions, thus making parents’ influence positive and strong (Eberly & Montemayor, 1998). It was found in studies that in the exemplars of prosocial behaviours, there were similarities of parent related representations and of adolescents sharing similar values as their parents (Hart & Fegley, 1995).

Therefore, previous sections have established that positive parenting (i.e., authoritative parenting style) is associated with outcomes, such as higher levels of self-esteem, ability to relate with others, more likely to engage in prosocial related skills,
and function with greater autonomy in confidence (e.g., Ngai, 2015), which promote and facilitate prosocial behaviour in adolescents (Bar-Tal et al., 1980; Carlo, 2014; Eisenberg et al., 2015; Krevans & Gibbs, 1996).

**Interconnection of the Variables**

Research from parenting and parent and adolescent relationship have gone beyond looking at these variables as the only factors having direct impact on children and adolescents (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000). For example, adolescents’ relationship with parents may be considered as intervening mechanisms in terms of the significant variables introduced, while looking at adolescents’ development (Grotevant, 1998). Parent and adolescent relationships can be used as moderators between other social influence (e.g., parenting styles) and outcomes of adolescent development and as mediators that explain the alternative source of influence in relation to the outcome of adolescent behaviours (Baron & Kenny, 1986).

One example of this moderation can be found in the influence of parental behaviours as moderators for adolescents’ wellbeing in the psychological domain in a peer relationship and cohesion in the family (Gauze, Bukowski, Aquan-Assee, & Sippola, 1996). Another study investigating a complex moderating relationship examining parent and adolescent relationship reported that the quality of parent and child relationship would facilitate the adolescents following their parents’ example in drug abuse or substance use. It is evident that when adolescents perceive their relationship with their parents as good, they tend to model their good behaviour. Modelling after antisocial parents may be a potential developmental risk for the adolescent (Andrews, Hops, & Duncun, 1997).
In the subsequent section, the interconnections of the variables for this study are discussed.

*Relationship between Psychopathy, Quality of Father-child relationship and behaviours*

A developmental study by Bowlby (1969) on 44 male juvenile offenders demonstrated that when deprived of bonding with their mothers early in life, ‘affectionless psychopathy’ results. However, Rutter (1982) argued that the focus and attention on the mother may require more verification as the bonding with a father figure could be equally important.

One common idea shared in the literature is that the development of behavioural problems in individuals with high levels of psychopathic traits is largely independent of parenting and these children and adolescents respond less positively to parenting (e.g., Oxford, Cavell, & Hughes, 2003; Wootton et al., 1997). Positive affection and warmth from parents have been found to influence development of conscience in young children who show lack of fear and sensitivity to punishment (e.g., Blair, Colledge, & Mitchell, 2001; Kochanska, 1997; Marsh et al., 2008).

Parents who are abusive and harsh, show little emotion and affect to their children, their ability to communicate their feelings may also cause their children to fail to develop the competency to see the perspectives of others or read the emotional displays of others, accurately (Daversa, 2010). These individuals have a higher risk of developing behaviours with psychopathic traits.

Kosson and colleagues (2002) found that psychopathy scores in male adolescents were associated with how they rate their closeness and attachment to their parents. This suggests that weak parent-child relationship is associated with psychopathy. Similarly, other studies reported that negative parent and child
relationships were linked to children’s and adolescents’ participation in problematic behaviours (Loeber & Dishion, 1983; Reid & Patterson, 1989; Stattin & Kerr, 2000).

Another study examining parent and child relationship as a moderator found that when the relationships are rated as high rather than low in quality, a group of high school students exhibited more competent functioning skills with fewer symptoms of psychopathology (Garber & Little, 1999). The relationship between how the individual care for self after school and participation in problematic behaviours was moderated by parents’ acceptance and firm control (Galambos & Maggs, 1991).

The quality of relationship with parents has a critical impact and implication for the psychosocial functioning in adolescents. Adolescents who experienced more warmth and less conflicts in their relationships with parents are at lower risk from psychological problems (Steinberg, 2001). They were more able to form good and sound functioning relationships with their peers (Steinberg, 2001).

*Relationship between Family Adversity, Quality of Father-child relationship and behaviours*

The social environment is a critical influence in the development of young adolescents. Economic strain, large family size, troubled family environments, parental divorce and negative parent-related factors correlate negatively with adolescent development (Aneshensel & Sucoff, 1996; Amato & Keith, 1991; McLoyd, 1990; Repetti et al., 2002; Vanfossen, Brown, Kellam, Sokoloff, & Doering, 2010). In contrast, family support (e.g parent-child relationship) and resources and involvement of significant others’ within the household are protective factors for children (Casey-Cannon, Pasch, Tschann, & Flores, 2006; Chen, Greenberger, Farruggia, Bush, &

There is substantial evidence in research which looks at how parent and child relationship mediates between stressors like adversity in the family and conflict between parents, with child and adolescent behaviours (Grant et al., 2006). For example, in a large family, there is a greater likelihood of poor attachment since the parents' attention will likely be divided and is often unequal too. Research discussed earlier in this chapter has already concurred that the bond or relationship between parents and children does predict children's lack of prosocial behaviour or excessive display of problematic behaviours. Thus, parents’ availability and responsiveness are viewed as resources that are shared among more children, and in large families, this means that the quality of the relationship is likely to deteriorate significantly (Zemp, Milek, Davies, & Bodenmann, 2016).

Large family size has a negative correlation with parenting (Menaghan, 1999), in particular, father's parenting (Pleck, 1997). This is partly because in large sized family, the breadwinner who is usually the father may feel more pressure as the economic responsibility of the family rests on his shoulders. Also, large family size is proxy for lower socio-economic status and financial disadvantage. Hence, it will likely increase the risk for mental health issues and problematic behaviours in children and adolescents (Bradley & Corwyn, 2002; Hetherington & Martin, 1986).

There were also studies looking at disrupted homes which focus on the loss or absence of the father (e.g., Moffitt, Caspi, Rutter, & Silva, 2001; Nolen-Hoeksema, 2001). Disrupted or non-intact homes with an absent father was correlated with serious offending in children in their later years (McCord, 1982). Interestingly, the researcher found that the conflictual presence in the disrupted family also increased the risk for
offending greatly (McCord, 1982). In one Cambridge research study, it was found that when the child experienced permanent or temporary separation from the parent before 10 years of age, the risks of conviction or delinquency increased (Farrington, 1992).

Existing literature indicates that there is a difference in the association between father’s absence and adolescent boys’ and girls’ behaviours. Girls displayed more internalizing behavioural symptoms than boys (Nolen-Hoeksema, 2001). In contrast, the boys had higher levels of externalizing behavioural problems symptoms compared to girls (Moffitt et al., 2001). The absence of the availability of father-child relationship is detrimental to child and adolescent development.

Parents who suffer from ill health or have mental illness are most likely to have diminished competencies in managing their parent and child interaction, specifically, in monitoring their children and providing support which are consistently associated with significant predictors of positive adolescent development (e.g., Barnes & Farrell, 1992; Kerr & Stattin, 2000). When a parent is troubled by poor health, it will likely affect the ability to engage in a positive parent-child relationship.

There is a strong correlation found in research between parents’ criminal involvement and the emotional health and behavioural problems among children (Fritsch & Burkhead, 1981; Phillips et al., 2002). As their parents were locked away, parent and child relationship suffers (both physically and emotionally). This tends to lead to insecure attachment between parent and child (Brook et al., 2001). This insecure attachment was also linked to substance and drugs abuse (Brook et al., 2001).

In addition, there is evidence that supported the relationship between parents’ distress, and insufficient financial resources, with conflictual parent and adolescent relationship (Baxter, Gray, Hand, & Hayes, 2012; Broman, Hamilton, & Hoffman, 1997; Conger & Conger, 1992; Conger, Ge, Elder, Lorenz, Simons, 1994; Conger et al.,
2000; Leinonen et al., 2003). A positive parent and adolescent relationship is associated with higher level of well-being in adolescents even when there is unemployment in the family (Cui, & Conger, 2008; Willemen, Schuengel, & Koot, 2011). Conversely, during the period of parents’ unemployment, a lack of support from parents has a negative impact on adolescents’ wellbeing (Benner & Kim, 2010; Frasquilho et al., 2016; Solantaus et al., 2004).

In an environment of multiple familial adversity variables, an individual will likely feel anger, frustration, and anxiety which in turn, exert a negative impact on the relationship amongst family members. There is also a higher propensity for negative dynamics in the interactions for parent and child relationship. For instance, when parents are exposed to disadvantaged events and stressors in their environment, the likelihood of harsh parenting increases (e.g., Conger & Conger, 2002). These dynamics in the family interactions will likely influence negative relationship skills and aggressive behaviour which in turn, results in the children modeling these behaviours in their interactions with others (Caspi, 2012; Cox & Paley, 1997; Minuchin, 1988).

Results of the investigation by Shaw and colleagues (1994b) agree with previous findings on the impact of negative influences of multiple family stressors on children's development. Past studies also concurred that the number of family adversity indicators was positively correlated with higher risks in problematic behaviours (Rutter, Cox, Tupling, Berger, & Yule, 1975a; Rutter, Yule, Quinton, Rowlands, Yule, & Berger, 1975b; Sanson et al., 1991; Shaw & Emery, 1988). For instance, conflict between parents, father’s education level and psychological health were related to both children’s mental health outcomes and paternal parenting (Amato, 1994; Buehler et al., 2006; Davies & Cummings, 1994; Flouri & Buchanan, 2003; Harris, Rice, & Quinsey, 1998; Kaczynski, Lindahl, Malik, & Laurenceau, 2006).
Relationship between Father’s Authoritative Parenting Style, Quality of Father-child relationship and behaviours

There were studies looking at the relationship between parenting and attachment styles (Bowlby, 1988) while some focused on examining parental acceptance and rejection (Khaleque & Rohner, 2002). Hence, in the theoretical sense, the constructs of parenting styles and attachment with parents were found to be interrelated and sometimes used interchangeably. The bond established during the early developmental years between a child and his/her caregiver becomes a reference for relationships with parents as well as with others in the later years (Bowlby, 1973).

Adolescent and parent attachment also predicts youth behavioural and psychological developmental outcomes. A positive parenting style that facilitates secure parent and adolescent attachment will encourage higher levels of social competence and wellbeing in adolescence (McElhaney, Allen, Stephenson, & Hare, 2009). Moreover, this secure attachment if facilitated by positive parenting, will lead to positive self-esteem, sound autonomy and healthy interactions with their peers (Ryan, Deci, & Grolnick, 1995). Adolescent and parent attachment helped foster adolescent autonomy because as mentioned earlier, this relationship with the parents formed the secure base for the adolescent when negotiating through this developmental phase (McElhaney et al., 2009).

Many researchers have noted that high responsive parents are more child-centered, show higher acceptance of their children, evaluate their children more positively, and form close relationships and more secure attachments with their children (De Wolff & van IJzendoorn, 1997; Hoffman, 1983). Just as important, responsive parents are able to regulate and express their own emotions appropriately (e.g., anger,
sadness, frustration), and in turn, they are able to model and encourage prosocial behaviors (Barnett, 1987; Eisenberg & Murphy, 1995).

There is substantial evidence to suggest correlation between parents’ responsiveness and demandingness, with prosocial development. Many studies have reported consistent correlational relationships between parents’ responsiveness and prosocial behaviors in adolescence (Dekovic & Jaansens, 1992; Eberly & Montemayor, 1998; Eberly, Montemayor, & Flannery, 1993; Laible & Carlo, 2004; Laible et al., 2004; Lamborn et al., 1991). To some extent, there is also evidence to suggest the association between demandingness and prosocial behaviors (Eisenberg et al., 2006). For example, Baumrind (1991) found that authoritative parenting was positively related to adolescents’ prosocial behaviors. Also, the use of child-focused disciplinary practices by authoritative parents’ has been associated with prosocial behaviors and high levels of moral reasoning, and conscience (Eisenberg et al., 2006; Krevans & Gibbs, 1996).

It is evident in research that sensitivity and warm parenting practices stimulate the child to develop empathetic concerns as early as infancy/toddlerhood (Berkowitz & Grych, 1998; Robinson, 1994). Being in a warm and trusting attachment relationship enhances the ability of the children to display empathetic behaviors towards others (Mark, IJzendoorn, Bakermans-Kranenburg, 2002; Kestenbaum, Farber, & Sroufe, 1989; Van IJzendoorn, 1997). Empirical data supports these notions showing that infants who experience higher levels of parental warmth/responsiveness from parents displayed an increase in their empathetic responding overtime and are more likely to express guilt when they transgress (Kiang et al., 2004; Kochanska et al., 2005).

Apart from facilitating the development of empathetic behaviors, parenting practices and discipline related strategies can prevent the development of problematic
behaviour traits. For instance, authoritative parenting practices which involves firm and consistent discipline, together with warmth, were related to the development of empathy (Cornell & Frick, 2007).

Supportive parenting is another well-recognised feature of authoritative parenting style as it facilitates good parent and child relationship. Hence, it is well-documented in many studies showing the positive correlation of support from parents with prosocial behaviours but negatively with problematic behaviours (e.g., Bar-Tal et al., 1980; Eberly & Montemayor, 1998). Adolescents who engage in prosocial relationship also tend to describe their relationship with their parents as supportive, positive and showing positive affect (Rigby, 1993). In such relationship where parents show affection availably, the adolescents are usually responsive towards parents when they share familial values, set expectations for their behaviours and model the prosocial behaviourism for the child (Hoffman, 2000). Thus, support from such parents will likely enhance prosocial behavioural development with high expectations set on prosocial or moral behaviour (i.e., characterised in authoritative parenting style).

Many research studies reported the effects of fathers’ warmth on children’s’ social-emotional outcomes as well as on their problematic behaviours during childhood and adolescence (Allgood, Beckert, & Peterson, 2012; Behnke, Plunkett, Sands, & Bámaca-Colbert, 2011; Day & Padilla-Walker, 2009; Delgado, Killoren, & Updegraff, 2013). One study involving a multi-ethnic sample of urban middle-school students reported that fathers’ warmth moderated parental monitoring and school behaviours. These adolescents were less likely to engage in problematic behaviours in school compared to their peers when their fathers expressed more warmth in their interactions. Interestingly, this effect was stronger for boys than for girls (Lowe & Dotterer, 2013).
There is some empirical research to document the benefits that a supportive parent may buffer the harmful effects of parenting style, child psychopathy and family adversity. Within these discussions, positive father’s support or presence of conflict with father can be modelled as an important moderator for the influences brought about by parenting styles, child characteristics, and family adversity (Barrera, 2000; Cohen, 2004). Within this model (see Figure 2), it is argued that support from the father in the current study supports youth adjustment while conflicts with the father affects behaviours of youths negatively.
Summary

There are volumes of theoretical and empirical research devoted to identifying the risk factors associated with prosocial and problematic behaviours in overseas literature (e.g., Eisenberg & Miller, 1987; Frick, 1998; Ma et al., 1996; Penner et al., 2005). However, not much research has been conducted with regard to risk factors and their influence on prosocial and problematic behaviours in Singapore samples, especially not with a non clinical sample. More specifically, there is also no study that conjointly looks at quality of father-child relationship, child characteristics (psychopathy), father’s authoritative parenting style and family adversity on adolescent behaviours. The scarcity of analysis on problematic behaviours in the local context is compounded by the lack of data available (Choi & Lo, 2002).

Psychopathy, quality of father-child relationship, father’s authoritative parenting styles and family adversity are all closely associated with adolescents’ behaviour (e.g. Aunola & Nurmi, 2005; Campbell et al., 2004; Forman & Davies 2003; Patterson et al., 1998). This chapter introduced the theoretical framework for the study and provided an overview of the theoretical perspectives of the developmental trajectories of prosocial and problematic behaviours. This chapter also summarised and discussed the existing literature of the following variables in the study: psychopathy, quality of father-child relationship, father’s authoritative parenting styles and family adversity. The influence of psychopathy, quality of parent-child relationship, parenting styles and family adversity on adolescent behavioural adjustment were also reviewed in literatures from the West and Asian context.

From the literature review, studies have reported that people can manifest both prosocial and problematic behaviours (Hastings et al., 2008). The goal of this study is to investigate the associations of the proposed variables with prosocial and problematic
behaviours in local context. Furthermore, few studies have supported the notion that one risk domain alone directly inhibits the development of prosocial behaviours or promotes the development of problematic behaviours (Manassis & Bradley, 1994; Rubin et al., 1991; Shaw & Bell, 1993). Hence, this study plans to explore how the variables proposed by Greenberg’s risk model (Greenberg et al., 1993, Greenberg et al., 2001) contribute to the development of Singapore adolescents’ behaviours by answering the following research questions (see Figure 2):

1) Does psychopathy predict prosocial and problematic behaviours in Singapore adolescents?

2) Does father’s authoritative parenting style predict prosocial and problematic behaviours in adolescents?

3) Does family adversity predict prosocial and problematic behaviours in adolescents?

4) Does the quality of father-child relationship moderate the relationship between psychopathy and adolescent’s behaviours?

5) Does the quality of father-child relationship moderate the relationship between father’s authoritative parenting style and adolescent’s behaviours?

6) Does the quality of father-child relationship moderate the relationship between family adversity and adolescent’s behaviours?
Figure 2

Diagram of the hypothesized moderating role of parents’ support and admiration and conflict and criticism dimensions for the relationship between parenting styles, psychopathy, family adversity and behaviours.

**Predictor Variable:**
- Psychopathy
- Father’s Authoritative Parenting Style
- Family Adversity

**Outcome Variable:**
- Behaviours (Prosocial and Problematic)

**Moderators:**
- Father’s Support and Admiration Dimension
- Father’s Conflict and Criticism Dimension
CHAPTER 3

METHODOLOGY

This chapter provides information on the selection of the sampled groups and the profile of the participants for the study. It also describes the procedure of the study and the way data was analysed for the study.

Participants and Consent Procedures

For this study, ethical clearance and approval was sought from the Nanyang Technological University (NTU) Institutional Review Board (IRB) prior to data collection (See Appendix A and B).

Based on power analysis, the conventional alpha level of .05, power of .80 and effect size of .20 (Cohen, 1992) is used to calculate an estimated sample size of about 757 students. However, considering attrition, non-response and missing data, the target was to collect the data from a sample of 800 students.

In 2015, 800 participants from regular public schools were recruited using the snowball sampling method. Invitations to participate in the research and consent forms (see Appendix C and D) about the data collection were distributed to the parents and youths. They were informed that participation was completely voluntary and that the data collected would remain confidential and would be used for research purposes only. All participants were asked to respond to all the instrument scales in the questionnaire in a self-administration format.

For participants who were not able to meet the researchers, consent forms (see appendix C and D) about the data collection and questionnaire were placed in an envelope was given to the participants to complete at their own time. They were
informed that completing the questionnaire will take about 30 minutes and their participation will be voluntary. They will return the completed questionnaires and assent forms in a sealed envelope to the person who referred them to be returned to the researcher. The information to contact the researcher was also provided in the consent and assent forms.

For participants who were able to meet the researcher, prior consent and assent forms were given to them. They completed the questionnaire in about 30 minutes. The researcher was present during the data collection session.

The response rate was 86.8%. Only 694 students agreed to participate in the study. Hence, in this study, data was collected from 694 adolescent voluntary participants through recommendation and referral.

The sample consisted of 694 adolescents from regular public schools. Of the 694 cases, 416 were males (59.9%), 276 were females (39.8%) and 2 (0.3%) did not report his/her gender. The age of the participants ranged from 16 to 19 years ($M = 16.55, SD = 0.67$). Of the 694 adolescents sampled, 400 (57.8%) participants were Chinese, 181 (26.1%) were Malays, 65 (9.4%) were Indians and the remaining 46 (6.6%) were classified as others, a category that includes other ethnic groups not listed. Two (0.3 %) of the participants did not report their ethnicity. Refer to Table 1 to 5 for a detailed breakdown of demographic characteristics of the participants.


Table 1

*Demographic Characteristics of Participants for the study (N = 694)*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>16.55</td>
<td>0.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>416</td>
<td>59.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>276</td>
<td>39.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not stated (missing information)</td>
<td>2</td>
<td>0.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese</td>
<td>400</td>
<td>57.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malay</td>
<td>181</td>
<td>26.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian</td>
<td>65</td>
<td>9.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>46</td>
<td>6.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not stated (missing information)</td>
<td>2</td>
<td>0.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2
Demographic Characteristics of Participants for the study ($N = 694$)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parent’s Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s Education Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>85</td>
<td>12.2</td>
</tr>
<tr>
<td>Secondary</td>
<td>170</td>
<td>24.5</td>
</tr>
<tr>
<td>Pre-University/Polytechnic</td>
<td>287</td>
<td>41.4</td>
</tr>
<tr>
<td>University/Post-graduate</td>
<td>110</td>
<td>15.9</td>
</tr>
<tr>
<td>Not stated (missing information)</td>
<td>42</td>
<td>6.1</td>
</tr>
<tr>
<td>Father’s Education Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>97</td>
<td>14.0</td>
</tr>
<tr>
<td>Secondary</td>
<td>174</td>
<td>25.1</td>
</tr>
<tr>
<td>Pre-University/Polytechnic</td>
<td>277</td>
<td>39.9</td>
</tr>
<tr>
<td>University/Post-graduate</td>
<td>99</td>
<td>14.3</td>
</tr>
<tr>
<td>Not stated (missing information)</td>
<td>47</td>
<td>6.8</td>
</tr>
</tbody>
</table>
Table 3

**Demographic Characteristics of Participants for the study (N = 694)**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parent’s Employment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>414</td>
<td>59.7</td>
</tr>
<tr>
<td>Not employed</td>
<td>269</td>
<td>38.8</td>
</tr>
<tr>
<td>Not stated (missing information)</td>
<td>11</td>
<td>1.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father’s Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>596</td>
<td>85.9</td>
</tr>
<tr>
<td>Not employed</td>
<td>71</td>
<td>10.2</td>
</tr>
<tr>
<td>Not stated (missing information)</td>
<td>27</td>
<td>3.9</td>
</tr>
</tbody>
</table>
Table 4  
*Demographic Characteristics of Participants for the study (N = 694)*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parent’s Physical Health</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s Physical Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has physical health issues</td>
<td>61</td>
<td>8.8</td>
</tr>
<tr>
<td>No physical health issues</td>
<td>633</td>
<td>91.2</td>
</tr>
<tr>
<td>Father’s Physical Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has physical health issues</td>
<td>18</td>
<td>2.6</td>
</tr>
<tr>
<td>No physical health issues</td>
<td>676</td>
<td>97.4</td>
</tr>
<tr>
<td><strong>Parent’s Mental Health</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s Mental Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has mental health issues</td>
<td>18</td>
<td>2.6</td>
</tr>
<tr>
<td>No mental health issues</td>
<td>676</td>
<td>97.4</td>
</tr>
<tr>
<td>Father’s Mental Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has mental health issues</td>
<td>10</td>
<td>1.4</td>
</tr>
<tr>
<td>No mental health issues</td>
<td>684</td>
<td>98.6</td>
</tr>
</tbody>
</table>
Table 5

*Demographic Characteristics of Participants for the study (N = 694)*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parent’s Criminal Records</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother’s Criminal Records</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has criminal violations</td>
<td>4</td>
<td>.6</td>
</tr>
<tr>
<td>No criminal violations</td>
<td>690</td>
<td>99.4</td>
</tr>
<tr>
<td><strong>Father’s Criminal Records</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has criminal violations</td>
<td>25</td>
<td>3.6</td>
</tr>
<tr>
<td>No criminal violations</td>
<td>669</td>
<td>96.4</td>
</tr>
<tr>
<td><strong>Large Family Size</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family with 4 or more children in the household</td>
<td>154</td>
<td>22.2</td>
</tr>
<tr>
<td>Family with 3 or less children in the household</td>
<td>540</td>
<td>77.8</td>
</tr>
</tbody>
</table>
**Measures**

The full questionnaire comprises demographic items and items from the questionnaire (see Appendix E).

**Antisocial Personality Screening Device (APSD)**

The Antisocial Process Screening Device (APSD) is considered a well-supported tool and recommended for assessing psychopathic traits in youth (Shaffer et al., 2016). A study conducted by Li and colleagues (2017) to validate the use of the scale in a Singapore sample concluded that APSD is reliable and sound and can be used as an instrument for assessing psychopathic traits in Asian at-risk adolescents.

The 20-item APSD is designed to measure antisocial behaviours and screens for psychopathy in children and adolescents (Frick & Hare, 2001). The child is rated on a dimensional scale that investigates the characteristic psychopathic pattern of interpersonal, affective, and behavioural symptoms (Frick & Hare, 2001). The adolescent completed the self-report. The questionnaire consists of 20 items rated on a 3-point Likert-type scale: 0 *(Not true at all)*, 1 *(Sometimes true)*, and 2 *(Definitely true)*. The items combine to form three subscales (callous and unemotional traits, narcissism, impulsivity) of 6, 7, 5 items respectively. The psychopathy score is derived by adding all the items. The scores of positively phrased items were reversed. Then, the raw scores for these subscales were calculated by adding the scores of the corresponding items in line with recommendations made by Frick and Hare (2001). Higher scores indicate higher levels psychopathy. The total antisocial personality screening device score was computed by adding the raw scores from all three subscales (Frick & Hare, 2001). For the purposes of this study, only the total score was used.
In this study, internal consistency of the psychopathy scale was 0.69. The internal consistency for psychopathy scale used in this study is lower compared to those from previous studies. For example, the internal consistencies from some previous studies range 0.73 – 0.77 (Lee, Vincent, Hart, & Corrado, 2003; Ooi et al., 2017; Shaffer et al., 2016). The APSD total score for this study is comparable to what has consistently been reported in published international studies and falling within the range of 0.62 – 0.81 (Barry et al. 2003).

**Strengths and Difficulties Questionnaire (SDQ)**

The Strengths and Difficulties Questionnaire (SDQ) is an established behavioral screening tool for adolescents (Lai, Leung, Luk, & Wong, 2014). It is a user-friendly screening instrument with concise and sound psychometric properties and can be readily administered in both non-clinical and clinic samples (Stone et al., 2010).

The 25-item SDQ is designed to assess positive and negative features of the behaviour of children and adolescents (Goodman, 1997). The adolescent completed the self-report which consisted of 25 items rated on a 3-point Likert-type scale: 0 (*not true*), 1 (*somewhat true*), and 2 (*certainly true*). The items combine to form five subscales (emotional symptoms, conduct problems, hyperactivity, peer problems, and prosocial behaviour) of 5 items each. The scores of positively phrased items were reverse scored. The raw scores for these subscales were calculated by adding the scores of the 5 corresponding items in line with Goodman’s (1997) recommendations. The problematic behaviour score was the summation of the raw scores from all the subscales except the prosocial scale (Goodman, 1997). For the purposes of this study, only the prosocial and problematic behaviour scales were used.
There was satisfactory internal consistency of the subscales found in this study. Cronbach’s alpha for prosocial behaviour and problematic behaviours were 0.68 and 0.71 respectively. The internal consistency coefficient (Cronbach’s alpha) from previous studies reported for problematic behaviours scores was between 0.70 to 0.82, and prosocial behaviours scores was between 0.68 to 0.76 (He, Burstein, Schmitz, & Merikangas, 2013; Muris, Meesters, & van den Berg, 2003; Yuh, 2017). The internal consistency coefficients (Cronbach’s alphas) for the both scores in this study were generally satisfactory.

*Network of Relationship Inventory (NRI)*

The Network of Relationships Inventory (NRI) was developed for children and adolescents to use the same set of items to describe their relationship with each of several members of their social network (Furman & Buhrmester, 1985). The NRI allows children and adolescents to rate people in their lives (teacher, father, mother, best friend, brother, sister) on 2 broad dimensions – social support and conflict (Furman, 1996). This instrument is selected for this study to measure the quality of relationship that the participants had with their fathers.

The version used for this study is a 12 item questionnaire with 4 subscales: Support (3 items), Admiration (3 items), Conflict (3 items) & Criticism (3 items) in which the adolescent will rate their fathers. The adolescent will complete the self-report which consisted of 12 items rated on a 5-point Likert-type scale: 1 (None), 2 (A little), 3 (Average), 4 (A lot) and 5 (The Most). The “Support” and “Admiration” subscales tap into the support and admiration dimension while the “Conflict” and “Criticism” subscales tap into the conflict and criticism dimension. The total score for Father’s support and admiration dimension will be computed by adding up total scores of
Support and Admiration subscales. For the computation of total score for Father’s conflict and criticism dimension, the total scores for Conflict subscale and Criticism subscale will be added. For the purposes of this study, Father’s total support and admiration and father’s total conflict and criticism dimension scores will be used.

Cronbach’s alpha for subscales for the Father’s support dimension, Father’s admiration dimension, Father’s conflict dimension, and Father’s criticism dimension were 0.88, 0.87, 0.86 and 0.86 respectively. The internal consistency for the total Father’s support and admiration dimension and Father’s conflict and criticism dimension were 0.88 and 0.91. The internal consistency coefficients (Cronbach’s alpha) from previous studies reported for NRI were between 0.80 to 0.85 (Ang, 2006; Furman, & Buhrmester, 1985, 1992). Furman and Buhrmester (1985) reported internal consistency reliabilities in the .80s for the NRI.

*Parental Authority Questionnaire (PAQ)*

The questionnaire was designed to measure Baumrind’s (1971) permissive, authoritarian, and authoritative parental authority. The validity of Baumrind’s parental authority types is supported by several studies and described as a valuable tool to investigate parenting styles (Buri, 1991).

The 30 item questionnaire yields 3 scale scores: Authoritative Parenting Style, Authoritarian Parenting Style and Permissive Parenting Style scores for the mother, the father or caregiver. The adolescent will complete the questionnaire to appraise their fathers’ parenting style. The items combined to form the 3 subscales: Authoritative Parenting Style (Items 4, 5, 8, 11, 15, 20, 22, 23, 27, 30), Authoritarian Parenting Style (Items 2, 3, 7, 9, 12, 16, 18, 25, 26, 29), and Permissive Parenting Style (Items 1, 6, 10,
13, 14, 17, 19, 21, 24, 28). For this study, only the total scores for father’s authoritative parenting style was used.

The relevance of the construct of parenting style for Asian families is a consideration when using the instrument with Asian samples and some Asian studies reported low values of internal consistency for parent or child report measures (Chao, 1994). Some studies considered Cronbach’s alpha value of .70 or greater as acceptable (Nunnally & Bernstein, 1994) whereas others recommended reliability coefficients of .80 or higher (Anastassi, 1988). Therefore, for Asian and Asian-American samples, the alpha values reported range from low to acceptable. Buri (1991) reported internal consistency that ranged from .74 to .87 for mothers’ and fathers’ parenting styles. The internal consistency for the scores in this study was satisfactory and the result for the Cronbach’s alpha for father’s authoritative parenting styles was 0.86.

Family Adversity Index

Rutter and Quinton (1977) identified several indicators of adversity such as family size, history of paternal criminality, history of maternal mental disorder, socioeconomic status, and foster care placement, among others. However, a tool was never developed to assess these indicators (Foley, 2011).

The questionnaire developed for this study included items like: family size, family separation, physical health of the parents, mental health of the parents, criminal records of the parents, presence of conflict in the family and socioeconomic status (includes the summation of parental employment, educational level of parents, availability of family resources, availability of reasonable transport and ability to meet financial obligation). The questionnaire consisted of both open-ended questions and questions requiring a yes or no answer. Examples of the dichotomous questions include:
Has your mother had a physical illness (e.g. heart, lung problems, etc.) that limited her functioning? Has your father have a criminal record other than traffic violations? Does your family have trouble meeting your financial obligations? Does your family run out of things you need?

For this study, large family size will be defined as four or more children living in the household, a guideline used in many other studies (Biederman et al., 1995; Rutter & Quinton, 1977; Seahill et al., 1999). Traditional SES measures include occupation and education (Hauser, 1994; Shavers, 2007). In this study, socioeconomic status includes parental employment, educational level of parents, availability of family resources, availability of reasonable transport and ability to meet financial obligation.

Family size, family separation, presence of family conflict, parental employment, educational level of parents, availability of family resources, availability of reasonable transport and ability to meet financial obligation, physical health of the parents, mental health of the parents and criminal records of the parents will be counted based on their responses to the dichotomous questions. The score for a positive response to the question (e.g. father has a criminal record) is ‘1’ and the score for negative response is ‘0’ (e.g. father does not have a criminal record). The scores for parental employment and availability of reasonable transport are reversed (i.e. ‘Yes’ is ‘0’ and ‘No’ is ‘1’). For educational level of parents, the score of ‘1’ is given for Primary level education and ‘0’ is given to other educational levels indicated.

The summation of the scores of the variables listed above is used to create a total index of adversity which is commonly how researchers create an index of adversity (e.g. Rutter & Quinton, 1977).
Analyses of Data

Statistical analysis was done using the Statistical Package (SPSS) Version 23.0. Multiple regression analyses were performed to examine the influence of psychopathy, father’s authoritative parenting style, father’s conflict and support dimension and family adversity on prosocial and problematic behaviours. Supplementary correlational analyses were performed to provide additional support for the results obtained from the regression. A correlation bivariate test was used to examine the association of the variables. Relationships on moderation were examined for father’s conflict and support dimension as moderators between the independent (psychopathy, father’s authoritative parenting style, and family adversity) and dependent variables (prosocial and problematic behaviours).
Data Analytical Plan

The Moderating Roles of the Variables, Prosocial Behaviours and Problematic Behaviours

For testing the moderator effect, a hierarchical multiple regression analysis was conducted with prosocial and problematic behaviours as the dependent variable. The independent variables as predictor variables: Psychopathy, Father’s parenting style – Authoritative (FTive) and Family adversity (FA) were entered into the analysis. The interactions of the moderator, Father’s support and admiration and conflict and criticism dimensions were also entered into the analysis (Refer to Figure 2 for the model of the moderation tests). The testing, probing and interpretation of interaction effects followed methods outline by Aiken and West (1991).

For the hierarchical multiple regression analysis, at Step 1, the independent variable, Psychopathy, Father’s parenting style – Authoritative (FTive) and Family Adversity was entered into the model respectively for each test. At Step 2, the potential moderators, father's support and admiration dimension and father's conflict and criticism dimension was added to the model for each set of the analysis. At Step 3, the two-way interaction between the independent variable (Psychopathy, Father’s parenting style – Authoritative (FTive) and Family adversity (FA) and potential moderator variables (Father's support and admiration dimension and Father's conflict and criticism dimension) were added to the model. To interpret the interaction effect, graphs will be plotted for the regression lines.
CHAPTER 4

RESULTS

The research hypotheses in the study were examined to determine the influence of psychopathy, family adversity, and father’s authoritative parenting style on prosocial and problematic behaviours in adolescents. Multiple regression analyses were performed to examine the influence of psychopathy, family adversity, and father’s authoritative parenting style on prosocial and problematic behaviours. Regression and correlation tests were conducted to address Hypothesis 1 to 6. A $p$ value of .05 was used for the study when evaluating the hypotheses. Moderation tests were conducted to determine father’s support and admiration and conflict and criticism dimensions as moderators for the independent variables on prosocial and problematic behaviours.

The American Psychology Association (APA) Task Force on Statistical Inference has recommended the computation of effect size estimates for all analyses, when reporting a $p$ value (Wilkinson & APA Task Force on Statistical Inference, 1999). The recommendation emphasised the importance of evaluating practical significance and result replicability. It is therefore insufficient to only report $p$ values and statistical significance. There are many types of effect size estimates that can be computed (e.g., Cohen’s $d$ or $R^2$). In this study, Cohen’s $d$ will be used to report effect size estimates for values obtained from Pearson’s correlational analyses and $R^2$ will be reported for all regression analyses.
Reliability Estimates

The Cronbach alpha estimates for the main study sample were as follows: psychopathy (0.69), quality of father-child relationship [father support and admiration dimension (0.88), father conflict and criticism dimension (0.91)], father’s authoritative parenting style (0.86), prosocial behaviours (0.70) and problematic behaviours (0.67). The family adversity index captures a diverse range of situations and experiences reflective of family adversity, hence no Cronbach alpha is calculated because it is not meant to be indicative of a unidimensional measure.

Preliminary Analysis

The means, standard deviations, skewness, and kurtosis of the measures used in this study are reported in Table 6. The skewness and kurtosis scores indicate whether scores in a specific set of data take on a normal distribution shape. For a normal distribution, the statistics of skewness and kurtosis are zero. Departures from normality may become a concern when the absolute value of the univariate skew index is greater than 3.0 and when the absolute value of the univariate kurtosis index is greater than 10.0 (Kline, 1998). An examination of the data set did not reveal significant departures from normality.
Table 6

Descriptive Statistics for Variables

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prosocial behaviours</td>
<td>7.12</td>
<td>1.90</td>
<td>-.32 (.09)</td>
<td>-.40 (.19)</td>
</tr>
<tr>
<td>Problematic behaviours</td>
<td>14.74</td>
<td>4.79</td>
<td>-.02 (.09)</td>
<td>-.29 (.19)</td>
</tr>
<tr>
<td>Psychopathy</td>
<td>11.65</td>
<td>4.13</td>
<td>.31 (.09)</td>
<td>.24 (.19)</td>
</tr>
<tr>
<td>Father support and admiration dimension</td>
<td>17.46</td>
<td>5.55</td>
<td>.04 (.09)</td>
<td>-.35 (.19)</td>
</tr>
<tr>
<td>Father conflict and criticism dimension</td>
<td>12.76</td>
<td>5.16</td>
<td>.64 (.09)</td>
<td>.00 (.19)</td>
</tr>
<tr>
<td>Father’s parenting style (Authoritative)</td>
<td>31.01</td>
<td>6.60</td>
<td>-.51 (.09)</td>
<td>1.56 (.19)</td>
</tr>
<tr>
<td>Family Adversity</td>
<td>3.08</td>
<td>1.80</td>
<td>.50 (.09)</td>
<td>.19 (.19)</td>
</tr>
</tbody>
</table>

*Note.* The numbers in parenthesis are standard errors.
Correlations between Variables

A bivariate analysis was conducted to assess the nature of association between psychopathy, prosocial behaviours and problematic behaviours. As shown in Table 7, there was a weak but significant negative correlation between prosocial behaviours and psychopathy (PSY) \( (r = -.29, p < .01, \text{Cohen’s } d = .61) \). Likewise, there was a significant and moderate, positive correlation between problematic behaviours and psychopathy (PSY) \( (r = .48, p < .01, \text{Cohen’s } d = 1.09) \). The result showed an association between psychopathy and prosocial behaviours, as well as an association between psychopathy and problematic behaviours. An increase in psychopathy would result in decrease in prosocial behaviours but an increase in risk for problematic behaviours.

As shown in Table 7, prosocial behaviours was found to have a weak but significant positive correlation with father support and admiration dimension (FSD) \( (r = .17, p < .01, \text{Cohen’s } d = .35) \) but there was no significant correlation between prosocial behaviours and father conflict and criticism dimension (FCF) \( (r = -.07, p > .05, \text{Cohen’s } d = .14) \). An increase in the father support and admiration dimension will have a positive effect on prosocial behaviours. However, prosocial behaviours would not be affected by father conflict and criticism dimension. Also, there was a weak but significant negative correlation reported between problematic behaviours and father support and admiration dimension (FSD) \( (r = -.21, p < .01, \text{Cohen’s } d = .43) \). There was a weak but significant positive correlation between problematic behaviours and father conflict and criticism dimension (FCF) \( (r = .27, p < .01, \text{Cohen’s } d = .56) \).

Although the results showed that there was no correlation between father conflict and criticism dimension and prosocial behaviours, an increase in father support and admiration dimension would results in higher levels of prosocial behaviours. The results indicated that father support and admiration dimension and father conflict and
criticism dimension were associated with problematic behaviours. An increase in father support and admiration dimension would result in lesser risk for problematic behaviours. In addition, an increase in father conflict and criticism dimension would result in higher risk for problematic behaviours.

Furthermore, as shown in Table 7, there was a weak but significant positive correlation found between prosocial behaviours and father’s parenting style – Authoritative (FTive) ($r = .15, p < .01, \text{Cohen’s} \ d = .30$). Likewise, there was a weak but significant negative correlation between problematic behaviours and father’s parenting style – Authoritative (FTive) ($r = -.15, p < .01, \text{Cohen’s} \ d = .30$). The results showed an association between father’s authoritative parenting style behaviours. An increase in father’s authoritative parenting style would result in an increase in prosocial behaviour. Adolescents’ whose fathers were less authoritative would increase the risk for problematic behaviours.

Also, as shown in Table 7, there was no significant correlation between prosocial behaviours and family adversity (FA) ($r = -.01, p > .05, \text{Cohen’s} \ d = .02$) but there was a weak but significant positive correlation between problematic behaviours and family adversity (FA) ($r = .13, p < .01, \text{Cohen’s} \ d = .26$). The results did not show an association between family adversity and prosocial behaviours. However, there was an association between family adversity and problematic behaviours. The higher the family adversity index would result an increase in risk for problematic behaviours.
Table 7

Intercorrelations for study variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>PS</th>
<th>PB</th>
<th>PSY</th>
<th>FSD</th>
<th>FCF</th>
<th>FTive</th>
<th>FA</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS</td>
<td>-</td>
<td>-.11**</td>
<td>-.29**</td>
<td>.17**</td>
<td>-.07</td>
<td>.15**</td>
<td>-.01</td>
</tr>
<tr>
<td>PB</td>
<td>-.48**</td>
<td>-</td>
<td>-.21**</td>
<td>.27**</td>
<td>-.15**</td>
<td>.13**</td>
<td></td>
</tr>
<tr>
<td>PSY</td>
<td>-.10**</td>
<td>-.21**</td>
<td>-</td>
<td>.21**</td>
<td>-.07</td>
<td>.11**</td>
<td></td>
</tr>
<tr>
<td>FSD</td>
<td>-.08*</td>
<td>-.10**</td>
<td>-</td>
<td>-</td>
<td>.58**</td>
<td>-.13**</td>
<td></td>
</tr>
<tr>
<td>FCF</td>
<td>-.10**</td>
<td>-.13**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTive</td>
<td>-.13**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>FA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Note: N = 694; Prosocial behaviours (PS), problematic behaviours (PB), psychopathy (PSY), Father support and admiration dimension (FSD), Father conflict and criticism dimension (FCF), Father’s parenting style – Authoritative (FTive) and family adversity – FA

*P<.05

**P<.01
Relationship between Psychopathy (PSY), Father’s Parenting Style (Authoritative), Family Adversity and Behaviours

To examine the influence of variables on prosocial behaviours, regression was conducted with prosocial behaviours as the dependent variable. For this analysis, psychopathy (PSY), Father’s parenting style – Authoritative (FTive) and Family adversity, were the independent variables used. Table 8 presents the results of the regression analyses.

Similarly, regression was also conducted with problematic behaviours as the dependent variable. Likewise, psychopathy (PSY), Father’s parenting style – Authoritative (FTive), Family adversity – FA were the independent variables in the analysis. Table 9 presents the results of the regression analyses.
<table>
<thead>
<tr>
<th>Variable</th>
<th>t</th>
<th>b</th>
<th>SEb</th>
<th>β</th>
<th>CI for b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychopathy</td>
<td>-7.89</td>
<td>-.13</td>
<td>.02</td>
<td>-.29***</td>
<td>-.17 – -.10</td>
</tr>
<tr>
<td>Father’s parenting style</td>
<td>3.90</td>
<td>.04</td>
<td>.01</td>
<td>.15***</td>
<td>.02 – .06</td>
</tr>
<tr>
<td>authoritative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family adversity</td>
<td>-.228</td>
<td>-.01</td>
<td>.04</td>
<td>-.01</td>
<td>-.01 – .08</td>
</tr>
</tbody>
</table>

*p<.05; **p<.01; ***p<.001
Table 9

*Influence of variables on problematic behaviours (N = 694)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>t</th>
<th>b</th>
<th>SEb</th>
<th>β</th>
<th>CI for b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychopathy</td>
<td>14.20</td>
<td>.55</td>
<td>.04</td>
<td>.48***</td>
<td>.47 – .63</td>
</tr>
<tr>
<td>Father’s parenting style –</td>
<td>-4.09</td>
<td>-.11</td>
<td>.03</td>
<td>-.15***</td>
<td>-.17 – -.06</td>
</tr>
<tr>
<td>authoritative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family adversity</td>
<td>3.10</td>
<td>.33</td>
<td>.11</td>
<td>.13**</td>
<td>.12 – .53</td>
</tr>
</tbody>
</table>

*p<.05; **p<.01; ***p<.001
Hypothesis 1 proposed that psychopathy will likely predict prosocial and problematic behaviours. Hypothesis 1(a) states that psychopathy will be negatively related to prosocial behaviours in adolescents. In predicting prosocial behaviours from psychopathy, the result was statistically significant. The regression equation for the sample was statistically significant, $R^2 = .08, F(1, 692) = 62.22, p < .01$ (see Table 8). Correlation analysis results also indicated a negative correlation between the two variables ($r = -.29, p < .01$, Cohen’s $d = .61$). Thus, there was an inverse relationship between psychopathy and prosocial behaviours. An increase in the psychopathy traits in adolescents would result in a decrease in the level of prosocial behaviours in adolescents. The results supported Hypothesis 1(a).

Hypothesis 1(b) states that psychopathy will be positively related to problematic behaviours in adolescents. The variable psychopathy was significantly associated with problematic behaviours as expected, $R^2 = .27, F(1, 692) = 201.52, p < .01$ (see Table 9). Correlation analysis of the two variables ($r = .48, p < .01$, Cohen’s $d = 1.09$) indicated a positive relationship. Thus, higher psychopathy scores were associated with higher risk for problematic behaviours. These findings provided support for Hypothesis 1(b).

Youths in our sample who reported traits of psychopathy, were more likely to have problematic behaviours and less likely to have prosocial behaviours, as compared to their peers who did not report psychopathy traits.

Hypothesis 2 proposed that father’s authoritative parenting style will likely predict prosocial and problematic behaviours. Hypothesis 2(a) states that father’s authoritative parenting style is positively associated with prosocial behaviours in adolescents. The regression equation for the sample was statistically significant for father’s authoritative parenting style $R^2 = .03, F(1, 692) = 20.74, p < .01$ (see Table 8). Correlation analysis results also indicated a positive correlation between the two
variables for father’s authoritative parenting style and prosocial behaviours ($r = .15, p < .01$, Cohen’s $d = .30$) respectively.

Hypothesis 2(b) states that father’s authoritative parenting style is negatively associated with problematic behaviours in adolescents. Father’s authoritative parenting style was found to be statistically significant in predicting problematic behaviours. The regression equation for the sample was statistically significant, $R^2 = .02, F(1, 692) = 16.74, p < .01$ (see Table 9). Correlation analysis results also indicated a negative correlation between the two variables ($r = -.15, p < .01$, Cohen’s $d = .30$). There was support for hypothesis 2(b). The findings presented support the claim that youths whose fathers used authoritative parenting style were less likely to engage in problematic behaviours compared to youths whose fathers did not use authoritative parenting style.

Hypothesis 3(a) and 3(b) states family adversity will likely predict problematic behaviours but will have no effect on prosocial behaviours. Family adversity was found to be statistically significant in predicting problematic behaviours but not prosocial behaviours. The regression equation for the sample was statistically significant, $R^2 = .02, F(1, 6909) = 9.63, p < .01$ (see Table 9). Correlation analysis results also indicated a positive correlation between the two variables ($r = .13, p < .01$, Cohen’s $d = .26$). The results supported hypothesis 3(a) and 3(b). The results showed that family adversity predicted problematic behaviours for the adolescents who participated in the study although no significant relationship was found between family adversity and prosocial behaviours.
The Moderating Role of Father’s Support and Admiration and Conflict and Criticism

Dimensions for the Variables in this Study and Behaviours

In addition to testing for main/direct effects, we tested moderation (interaction) effects for the following: the impact of father’s authoritative parenting style (Independent Variable), adolescent psychopathy (Independent Variable), and family adversity (Independent Variable) on adolescent prosocial behaviour (Dependent Variable) and adolescent problematic behaviour (Dependent Variable) with two potential moderators, father’s support and admiration (Moderator) and father’s conflict and criticism (Moderator). Table 7 presents the intercorrelations of all variables in the present study. The correlations and regression tests (Table 8 and 9) were used as a guide in the data analytical plan for moderation.

From the moderation tests, the results were statistically significant for the following tests:

(1) Psychopathy as independent variable, adolescent problematic behaviours as dependent variable and father’s support and admiration as moderator. Hypothesis 4(b) was supported.

(2) Father’s authoritative parenting as independent variable, adolescent problematic behaviours as dependent variable and father’s conflict and criticism as moderator. This supported hypothesis 5(d).

(3) Family adversity as independent variable, adolescent problematic behaviours as dependent variable and father’s conflict and criticism as moderator. The results supported hypothesis 6(b).
Perceived Relationship with Father as a Moderator for Psychopathy and Behaviours

Father’s Support Dimension and Admiration as a Moderator for Psychopathy and Behaviours

The results for this study partially supported the hypothesis that father’s support and admiration will moderate for psychopathy and behaviours. However, father’s support and admiration will not moderate for psychopathy and prosocial behaviours. Hence, hypothesis 4(a) was not supported by the results. However, the current research findings showed that father’s support and admiration moderated for psychopathy and problematic behaviours. The results supported hypothesis 4(b).

For the moderation analysis, a hierarchical multiple regression analysis was performed. At Step 1, the independent variable, psychopathy was entered into the model. At Step 2, the potential moderator, father's support and admiration dimension was added to the model. At Step 3, the two-way interaction between the independent variable (Psychopathy) and potential moderator variable (Father's support and admiration dimension) was added to the model. Father's support and admiration dimension moderated the association between psychopathy and problematic behaviours, $\Delta R^2 = .005$, $\Delta F (1, 690) = 4.58, p<.05$. The two way interaction (psychopathy x father's support and admiration dimension) was statistically significant, $\beta = .071, p < .05$.

Detailed statistical results were presented in Table 10. Following Aiken and West (1991), to interpret the interaction effect, we plotted separate regression lines for the “low support and admiration dimension” and “high support and admiration dimension” groups (see Figure 3), and tested the significance of the simple slopes of the regression lines. The moderator, perceived fathers' support and admiration dimension, was better able to differentiate problematic behaviours at lower rather than at higher levels of psychopathy. Specifically, low adolescent psychopathy in the presence of high
perceived father support and admiration was associated with reduced problem
behaviours. Thus, hypothesis 4(b) of this study was supported by the results.
Figure 3. Regression lines for relations between psychopathy and problematic behaviours as moderated by father's support and admiration dimension.
Table 10

Hierarchical multiple regression analysis: father’s support and admiration dimension as moderator of the association between psychopathy and problematic behaviours.

<table>
<thead>
<tr>
<th>Predictor measure and step</th>
<th>β</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychopathy</td>
<td>.475</td>
<td>.226</td>
<td>.226</td>
<td>201.52**</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychopathy</td>
<td>.458</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s support and admiration dimension</td>
<td>-.162</td>
<td>.251</td>
<td>.026</td>
<td>23.87**</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychopathy</td>
<td>.451</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s support and admiration dimension</td>
<td>-.159</td>
<td>.256</td>
<td>.005</td>
<td>4.58*</td>
</tr>
<tr>
<td>Psychopathy x Father’s support and admiration dimension</td>
<td>.071</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Psychopathy was standardized prior to analysis.

*p < .05.

**p < .01.
Father’s Conflict and Criticism as a Moderator for Psychopathy and Behaviours

The findings for this study did not support the hypothesis that father’s conflict and criticism will moderate for psychopathy and behaviours. Results showed that father’s conflict and criticism did not moderate for psychopathy and prosocial behaviours. Similarly, results did not support father’s conflict and criticism as a moderator for psychopathy and problematic behaviours. Although, there were positive correlations between the variables discussed in this study, the results did not support the moderating effect of father’s conflict conflict and criticism for psychopathy and behaviours (prosocial and problematic behaviours). Both hypothesis 4(c) and 4(d) were not supported by the results.
Perceived Relationship with Father as a Moderator for Father's Parenting Style (Authoritative) and Behaviours

Father's Support and Admiration as a Moderator for Father's Parenting Style (Authoritative) and Behaviours

The results for the hypothesis that father’s support and admiration will moderate for father's parenting style (authoritative) and behaviours were not significant. The results for this study did not support hypotheses 5(a) and 5(b). Father’s support and admiration did not moderate for father's parenting style (authoritative) and prosocial behaviours. Likewise, results showed that it did not moderate for father's parenting style (authoritative) and problematic behaviours.

Father’s Conflict and Criticism as a Moderator for Father's Parenting Style (Authoritative) and Behaviours

The results for this study partially supported the hypothesis that father’s conflict and criticism will moderate for father's parenting style (authoritative) and behaviours. However, father’s conflict and criticism did not moderate for father's parenting style (authoritative) and prosocial behaviours. Hypothesis 5(c) was thus not supported by the results. However, the current research findings showed that father’s conflict and criticism moderated for father's parenting style (authoritative) and problematic behaviours. Therefore, hypothesis 5(d) of this study was supported.

For the moderation analysis, a hierarchical multiple regression analysis was performed. At Step 1, the independent variable, father's authoritative parenting style was entered into the model. At Step 2, the potential moderator, father's conflict and criticism dimension was added to the model. At Step 3, the two-way interaction between the independent variable (Father's authoritative parenting style) and potential
moderator variable (Father's conflict and criticism dimension) was added to the model.

Father's conflict and criticism dimension moderated the association between father's authoritative parenting style and problematic behaviours, $\Delta R^2 = .006$, $\Delta F (1, 690) = 4.27, p<.05$. The two way interaction (father's authoritative parenting style x father's conflict and criticism dimension) was statistically significant, $\beta = .077, p < .05$.

Detailed statistical results are presented in Table 11. Following Aiken and West (1991), to interpret the interaction effect, we plotted separate regression lines for the “low conflict and criticism dimension” and “high conflict and criticism dimension” groups (see Figure 4), and tested the significance of the simple slopes of the regression lines.

The association between father's authoritative parenting style and problematic behaviours was statistically significant for both groups. The moderator, perceived fathers' conflict and criticism, was better able to differentiate problematic behaviours at higher rather than at lower levels of fathers' authoritative parenting style. Specifically, high authoritative father parenting in the presence of low perceived father conflict and criticism was associated with a significantly lower level of problematic behaviour compared with high authoritative father parenting in the presence of high perceived father conflict and criticism. Thus, hypothesis 5(d) was supported by the results.
Figure 4. Regression lines for relations between father's authoritative parenting style and problematic behaviours as moderated by father's conflict and criticism dimension.
Table 11

*Hierarchical multiple regression analysis: father’s conflict and criticism dimension as moderator of the association between father’s authoritative parenting style and problematic behaviours.*

<table>
<thead>
<tr>
<th>Predictor measure and step</th>
<th>$\beta$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father's authoritative parenting style</td>
<td>-.154</td>
<td>.024</td>
<td>.024</td>
<td>16.74**</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father's authoritative parenting style</td>
<td>-.127</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father's conflict and criticism dimension</td>
<td>.255</td>
<td>.088</td>
<td>.064</td>
<td>48.53**</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father's authoritative parenting style</td>
<td>-.117</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father's conflict and criticism dimension</td>
<td>.270</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father's authoritative parenting style x Father's conflict and criticism dimension</td>
<td>.077</td>
<td>.093</td>
<td>.006</td>
<td>4.27*</td>
</tr>
</tbody>
</table>

Note: Father's authoritative parenting style was standardized prior to analysis.

* $p<.05$.

** $p<.01$.
Perceived Relationship with Father as a Moderator for Family Adversity and Behaviours

Father’s Support and Admiration Dimension as a Moderator for Family Adversity and Behaviours

The findings for this study did not support the hypothesis that father’s support and admiration will moderate for family adversity and behaviours. Results showed that father’s support and admiration will not moderate for family adversity and problematic behaviours. Hence, hypothesis 6(a) was not supported.

Father’s Conflict and Criticism as a Moderator for Family Adversity and Behaviours

The findings for this study supported the hypothesis 6(b). Results showed that father’s conflict and criticism will moderate for family adversity and problematic behaviours.

For the moderation analysis, a hierarchical multiple regression analysis was performed. At Step 1, the independent variable, family Adversity was entered into the model. At Step 2, the potential moderator, father’s conflict and criticism dimension was added to the model. At Step 3, the two-way interaction between the independent variable (Family adversity) and potential moderator variable (Father's conflict and criticism dimension) was added to the model. Father's conflict and criticism dimension moderated the association between family Adversity and problematic behaviours, $\Delta R^2 = .008$, $\Delta F (1, 607) = 5.60$, $p < .05$. The two way interaction (family adversity x father's conflict and criticism dimension) was statistically significant, $\beta = -.093$, $p < .05$.

Detailed statistical results were presented in Table 12. Following Aiken and West (1991), to interpret the interaction effect, we plotted separate regression lines for the “low conflict and criticism dimension” and “high conflict and criticism dimension”
groups (see Figure 5), and tested the significance of the simple slopes of the regression lines. The association between family adversity and problematic behaviours was statistically significant for both groups. The moderator, perceived fathers' conflict and criticism dimension, was better able to differentiate problematic behaviours at lower rather than at higher levels of family adversity. Specifically, low family adversity in the presence of low perceived father conflict and criticism is associated with reduced problem behaviours. Thus, hypothesis 6(b) was supported by the results.
Figure 5. Regression lines for relations between family adversity and problematic behaviours as moderated by father's conflict and criticism dimension.
Table 12

Hierarchical multiple regression analysis: father's conflict and criticism dimension as moderator of the association between family adversity and problematic behaviours.

<table>
<thead>
<tr>
<th>Predictor measure and step</th>
<th>β</th>
<th>$R^2$</th>
<th>Δ$R^2$</th>
<th>Δ$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family adversity</td>
<td>.125</td>
<td>.016</td>
<td>.016</td>
<td>9.63**</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family adversity</td>
<td>.111</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father's conflict and criticism dimension</td>
<td>.254</td>
<td>.080</td>
<td>.065</td>
<td>42.66**</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family adversity</td>
<td>.100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father's conflict and criticism dimension</td>
<td>.251</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family adversity x Father's conflict and criticism dimension</td>
<td>-.093</td>
<td>.089</td>
<td>.008</td>
<td>5.60*</td>
</tr>
</tbody>
</table>

Note: Family adversity was standardized prior to analysis.

* $p < .05$.

** $p < .01$. 
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Supported</th>
<th>Brief Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) (a) Psychopathy will negatively influence prosocial behaviours in adolescents.</td>
<td>Supported</td>
<td>$r = -0.29^{***}$</td>
</tr>
<tr>
<td>(b) Psychopathy will positively influence problematic behaviours in adolescents.</td>
<td>Supported</td>
<td>$r = 0.48^{***}$</td>
</tr>
<tr>
<td>(2) (a) Father’s authoritative parenting style will positively influence prosocial behaviours in adolescents.</td>
<td>Supported</td>
<td>$r = 0.15^{***}$</td>
</tr>
<tr>
<td>(b) Father’s authoritative parenting style will negatively influence problematic behaviours in adolescents.</td>
<td>Supported</td>
<td>$r = -0.15^{***}$</td>
</tr>
<tr>
<td>(3) (a) Family adversity will not predict prosocial behaviours.</td>
<td>Supported</td>
<td>$r = -0.01$</td>
</tr>
<tr>
<td>(b) Family adversity will likely predict problematic behaviours.</td>
<td>Supported</td>
<td>$r = 0.13^{**}$</td>
</tr>
<tr>
<td>(4) (b) Father’s support and admiration dimension will moderate the relationship between psychopathy and problematic behaviours.</td>
<td>Supported</td>
<td>$\beta = 0.071^*$</td>
</tr>
<tr>
<td>(5) (d) Father’s conflict and criticism dimension will moderate the relationship between father’s authoritative parenting style and problematic behaviours.</td>
<td>Supported</td>
<td>$\beta = 0.077^*$</td>
</tr>
<tr>
<td>(6) (b) Father’s conflict and criticism dimension will moderate the relationship between family adversity and problematic behaviours.</td>
<td>Supported</td>
<td>$\beta = -0.093^*$</td>
</tr>
</tbody>
</table>

*p<.05; **p<.01; ***p<.001
CHAPTER 5

DISCUSSION AND CONCLUSION

The results of the study have been presented in the previous chapter. These results contribute to the existing research literature and enable us to gain a better insight into the influence of psychopathy, family adversity, and parenting styles, in particular, father’s authoritative parenting style on prosocial and problematic behaviours. We will also discuss father-child relationship (father’s support and admiration and conflict and criticism dimensions) as moderators for the independent variables on prosocial and problematic behaviours. This chapter discusses the results presented and seeks to explain the findings as well as relate them to past research. Future directions and limitations of the study will also be discussed.

*The Influence of Psychopathy on Behaviours*

The results from the present study concur with previous studies on the influence of psychopathy on behaviours (e.g. Andershed et al., 2002; Essau et al., 2006; Frick et al., 2003; Frick & Ellis 1999; Koenings et al., 2010; Vitacco et al., 2002). It was found that psychopathy predicts prosocial and problematic behaviours (e.g. Pardini et al., 2003). It was evident that psychopathy negatively influences prosocial behaviours in adolescents. The results reported a negative correlation between psychopathy and prosocial behaviours. In addition, results obtained also indicated that psychopathy predicted higher risk for problematic behaviours. There was a positive correlation between psychopathy and problematic behaviours. Thus, the results obtained from the regression and correlation analyses supported both hypotheses that psychopathy predicts prosocial and problematic behaviours in youths.

225
Callous unemotional traits, narcissism, and impulsivity are three key features of psychopathy (Frick & Hare, 2001). An individual with psychopathy is characterized by a lack of empathy for others, has a grandiose view of himself or herself, can be exploitative of others, and is impulsive in nature (Fowles, 1980; Frick & Hare, 2001; Harpur et al., 1989).

Callous and unemotional traits in psychopathy contribute to the individual’s lack of guilt or remorse, with an absence of empathy and compassion for others (Barry et al., 2000). The limited emotions result in the inability of the individual to form meaningful relationships which suggest that they are capable of the most deliberate and aggressive behaviours (Cleckley, 1988; Barry et al., 2000; Frick et al., 2003; Frick & Marsee, 2006; Marsee et al., 2005).

Apart from being more adventure-seeking and less responsive to punishment, children with these traits are less reactive to threats and emotional stimulation (Fisher & Blair, 1998; Frick et al., 1999; Kagan & Snidman, 1991; Loney et al., 2003; O’Brien & Frick, 1996). These characteristics make it far more difficult for these children to develop conscience (Barry, et al., 2000; Blair, 1999; Frick, 1998; Kochanska, 1993).

Furthermore, traits of grandiosity, a sense of entitlement and self-centeredness, and vanity or exhibitionism in narcissistic traits in psychopathy may be related to an increased willingness to act out against others (Washburn et al., 2004). Empirical evidence suggests that children and adolescents with narcissistic traits are associated with behavioural and emotional difficulties (Barry et al., 2003; Barry & Wallace, 2010; Ha et al., 2008; Washburn et al., 2004). Studies had reported that these individuals are likely to be more aggressive and more prone to delinquency (e.g. Barry et al., 2007; Thomaes et al., 2008).
One other feature of psychopathy is impulsivity. Being impulsive also means that they react more easily to provocations, are less able to regulate behaviours, and have little or no restraints against violating social rules (Frick & Hare, 2001; Hollander & Evers, 2001).

To reinforce the above research findings, study conducted by Koenings and colleagues (2010) reported that high psychopathy participants are often compromised in their ability to make sound decisions and to process emotion. High psychopathy participants are less likely to reciprocate positively in relationships (Rilling et al., 2007). A few studies have consistently showed that individuals with high psychopathy traits have lesser ability to read facial expressions and interpret emotions accurately when compared with those of lower reported psychopathy traits (e.g., Birbaumer et al., 2005; Flor et al., 2002; Levenson et al., 2000). This could explain why these individuals are less capable in adopting prosocial behaviours.

The absence of guilt or remorse, lack of compassion and ability to empathize, together with shallow and constricted emotions may possibly explain why youth with psychopathy traits are less able to develop prosocial behaviours (Barry et al., 2000; Cleckley, 1988; Kagan & Snidman, 1991; Wootton et al., 1997). One key contributing factor for reduced empathy is the result of the amygdala hypo activity causing the individual with psychopathic traits to have deficits in the ability to recognise emotion (Blair, 2007).

It is documented extensively in developmental psychology theories that empathy and sympathetic concern for others will discourage aggressive behaviours (Eisenberg, 2005; Hoffman, 1990). Therefore, having the ability to empathise is one significant factor that encourages prosocial behaviour and discourages antisocial behaviour (Batson
et al., 1991). Moreover, there is evidence in some research showing that there is a correlation between lack of empathy and aggression (Zahn-Waxler et al., 1995).

Our results confirmed the findings from previous studies that psychopathy is inversely related to prosocial behaviours (White, 2014). The inability to feel remorse, empathy and compassion for others can inhibit the development of the affective components of conscience in the youths (Barry, et al., 2000; Blair, 1999; Frick, 1998; Frick et al., 2003; Kochanska, 1993). This could be another possible reason to explain the individual’s inhibition or motivation to act in a prosocial manner.

From the findings, it is evident that there is a relationship between psychopathy and problematic behaviours. The results in this study reinforced findings from previous studies that demonstrated the relations between psychopathy and problematic behaviours in juveniles (e.g., Campbell et al., 2004; Corrado et al., 2004; Forth et al., 1990; Kosson et al., 2002; Lynam, 1997).

There is extensive evidence that ability for self-control which is absent in individuals with psychopathy traits may reflect a disposition towards problematic behaviours (Farrington et al., 1990; Gottfredson & Hirschi, 1990; Herpertz & Sass, 2000; Kindlon et al., 1995; Vitacco & Rogers, 2001; White et al., 1994). Risk-taking behaviours, lack of empathy towards others and being impulsive (one of the traits in psychopathy) puts the youth at high risk for problematic behaviours (Barry et al., 2000; Carroll et al., 2006; Caspi, 2000; Cleckley, 1988; Eysenck & Eysenck, 1977; Frick, 1998; Frick et al., 1994; Jolliffe & Farrington, 2009; Jones et al., 2011; Luengo et al., 1994; Pratt & Cullen, 2000; Romero et al., 2001). Similarly, one Singapore study by Tam and colleagues (2007) reported the youths who were engaged in problematic behaviours were thrill seeking.
Taken together, these results supported our findings which suggest that youths with psychopathic traits are more likely to develop problematic behaviours. Hence, it is predicted that with these characteristics, the individual has the ingredients to engage in problematic behaviours more (e.g., Barry et al., 2003; Barry & Kauten, 2014; Barry & Wallace, 2010; Bushman & Baumeister, 1998; Frick & Hare, 2001; Frick et al., 2014; Gottfredson & Hirschi, 1990; Moffitt, 1993; Patrick, 2010; Pincus et al., 2009).

From the findings, it is evident that understanding psychopathy and its influence on behaviours is a valid and important one. The findings from this study support the risk model proposed by Greenberg and colleagues (1993, 2001) that child characteristics (e.g., psychopathy) is significant in predicting youth’s behaviours (e.g., Campbell et al., 2004; Farrington et al., 1990; Gottfredson & Hirschi, 1990; Hare, 1998; Kindlon et al., 1995; Vitacco et al., 2002; Vitacco & Rogers, 2001; White et al., 1994).

*The Influence of Family Adversity on Behaviours*

The results from the correlation analysis indicated a positive relationship between family adversity and problematic behaviours. In addition, the results obtained also revealed that family adversity predicts problematic behaviours. On the contrary, there was no significant results reported for family adversity and prosocial behaviours. The results appear to concur with previous studies conducted in the West which also report that family adversity predicts problematic behaviours (Burchinal, Roberts, Hooper, & Zeisel, 2000; Cummings & Davies, 2002; Essex, Klein, Cho, & Kalin, 2002; Masten & Shaffer, 2006; Obradovi, Bush, Stamperdahl, Adler, & Boyce, 2010).

It is evident in literature from the West that the family environment influences the adolescents in their psychological adaptation, adjustment and competencies and is significantly associated with their wellbeing (Aydin, & Oztutuncu, 2001; DuBois, et al.,
1992; Jarvis, & Lohman, 2000). Thus, the presence of adversity in a child’s or adolescent’s environment also mean poorer developmental outcomes (e.g., Aneshensel & Sucoff, 1996; Gutman & Eccles, 2007; Henderson, et al., 2006; Herman et al., 2007; Jewell & Stark, 2003; Luthar, 2006; Obradovic’, Shaffer, & Masten, in press; Rutter, 1983; Sameroff, 2006; Vanfossen et al., 2010).

There is no lack of literature that supports the detrimental effects of stressful and adverse events such as conflict between parents, maternal depression, and financial stress in the family on children and adolescents. In these literature, the negative effects include socioemotional behaviour problems and deficits in cognitive development (e.g., Amato & Keith, 1991; Burchinal et al., 2000; Cummings & Davies, 2002; Essex et al., 2002; Masten & Shaffer, 2006; McLoyd, 1990).

One possible explanation is that difficulties in child adjustment increased as the number of family stressors increased (Forman & Davies, 2003; Rutter et al., 1975; Rutter & Quinton, 1977). The family has limited resources and time to cope with the increasing demands of challenges in the environment and hence, resources and time are taken away from parenting.

Sameroff and his colleagues (1987) reported that children with high multiple environment risk scores experienced much worse outcomes than children with low multiple environment risk scores. Our findings supported these studies that reported higher family adversity scores predict more problematic behaviours in adolescents (Ackerman et al., 1999; Biederman et al., 1995; Forman & Davies 2003; Luster & McAdoo, 1994; Raposa & Hammen, 2018; Rutter & Quinton, 1977; Shaw et al., 1994b). There is more evidence to suggest that the cumulative effects of risk on adjustment (Biederman et al., 1995; Luster & McAdoo, 1994; Rutter & Quinton, 1977; Shaw et al., 1994b).
The adversities present in the adolescents’ social environment can critically influence their developmental outcomes (e.g., Farrington, 2000; Rutter & Quinton, 1977). The variables that make up the family adversity variable such as financial and resource related deficiency, disruptions to the family structure, conflicts in the family, large household size, prior parents’ criminal records and parental mental health, all have positive correlations with adolescents’ problematic behaviours (e.g., Costello et al., 2003; Farrington, 2000; Hetherington, 2006; Osborne & McLanahan, 2007; Repetti et al., 2002; Strohschein, 2005; Vanfossen et al., 2010; Walper & Beckh, 2006; Zemp et al., 2016).

There is evidence suggesting that adversities associated with financial hardship may affect healthy family functioning and subsequently, child development (Coley & Chase-Lansdale, 2000). Economically disadvantaged families are more likely to experience conflict between both parents as well as multiple family disruptions that could impact children in a negative way (Baxter et al., 2012; Broman et al., 1997; Carlson & Corcoran, 2001; Shaw & Emery, 1988). For example, when there is unemployment in the family, parents are likely to feel distressed and exhibit stress-related symptoms which are significantly correlated with youth’s developmental outcomes (Amrock & Weitzman, 2014; Conger et al., 2000; Mattejat & Remschmidt, 2008; Weissman et al., 2006). Hence, a combination of economic factors such as parents’ unemployment and economic deprivation, may result in conflictual family relationship (e.g., Baxter et al., 2012; Broman et al., 1997; Conger & Conger, 1992; Conger et al., 1994; Conger et al., 2000). This, in turn, is linked to the negative emotional well-being in youths (Conger et al., 1997; Conger & Conger, 1992).

Another possible explanation is that families of higher socioeconomic status
tend to have access to resources that support higher levels of family functioning. Positive parenting strategies are more likely possible when parents have available resources (Mistry et al., 2002). For example, research shows that these parents have more time to communicate with their children and to discuss consequences of problematic behaviours (Pinderhughes et al., 2000). Hence, a more positive family environment with less conflict is also possible (Copeland et al., 2009; Costello et al., 2003). It is also evident in a Singapore study conducted by Ong and colleagues (2000) that problematic behaviours were associated with family environment.

Conversely, one study in Iowa reported that financial difficulties and bad economic situation added to the parents’ stress levels. This influence went beyond the parents’ mental health and affected the parents’ nurturing abilities and parenting approaches (Conger et al., 1992, 1994). The elevated levels of their depression and anxiety resulted in them being less competent in providing a safe and supportive environment for their children. Furthermore, other studies suggested that poor financial and economic situations in the family also greatly impact the parents’ parenting behaviours and practices thus affecting their children’s development outcomes (Conger & Elder, 1994). Similarly, in Singapore, when the parents are pressed for time to juggle with paying bills for their daily living and at the same time having to cope with difficult financial situations, their ability to supervise their adolescents will likely be affected.

It was also found that individuals with skill deficits that inhibit learning and functioning may also live in significantly adverse environments (Patterson, 1986). When individuals live in environments that have significant adversity, it is possible that the social interactions within such environments may reinforce the negative and antisocial behaviours in the family (Patterson et al., 1992). Thus, overtime, the individual risk factors may be made worse because of the adverse environments. For
example, children and adolescents have a high risk of being exposed to conflicts in adverse family environment, thus making them more likely to engage in negative interaction patterns (Voydanoff & Donnelly, 1988).

Moreover, Guassi Moreira and Telzer (2018) reported that children who were exposed to higher levels of conflicts tend to make more risky decisions and engage in risk-taking activities as well. In contrast, those children who were not exposed to high family conflicts were less likely to make decisions that put them in risky situations. In addition, for children who were constantly and consistently exposed to high levels of conflict in the family, psychological problems are likely to develop and the negative effects followed them through to adulthood.

Another possible explanation is the diminishing attachment security experienced by children who were repeatedly exposed to unstable and fear-inciting situations in the family. These children may choose to alter their reality and distort them while trying to cope with the hostile conflict in the family (Cummings & Davies, 1996; Davies & Forman, 2002). These children and adolescents may use avoidance strategies to dismiss and disengage from their families, to play down the importance of the events (Davies et al., 2004; Davies & Forman, 2002; Forman & Davies, 2005). Their coping behaviours could manifest as more negative symptoms of depression, anxiety, social withdrawals and problematic behaviours which could have an early onset during childhood and persist through to later adolescence (Davies et al., 2004; Davies & Forman, 2002; Forman & Davies, 2005).

There are no lack of studies that explained the significance of family relations and processes and how these risk factors can increase the adolescents’ risk for problematic behaviours (Brook et al., 1990; Dahlberg, 1998; Hawkins et al., 1992; Marta, 1997). The available theoretical frameworks for family process supported the
relationship between family adversity variables and child-related outcomes (e.g., Conger et al., 2002; Mistry et al., 2002). Other family related variables such as parents’ education level and family income were connected to children’s behaviours.

An adolescent who is exposed to numerous familial related adversity variables will experience negative emotions such as anger, frustration, and anxiety that will negatively affect the relationship within the members of the family. Thus, this negative relationship will spiral into the family dynamics and this may result in negative interactions between parent and child. For example, parents are more likely to use harsh and punitive punishments when they experience stress due to the negative events and stressors in their environment (e.g., Conger & Conger, 2002). In turn, these negative dynamics will encourage the development of poor relationship skills and aggressive behaviour which the children will likely model after and subsequently, act out these behaviours while interacting with others (Caspi, 2012; Cox & Paley, 1997; Minuchin, 1988).

Our findings reported that family adversity has no significant influence on the development of prosocial behaviours in youths. Likewise, Flouri and Tzavidis (2008) reported similar findings that family adversity does not predict prosocial behaviours. One possible explanation for this is that not all children are equally affected by adverse environmental influences (Belsky et al., 1998; Cummings et al., 2007; Deater-Deckard & Dodge, 1997; El-Sheikh, 2005; Ramos et al., 2005). Some researchers posited that although children may be more vulnerable to contextual risk, they may also show more adaptive responses to interventions (Belsky et al., 2007; Blair, 2002; Klein Velderman et al., 2006).

Furthermore, a lack of family adversity does not necessarily suggest the presence of a nurturing family environment. Thus, future studies will need to further
examine the role of a nurturing family environment and its influence on prosocial and problematic behaviours (Obradović et al., 2010).

In addition, it was documented in many studies that the compounding effect of multiple risks was significantly associated with the adjustment and behaviours of children and adolescents (Biederman et al., 1995; Luster & McAdoo, 1994; Rutter & Quinton, 1977; Shaw et al., 1994). Additionally, when individuals are exposed to numerous difficulties and continuously over a period of time, the stressors will have a strong negative impact on the development of these individuals (DeBellis et al., 2014; English et al., 2005; Hammen, 2005; Jaffee & Maikovich-Fong, 2011; Lupien et al., 2009; Simpson & Belsky, 2008).

The Influence of Father’s Authoritative Parenting Style on Behaviours

In the present study, it was hypothesised that youths whose fathers adopt an authoritative parenting style will encourage the development of prosocial behaviours compared to youths whose fathers do not adopt this parenting style. In support of our findings, we agreed with Lamborn et al. (1991) and Steinberg et al. (1994) studies which reiterated the idea that authoritative parenting is the optimal parental style. Other studies reported that children whose parents had an authoritative style attained the best outcomes on a number of behavioural and psychological measures (Jackson et al., 1998; Radziszewska et al., 1996). These adolescents from authoritative families would perform better in all youth outcomes examined. Sensitive and responsive parents who promote autonomy and are available to the child when required, are also associated with optimal child developmental outcomes (Bowlby, 1988).

It is well-documented that parenting styles are significantly associated with the adolescents’ behavioural development (Lerner et al., 1995; Yilmaz, 2000). One possible
explanation could be that authoritative parents allow their children to have the opportunities to work out their independence in a structured and safe environment (e.g. Smetana et al., 2006). It was found that such parenting behaviours encourage children's independence, competence, and relatedness which in turn, are closely correlated with prosocial behaviours (Deci & Ryan, 2000). Furthermore, empirical studies and literature reviews have supported the positive link between the opportunity to exercise autonomy in a supportive environment with outcomes such as better mental health, higher self-esteem, positive self-concept, self-motivation, initiative, and regulation of one’s self (Cohler & Geyer, 1982; Ryan & Deci, 2000; Zimmer-Gembeck, 2001). There are also studies that stressed the association of prosocial behaviours with effective and clear communication of parents’ expectations of behaviours practised in a warmth and autonomy driven environment (Eisenberg, 1990).

In authoritative parenting style, parents give enough space for their children to have the flexibility to decide on their choices. In turn, this facilitates their prosocial tendencies toward others (Grusec & Davidov, 2010). It is also suggested widely that adolescence is a stage in development where the parent and child renegotiate their relationship, expectations and rules in the household, and thereby increasing chances for adolescent and parent conflict (Archibald et al., 2003; Collins & Russell, 1991). Therefore, parents should encourage autonomy in their parenting styles and adopt parenting techniques that encourage a reasonable amount of control and self-determination (Branje et al., 2013).

Children whose parents encourage independence and autonomy are also more likely to have the competency to develop healthy egos and confidence to explore and form their own identities (Blos, 1979; Erikson, 1959, 1968; Collins et al., 1997; Darling & Steinberg, 1993; Grotevant & Cooper, 1986; Hauser et al., 1991). In so doing, these
children are also more able to stand up to their own viewpoints and have a lower tendency to follow their peers blindly (Collins et al., 1997; Darling & Steinberg, 1993; Grotevant & Cooper, 1986; Hauser et al., 1991). It is also evident in previous studies that adolescents whose parents do not allow autonomy tend to display negative behaviours like depression symptoms, unhealthy relationships with peers, and problematic behaviours (Allen et al., 2006; Eberhart & Hammen, 2006; Lee & Bell, 2003; McClanahan & Holmbeck, 1992; Quintana & Kerr, 1993; Soenens & Vansteenkiste, 2005).

As mentioned earlier in the literature review chapter, one possible explanation for our findings is that parents who are responsive tend to be more child-centred and are more willing to accept their children. They tend to evaluate their children positively, and establish close, interpersonal relationships with more secure attachments to their children (De Wolff & van IJzendoorn, 1997; Hoffman, 1983). In addition, this positive parenting style will facilitate secure parent and adolescent attachment that contribute to the child’s development in social competence and over well-being (McElhaney et al., 2009). At the same time, this positive parenting that strengthens the attachment bond between parent and child is linked to the development of positive self-esteem and healthy relationship building in adolescents as they interact with their peers (Ryan et al., 1995).

More importantly, these responsive parents are capable of expressing and regulating their emotions. They are good role models who encourage sympathy and prosocial behaviours (Barnett, 1987; Eisenberg & Murphy, 1995; McElhaney et al., 2009). Authoritative parents are themselves good role models of social interaction and caring behaviour which are demonstrated through their parenting behaviours (Baumrind, 1991). Additionally, these parents tend to use inductive reasoning in their
discipline practices which is related to prosocial behaviours in preadolescents and adolescents (Bar-Tal et al., 1980; Krevans & Gibbs, 1996). It also improves their empathetic and sympathetic responding (Dlugokinski & Firestone, 1973; Krevans & Gibbs, 1996).

Moreover, in authoritative parenting, parents who have strict expectations on their children are also likely to set high behavioural expectations. They are also more able to supervise their children. A demanding parent will likely influence the internalization of moral values in a child (Grusec & Goodnow, 1994). On the other hand, harsh and neglectful parent-child interactions in an aloof or hostile parenting style might lead to problematic behaviour outcomes (Maccoby & Martin, 1983). Clearly then, having a responsive and demanding parent helps support positive developmental outcomes in a child.

There is support from empirical evidence demonstrating the expected associations between parents’ responsiveness and demandingness with prosocial development. In the previous literature review, it was mentioned that parents’ responsiveness was associated with socially competent and prosocial behaviours in adolescents (Dekovic & Jaansens, 1992; Eberly et al., 1993; Eberly & Montemayor, 1998; Laible et al., 2004; Laible & Carlo, 2004; Lamborn et al., 1991). Likewise, there is evidence demonstrating the association between demandingness and prosocial behaviours (Eisenberg et al., 2006). It is well established in empirical studies that parents clearly have a role to play in influencing their child’s ability to perspective-take, empathise and to reason in a morally upright fashion (Eisenberg, 1986; Eisenberg & Spinrad, 2004).

One other possible explanation for the positive influence of authoritative father’s parenting on prosocial behaviours and negative influence of authoritative father’s
parenting on problematic behaviours is that when parents are sensitive and responsive towards their children, their adolescents are likely to have healthy bonds with the parents and regard their parents positively. In turn, these adolescents are also more willing to accept their parents’ values and beliefs. Other studies have reported that how adolescents perceived their parents (i.e. warm, accepting) is linked to their attachment security and this is connected to their confidence, self-exploration and interactions with others (Jackson et al., 1990; Kamptner, 1988). These adolescents are also more willing to disclose their activities to their parents compared to those whose parents are high on control and are obsessively monitoring their activities (Stattin & Kerr, 2000).

Authoritative parents exude warmth and acceptance when interacting with their children, and they are able to impose a positive influence on them (Barnes & Olson, 1985; Baumrind, 1991; Darling & Steinberg, 1993; Eisenberg, 1990; Grotevant & Cooper, 1998; Lamborn et al., 1991). A Singapore study concurred that the youths’ perception of their parents was significantly related with their competency in psychosocial competence and their likelihood to engage in antisocial behaviours (Sim, 2000).

In our research, the results definitely supported the view that father’s authoritative parenting negatively predicts adolescent problematic behaviours. Similarly, some longitudinal studies reported that authoritative parenting has a negative relationship with children’s negative behaviour. However, parents who are difficult and use coercion in their punishment will worsen the negative behaviours (Woodward et al., 1998). Many studies have supported the negative correlation between higher level of authoritative parenting style and fewer children’s problematic behaviours (Alizadeh et al., 2011; Brar, 2003; Huver et al., 2007; Pierce et al., 2002). One can explain that parental control and monitoring present in authoritative parenting influence the
behaviours of the youths (Ennett et al., 2008). Parental supervision in authoritative parenting style influences youth's behaviour through minimizing their opportunities to be involved in risk-taking and associations with deviant peers (Li et al., 2000).

Another possible explanation is that youths are at risk of putting themselves in risky situations and involving in delinquent behaviours without the guidance and protection from their parents (Hagan & McCarthy, 1997; McCarthy & Hagan, 1992). When parents supervise and have an overview of their children’s whereabouts and activities, they are less likely to be in the company of deviant peers or to give in to pressure to participate in activities that violate the law (Dishion et al., 1991).

Furthermore, lack of supervision from parents was also correlated with increased substance abuse in adolescence (Chamberlain & Patterson, 1995; Lamborn et al., 1991; Steinberg et al., 1994; Sommers & Baskin, 1991). On the other hand, higher levels of supervision from parents is correlated with lower risks for problematic behaviours and delinquency (Griffin et al., 2000; Parker & Benson, 2004).

There is no lack of studies to reiterate the importance of parenting and how it influences children in all areas of their development and the way they interact with the world (e.g., Becker et al., 2010; Lightfoot et al., 2009; Morley & Moran, 2011). In conclusion, parenting styles do influence self-control in children which impacts their adjustment and behaviours (Finkenauer et al., 2005). Research in this area has shown that poor parental discipline and lack of supervision are associated with repeated problematic behaviours (Wilson, 1980).
Perceived relationship with father as a moderator

This research sought to understand how attachment in the form of relationship with fathers as a moderator will influence the development of behaviours. The feelings of security in children are strongly influenced by how they perceived the availability of their attachment figures. Inconsistent availability of attachment figures arouse feelings of anxiety, anger, and despair (Kobak, 1999). Furthermore, an insecure bond with the significant caregiver may result in the child having negative outcomes in the course of lifespan development (Malekpour, 2007). In the case of this study – the father is the attachment figure.

When children experience warmth, and care from parents who are responsive, they are likely to form a secure and warm relationship with their parents (Kerns et al., 2000). In comparison, when children experience rejection, they are likely to have a poor attachment relationship with their parents (Kerns et al., 2000). It follows then that insecure attachment to parent figures may affect the adolescent negatively, not only during early childhood but also during middle childhood and adolescence. Hence, it is worth reiterating that attachment is likely to be one of the major factors that influence the development of behaviours in children and adolescents (DeKlyen & Greenberg, 2008).

It was also noted that adolescence is a period where these individuals become increasingly detached from parents but grow in their attachment to peers (Laible et al., 2000). For example, for some adolescents, their parents have less influence over them with regards to their substance use-related choices whereas they are more likely to be influenced by peers (Beal, Ausiello, & Perrin, 2001; Epstein, Bang, & Botvin, 2007; Li, Pentz, & Chou, 2002; Miller, Alberts, Hecht, & Krizek, 2000).

Furthermore, there is substantial evidence in research that the support from
parents and the lower levels of conflictual relationship with them may protect the 
adolescents against the negative influences of parenting style and family adversity. In 
some discussion from past studies, positive support from father and presence of conflict 
in father and child relationship were considered to be significant moderators for the 
relationship between parenting style, child characteristics, family adversity and 
behaviours (Barrera, 2000; Cohen, 2004). For instance, in this framework, father’s 
support will promote positive youth behavioural outcomes while conflictual relationship 
with the father figure will result in negative youth outcomes.

In this study, perceived relationship with father was defined in terms of father’s 
support or conflict dimensions. The following sections will discuss the moderation role 
of father’s support or conflict dimensions on prosocial and problematic behaviours. The 
key findings from our moderation analysis reported that for dispositional trait-like 
individual characteristics, like psychopathy, father’s support played a role in reducing 
problematic behaviours. For variables that involved reciprocal relationships or 
interactions (e.g., authoritative parenting and adverse family circumstances), father’s 
conflict played a moderating role in influencing problematic behaviours.

Father’s Support and Admiration as a Moderator for Psychopathy and Behaviours

It was hypothesized that father’s support and admiration will moderate for 
psychopathy and behaviours. The results for this study partially supported the 
hypothesis. The findings showed that support and admiration from father moderated for 
psychopathy and problematic behaviours but it did not moderate for psychopathy and 
prosocial behaviours.

The moderator, perceived fathers' support and admiration dimension, was better 
able to differentiate problematic behaviours at lower rather than at higher levels of
psychopathy. This meant that perceived high support and admiration from father was significant in reducing problem behaviours for the group who reported lower level of psychopathy traits.

Previous literature has repeatedly reported that traits of psychopathic individuals include lower levels of ability to make decision, poorer emotion-processing skills, and less able to reciprocate positively in relationships (Koenings et al., 2010; Rilling et al., 2007). Other studies reported their inhibition to read facial expressions and interpret emotions accurately as compared to those with fewer reported psychopathy traits (e.g., Birbaumer et al., 2005; Flor et al., 2002; Levenson et al., 2000). This lack of competencies to read and decode emotion is a result of amygdala hypo-activity that contribute towards individuals with psychopathic traits to suffer the lack in showing empathy (Blair, 2007; Keysers et al., 2014).

As previously mentioned, traits like absence of guilt or remorse, lack of ability to empathize, lack of compassion for others as well as having shallow and constricted emotions contributed towards these individuals having greater difficulties in developing prosocial behaviours (Barry et al., 2000; Cleckley, 1988; White, 2014). These characteristics can impair the development of conscience in the youths which in turn, could prevent them from developing prosocial behaviours such as the ability to empathize and accurately express their emotions (Barry, et al., 2000; Blair, 1999; Frick, 1998; Frick et al., 2003; Kochanska, 1993). Thus, with the above more serious types of individual psychopathic traits, the presence or absence of father’s support and admiration, will unlikely inhibit or motivate the youth’s development of prosocial behaviours. This study found no moderation relationship in father’s support and admiration for psychopathy and prosocial behaviours.
In this study, good relationship in terms of support from the attachment figure - the father, will lower problematic behaviours in individuals with fewer psychopathic traits. Likewise, Carlo, Roesch and Melby (1998) reported in their study that levels of aggressive and antisocial behaviours were low when support from parents was high together with low levels of anger and sociability. Similarly, results from this study concurred with what Carlo and colleagues (1998) had reported. According to the findings in this study, father’s support and admiration played a significant role in managing the problematic behaviours in youths.

Stemming from attachment theory, Kobak (1999) suggested that distress resulting from attachment disruptions in older children and adolescents may be a strong predictor of maladaptive behaviour and psychopathology. Other studies have also found that children without problematic behaviours were more likely than those in a control group to have supportive relationship from their parents (Clarke et al., 2002). Other studies have documented that the prevalence of insecure-unresolved attachment issues in adolescents have been implicated in problems of psychosocial functioning and were associated with different patterns of problematic behaviours (Allen et al., 1996; Wallis & Steele, 2001). Thus, one possible explanation could be that support from attachment with the father makes the individual less insecure and more motivated to display fewer problematic behaviours.

Results from this study supported the literature that discussed the critical role of the father when the child has psychopathy traits and that their support can make a difference if the youths have lower levels of psychopathic traits. However, further research is needed to establish a clearer understanding of the moderating factors that could influence the development of behaviours.
Father’s Conflict and Criticism as a Moderator for Psychopathy and Behaviours

It was hypothesized that father’s conflict and criticism will moderate psychopathy and behaviours. The results of this study did not support the hypothesis. Numerous studies have put forward the view that parent and adolescent conflicts were related to the adolescents’ prosocial and problem behaviours (Barber, 1994; Baumeister, & Lobbestael, 2011; Blair, 2005; Collins & Laursen, 1992; Dadds et al., 2009). Silva and Stattin (2016) investigated the moderating role of parenting on the relationship between psychopathy and antisocial behaviour in adolescence. They reported that high conflict and criticism from parents contributed to violence regardless of the level of psychopathic traits.

One key function of the human emotion system is to form positive social connections with other people. Emotional patterns such as guilt and empathy contribute indirectly to prosocial behaviour patterns. When the ability to regulate the emotions is not possible - such as among youths with psychopathic traits - their ability to promote positive social connection is lost, and that creates the opportunity for problematic behaviours (Baumeister, & Lobbestael, 2011). During a conflict with father, the youth could have emotions running high that he or she is not capable to regulate. Hence, there is a likelihood that conflict with the father won’t affect individuals with psychopathy traits such that it could moderate prosocial behaviours. They lack the ability to engage in prosocial behaviours for positive interactions. Hence, this may help explain the insignificant results yielded for father’s conflict moderating psychopathy and prosocial behaviours.

One possible explanation for father’s conflict and criticism dimension not moderating for psychopathy and behaviours could be parent and adolescent conflicts were a result of managing the adolescents’ problem behaviours (Zhou & Bankston,
Parents with problematic adolescents, compared to non-problematic adolescents, complained more about conflicts (Detzner, Xiong, & Eliason, 1999; Zhou & Bankston, 1998). Other studies found that parent and adolescent conflicts were significantly linked to the adolescents’ past incidences of problem behaviours (Barber, 1994; Collins & Laursen, 1992; Shek & Ma, 2001). This could mean that psychopathy traits in the child could have already created a conflictual relationship with the father, hence, this could be a bidirectional interaction.

Individuals with psychopathy have traits like callousness, lack of remorse, lack of guilt and empathy, emotional poverty and lack of remorse (Barry, et al., 2000; Blair, 1999; Frick, 1998; Frick et al., 2003; Kochanska, 1993). This suggest at least a partly impaired ability to regulate emotions in these individuals. The lack of empathy among psychopathic individuals is well supported in research (Cleckley, 1988). Psychopathic individuals are not able to respond emotionally to other people’s emotional displays and to emotional stimulation (Blair, 2005; Dadds et al., 2009). Guilt and other emotional motivators of prosocial behaviour are often linked to empathy. This lack of affective response may be an important key to understanding their inhibition to develop prosocial behaviours and their roots in aggressive and antisocial behaviour (Baumeister & Lobbestael, 2011). Also, more importantly, this lack can explain why they may not be as affected by conflicts with others, including their fathers.

In view of the above, conflicts with fathers did not moderate for psychopathy and behaviours (both prosocial and problematic behaviours) as reported in this study. Conflict with fathers seems to have no significant influence over individuals with psychopathy traits.
Father’s Support and Admiration as a Moderator for Family Adversity and Behaviours

This study hypothesized that father’s support and admiration dimension will moderate for family adversity and behaviours. The findings for this study did not support the hypothesis. Results from this study showed that father’s support and admiration dimension did not moderate for family adversity and problematic behaviours.

Past studies supporting the ‘cumulative risk hypothesis’, seemed to suggest that the additional effects of the number of environmental stressors rather than the combination of stressors, were associated with child behaviour problems (Deater-Deckard, et al., 1998; Rutter et al., 1975a; Sameroff, Seifer, Zax, & Barocas, 1987; Sanson et al., 1991; Shaw et al., 1994b; Shaw et al., 1998a).

Also, several studies have found that increased parental support is related to decreased problematic behaviours as well as decreased symptoms of depression and anxiety (e.g., Beal et al., 2001; DuBois et al., 1992; Hoffman & Su, 1998; Wills et al., 2001). Although there is evidence that parental support is an important moderator between stressful events and negative outcomes (Davis et al., 1997; Wills et al., 1992; Wills & Cleary, 1996), this study did not report similar moderation results.

Our results seemed to suggest that father’s support and admiration dimension did not strengthen nor weaken the relationship between family adversity and problematic behaviours. One explanation could be parents in such multiple risk environments need assistance in coping with stressors in, and outside of the family that could affect the quality of the caregiving environment (Beck & Shaw, 2005). Furthermore, the role of the father continues to be one who is supposed to fulfil the financial needs of the family. In an adverse family situation where financial stress is of great concern, the father’s role as a source of support is compromised.
As mentioned earlier, parent's attempts to be supportive may not actually be viewed as support for the youths who are trying to attain autonomy. This is the period where youths find peer support more welcomed than support from parents (Hagell & Newburn, 1996; Loeber & Dishion, 1983).

*Father’s Conflict and Criticism as a Moderator for Family Adversity and Behaviours*

This study hypothesized that father’s conflict and criticism dimension will moderate for family adversity and behaviours. The findings for this study supported the hypothesis. Results showed that father’s conflict and criticism moderated for family adversity and problematic behaviours.

The moderator, perceived fathers' conflict and criticism dimension, was better able to differentiate problematic behaviours at lower rather than at higher levels of family adversity. Specifically, low family adversity in the presence of low perceived father conflict and criticism was associated with reduced problem behaviours.

In view of the ‘cumulative risk hypothesis’ discussed previously, having a conflictual relationship with the father may act as another stressor to the already numerous environmental stressors present in the youth’s current state of functioning (Deater-Deckard et al., 1998; Sameroff et al., 1987; Sanson et al., 1991; Shaw et al., 1994b; Shaw et al., 1998a).

The presence of high levels of conflict between parents and adolescents is a sign of dysfunctionality in the family and this will increase the risk for youth related problems in the family (Keefe & Padilla, 1987; Repetti et al., 2002). It was mentioned in previous studies with Latino youths that excessive parent and adolescent conflict are correlated with increased risk for problematic behaviours and drug/substance use in youths (Johnston et al., 2004; McLaughlin et al., 2007). Likewise, other studies also
reported the negative effects of father and child relationship for adolescents, in specific, in poorer outcomes for girls (Youniss & Smollar, 1985; Williams & Kelly, 2005).

It is undeniable that relationship with parents and the ability to manage the challenges and adversities in the environment helped the adolescent develop the capacity to explore the outside world. The father acts as the symbolic bridge that links the child to the outside world (Geddes, 2008). One possible explanation is, that a less conflictual relationship with the father, the youth would have more confidence to deal with other stressors present in the environment. This could result in a lower likelihood for the youth to engage in problematic behaviours.

Taken as a whole, parents in such high-risk environments need support to cope with stressors since their ability as a caregiver is compromised under such stressful situations, as explained by the results from analyses involving family adversity earlier on (Beck & Shaw, 2005).

Father’s Support and Admiration as a Moderator for Father’s Parenting Style (Authoritative) and Behaviours

It was hypothesized that father’s support and admiration dimension will moderate for father's parenting style (authoritative) and behaviours. The results for this study did not support this hypothesis. Father’s support and admiration dimension did not moderate for father's authoritative parenting style and prosocial behaviours but neither did it moderate for father's authoritative parenting style and problematic behaviours.

One possible explanation for our findings is that authoritative fathers were able to respond to their children better and they also evaluated their children more positively. Parents who used the authoritative parenting style showed warmth, provided structure
for their children to guide their daily functioning and encouraged independence (Bornstein, 2006). They supervised and controlled their children and at the same time, encouraged open communication, reasoning and allowing the child to express opinions. They are able to foster more secure attachments and closer relationships with their children (De Wolff & van IJzendoorn, 1997; Hoffman, 1983). More importantly, these fathers have the capability to express themselves and modelled well-regulated emotions which were necessary to facilitate prosocial behaviours (Barnett, 1987; Eisenberg & Murphy, 1995). To a large extent, support from the father may not make much of a difference in this moderation relationship.

Just as important, in authoritative parenting, fathers have strict expectations of their children and are most likely to set high standards for behavioural conduct. With good supervision of their children, a demanding parent will promote internalized values that are positive (Grusec & Goodnow, 1994). Past research also reported that children growing up in a supportive, authoritative, and less restrictive environment displayed more prosocial behaviours and were able to reason at a higher level about issues in general (Janssens & Deković, 1997).

Interestingly, some research in this area also showed that youths may not always perceive their parent's supportive attempts to be actually helpful (e.g., Hagell & Newburn, 1996; Loeber & Dishion, 1983). In a study conducted by Bokhorst, Sumter and Westenberg (2009) examining the social support from parents, friends, classmates, and teachers in children and adolescents, they found that youths’, aged 16-18 years, need for peer support exceed their need for parent support. This could be the period that the youths find peer support to be more important than parental support.

Also, in prior investigation from previous studies, there were documented
evidence of peer attachment and quality of attachment to parents on behaviour problems (e.g., Bauman & Ennett, 1996; Conrad, Flay, & Hill, 1992; Kobus, 2003; Leventhal & Cleary, 1980; Tyas & Pederson, 1998). Hence, it is suggested that peer attachment plays a significant role in the psychological adjustment of adolescents as the level of attachment to parents decreases during this period (Hay & Ashman, 2003).

It is possible that during this period, the influence from peers is particularly strong during adolescence as they seek independence and autonomy to explore and form their own individual identities as they become less dependent on their parents. They move on to seek attachment with peers to establish group memberships in their own social environment and outside of the family (Brown, Clasen, & Eicher, 1986; Steinberg & Silverberg, 1986). Also, this period marks the time when adolescents will demand less supervised time and reduced time spent with parents (Brown, 1990; Fuligni & Eccles, 1993). They value the opinions of their peers and seek out their counsel as well as strive to gain their acceptance into the group (Brown, 1990; Fuligni & Eccles, 1993).

Another possible explanation is that individuals displaying high levels of callousness and shallow emotion also show lack of ability for guilt and empathetic responses (Cleckley, 1988). Furthermore, when the youth has high levels of callousness and unemotional behaviour, he/she is likely to have reduced response and physiological arousal to punishment or towards others’ display of distress. Genetically, they are more susceptible to engaging in antisocial behaviour (Frick et al., 2014; Viding & McCrory, 2012). They are not sensitive to punishment nor reward. One common idea shared in the literature is that the development of behavioural problems of individuals with high levels of callousness and unemotional is mostly independent of parenting and they tend to respond less to parenting (e.g., Oxford et al., 2003; Wootton et al., 1997).
Therefore, our findings indicate that the presence of parent support will not moderate for authoritative parenting and behaviours (prosocial or problematic) because authoritative parenting is already an optimal parenting style that attends to the behaviours or the youth. In addition, individuals with psychopathic traits are hindered in their ability to respond to their parents’ parenting approaches (Oxford et al., 2003).

Father’s Conflict and Criticism as a Moderator for Father's Parenting Style (Authoritative) and Behaviours

It was hypothesized that father’s conflict and criticism dimension will moderate for father's parenting style (authoritative) and behaviours. The results for this study partially supported this hypothesis. Father’s conflict and criticism dimension did not moderate for father's parenting style (authoritative) and prosocial behaviours. However, the current research findings showed that it moderated for father's parenting style (authoritative) and problematic behaviours.

The moderator, perceived fathers' conflict and criticism dimension, was better able to differentiate problematic behaviours at higher rather than at lower levels of fathers' authoritative parenting style. Specifically, high authoritative father parenting in the presence of low perceived father conflict and criticism was associated with a significantly lower level of problematic behaviour.

Studies have found insecure attachment to be linked to problematic behaviours and attachment security has been linked to lower levels of problematic behaviours (e.g., Davies et al., 2004; El-Sheikh & Buckhalt, 2003; Granot & Mayseless, 2001). Hence, when there is conflict and criticism between the father and child, it breeds insecurity, which in turn could mean increasing the child’s risk in developing problematic behaviours.
Furthermore, parents who used harsh punishments, were found to have little emotion and affect, and incapable of communicating their feelings. They were not able to model positive interaction patterns for their children too. As a consequence, these children will be less competent to understand others’ perspectives or viewpoints and were less likely able to read the emotional displays by others accurately (Daversa, 2010; Patterson & Yoerger, 1999).

Similar to results found in a number of past studies, parent and youth conflict was significantly associated with problematic behaviours (Laursen & Collins, 1994; Petersen, 1988). In all instances, Crean’s study (2008) reported that higher conflict was linked to higher levels of internalizing and externalizing behaviours. This pattern was consistent regardless of what the dyad composition involved (i.e., mother and son, mother and daughter, father and son, or father and daughter).

It is known that during adolescence, there is a change in the parents’ and adolescents’ expectations regarding their roles and responsibilities, and this leads to new dynamics in the family relationships (Baumrind, 1991; Collins et al., 1997; Collins & Russell, 1991; Lerner & Galambos, 1998; Smetana, 2005). It is also during this period of transition that the adolescents would challenge the parents’ viewpoints as well as rules and traditions set by their parents, especially if they were not discussed nor negotiated beforehand (Smetana, 1989). It is common to find greater conflict between parents and children when they have to negotiate their new expectations in the family (Allison & Schultz, 2004; Laursen et al., 1998).

Hence, the presence of conflict in the context of father’s authoritative parenting could mean unresolved issues in the how the father sets the expectations of behaviours and how the youth perceived the expectations. As the youths are motivated by privileges the adults they like to have, they are more likely to be defy the rules set for
them by their parents (Allen et al., 1990; Irwin, 1993; Jessor & Jessor, 1977; Lavery et al., 1993; Maxwell, 2002). It is likely that this group may be motivated to commit status offenses (e.g. smoking) and engaged in problematic behaviours (e.g. sexual activities and alcohol, drug and cigarette use) that enable them to achieve autonomy.

Furthermore, fathers are important figures in a youth’s development. Children faced greater academic challenges in school when they reported more conflict and less time spent with their fathers (Bai, Reynolds, Robles, & Repetti, 2017). Having conflict could be distressing for a youth who seeks autonomy but at the same time needs to follow the rules set by the father. The conflict may cause the youth to be less motivated to agree with the expectations and rules set by the father.

On the other hand, there were some studies that advocated the positive effect of low conflict in an environment that is supportive as it had the potential to influence positive outcomes (e.g., development in values, world views and character, and conflict management and resolution skills) (Von der Lippe, 1998). Thus, in the presence of secure attachment with their parents, low levels of conflict enable the adolescents to challenge and form their own opinions and thoughts. In contrast, excessive and high levels of conflicts not meant for the purpose of development can be deleterious to the adolescent. As a result, the adolescent will have a higher tendency to disobey and engage in problematic behaviours and connect with deviant peers (Sampson & Laub, 1993).

Overall, in the presence of low father conflict and criticism and authoritative father parenting, the youths demonstrate lower levels of problematic behaviours.
Implications, Limitations and Future Work

The present study sets out to better understand how variables such as psychopathy, father’s authoritative style of parenting, quality of father-child relationship and family adversity influence the adolescents’ behaviours. The risks and protective factors influenced and framed the individuals’ socio-emotional, psychological and behavioural development. It is without doubt that the positive factors such as good quality parent-child relationship and authoritative parenting style, will facilitate positive outcomes, whereas the negative factors such as child psychopathic traits and high levels of family adversity, are risks for poor adjustment and problematic behaviours.

Findings from this study contributed to literature in local research on factors influencing prosocial and problematic behaviours amongst youths in Singapore. These findings have both applied and practical implications for development, intervention and prevention work for youths, both in schools and those in incarceration. The implications and future research for the variables will be discussed according to the micro level of individual and family, meso level of school and community, and macro level of policy.

Micro level of individual and family

Our findings indicated that psychopathy increases the risk of problematic behaviours and discourages prosocial behaviours. Hence, it is important to note that youths may have skill deficits that inhibit their functioning and development due to their personality traits.

Adults working with adolescents should be trained to manage adolescents and develop roles in the family and procedures that will encourage prosocial behaviours and discourage problematic behaviours. Parents can develop an approach to discipline and work closely with the school and community to support and shape their adolescents’
behaviours. For youths with skills deficits and poor social functioning, parents, adult caregivers or persons working with them should be educated about the signs to look out for and have awareness of these traits. It is crucial for parents and adults who work with adolescents to acquire more knowledge about the adolescent developmental stage so as to provide the essential support for their adolescents during this vulnerable stage. These adolescents need the significant adults to put in place, the boundaries and structures to guide them.

Another interesting finding to note is that family adversity did not influence prosocial behaviours in youths. It is necessary to learn more about Singapore youths in adverse family situations, resilience factors, and how they acquired prosocial behaviours living in such environments. It will be important to know the protective factors that enabled these youths to function well and engage in positive behaviours in our local context. In addition, more in-depth understanding of the multiplicative interactions of factors that contribute to different types of problematic behaviours is needed in Asian families. Such investigation could yield interesting insights into youth behaviours (Gibson, Piquero, & Tibbetts, 2001).

Our results showed that father’s support and admiration dimension or conflict and criticism dimension in a father-child relationship is a significant predictor of the youth developing prosocial and problematic behaviours. Over the recent years, there have been more efforts to recognise the importance of the role of the father (DeKlyen et al., 1998; Paquette, 2004; Rosenberg & Wilcox, 2006).

Fathers play an important role in the normal day-to-day functioning of their children and adolescents as they engage them in different socialization experiences (Collins & Russell, 1991; Day & Lamb, 2004; DeKlyen et al., 1998; Hofferth et al., 2007; Lamb, 2000; Lewis & Lamb, 2003; Parke, 2000; Paquette, 2004; Phares &
Compas, 1992). Youths respond, learn and interact with others through their interactions with adults at home, particularly their fathers. There is enough evidence in numerous research literature which shows that fathers can positively affect the behaviours of their children (Amato, 2000; Booth et al., 2010; Carlson, 2006; Cherlin, 1999; McLanahan & Sandefur, 1994; Pougnet, Serbin, Stack, Schwartzman, 2011). Families need to recognize that fathers are an important resource for youths to socialise appropriately with the world (Amato, 1994; Coleman, 1988). Therefore, it is important to encourage positive parenting by fathers at home.

In most Asian families, parents are likely to nag, scold, and yell at their youths, especially during teachable moments, which caused youths to react negatively. This resulted in more frequent and intense conflicts for both parents and youths. It is suggested that fathers could expand their parenting repertoires and skills by learning to communicate with their youths differently. For example, fathers could try to be more aware of how they should interact with their youths to avoid parenting them negatively.

In particular, Singapore fathers are generally associated with absent from the family during to work commitments. Hence, these fathers are generally forgotten because of their relative lack of presence from their families especially when their help is sought to manage their children’s behaviours and they are not available. However, they play an important developmental role in enabling children to engage in appropriate socialization as they interact with others in the social world (Geddes, 2008). Hence, it is important for fathers to be educated better their roles and their involvement on their children’s outcomes.

In a previous national youth survey in Singapore, 75% of young people surveyed indicated that they would turn to their mothers as the first person for advice on important decisions. 65% of the participants reported that they will go to their peers.
57% reported that they will turn to their fathers for important decision (Ho & Yip, 2003). Although our findings indicated that perceived high support from father was significant in reducing problem behaviours for the group who reported lower level of psychopathy traits, the degree of involvement of fathers in the socialization of children is reported to be lower than mothers (Ho & Yip, 2003).

This study recommends that preventive efforts can be more targeted in different aspects of the adolescent’s life. A positive family environment and positive father-child or family relationships are precious resource for the adolescent to negotiate successful through his/her developmental challenges. Interventions should aim at promoting communication between father and adolescent, family members, developing family cohesion, and improving conflict resolution skills of family members for the psychological support of the adolescent. Also, these negotiation skills practised in the family context have been shown to continue to benefit the youth in later adult life (Serna, Schumaker, Hazel & Sheldon, 1986).

The question of “How are such relationships supportive?” has yet to be answered (Rutter, 1990). One could simply assume that when the overall level of conflict is low, the relationship is a harmonious one. However, low conflict does not mean having a supportive relationship. We are suggesting that a good relationship with one parent can act as a protective factor, reducing risk by simply preventing the father and youth from engaging in, or developing arguments that result in conflicts. The other supportive parent may intervene and support in conflict resolution. Future research could investigate the processes present in positive, warm and supportive relationships. The latter acts as a protective factor for youths and helps prevent the harmful effects of conflictual relationships that often set youths on a negative pathway.
Meso level of school and community

Past research has consistently supported the claim that psychopathic traits in children begin with an early onset (van Baardewijk et al., 2008) and this determines the seriousness or temporary antisocial and criminal pathway that particular groups of at-risk youths take during their early or later adolescent years (Declercq, Markey, Vandist, Verhaeghe, 2009).

Early signs of problem behaviours may first manifest in a school setting. Knowledge of the influence of psychopathic traits in individuals and how they respond to the conditions around them will serve to enhance the planning of prevention, intervention and developmental types of programmes in schools, and in other systems that serve young people (Lorber, Hughes, Miller, Crothers, Martin, 2010). By identifying psychopathic traits in non-clinical and mainstream adolescents, Singapore schools can undertake proactive measures to support at-risk youths.

It is recommended that there should be emphasis on identifying at-risk cases such as those with poor social skills, poor father-child relationship, family adversity, and problem behaviours, following them up with appropriate support and guidance at the pre-school and primary school level. The present support given to special needs students in mainstream schools are more likely to be focused on academic support and school transition (MOE, 2018). However, they are more likely to be in need of a programme which encourage prosocial behaviours engagement and to avoid being involved in problematic behaviours. Government funded programmes such as the whole-school approach that engage youths and youth leaders in the community could look at developmental programmatic models that promote prosocial youth behaviours (Ministry of Culture, Community and Youth, 2017).
Just as important, the mental health of students should be given priority in pre-school, primary school and secondary school curriculum. Such mental health programmes could be targeted at identifying those at-risk and providing support for the families, in particular, fathers’ parenting role in the child’s development.

Moderators such as support and admiration dimension from father, and conflict and criticism dimension with father could be used to guide intervention and programmes designed for youths. It will be interesting to investigate the services or supports that are rendered to fathers to encourage their positive involvement in the child’s growing years. Programmes to support fathers in parenting and their role in the family could be encouraged to benefit families. Parenting intervention for fathers could focus on enhancing protective or positive parenting practices associated with youth behaviours (Shelleby & Shaw, 2014).

At the community and social services agencies, more specific programmes and support could be provided through seminars and workshops to promote the importance of father-child relationship. According to the findings in this study, adolescents who perceived their fathers as having high authoritative parenting and experienced low perceived conflict with their fathers had a significantly lower level of problematic behaviour. For example, one possible programme could focus on managing father and child conflict for fathers and their adolescents. The father and adolescent pairs may explore their communication patterns, identify the potential conflicts they encounter, strategies to manage their conflicts. The programme can allow the fathers and adolescents to gain insights on how their interactions with their fathers affect their behaviours.

There are community resources available for families in Singapore. For example, Family Service Centres (FSCs) are a key community-based resources and
social service provider for families in need. These agencies can be more supported in their resources to reach out to multi-stressed and disadvantaged families to support them through crisis intervention, on-going programmes to build resilience or help to meet the basic needs of these families.

Macro level of policy

The current results have implications for public policy too. The identification of higher risk individuals and the on-going assessment of the factors that promote prosocial behaviours in individuals to discourage problematic behaviours could be useful for programme planning, legislative policies formation and resource allocation affecting youths (Walker & Sprague, 1999). Greater awareness of the impact of interventions on the developmental pathways of prosocial or problematic behaviours could enable a reasonable and sound allocation of resources for intervention efforts.

Early identification and intervention may be key to helping shape the behaviours of these youths. Findings in the study could also be used to update the Ministry of Education’s (MOE) Holistic Health Framework (2017). Early identification can facilitate an earlier intervention so as to prevent the harmful effects of individuals’ behaviours (Frick & White, 2008). In turn, this will likely reduce the social and economic costs associated with the management of these harmful effects in the society (e.g., cost of juvenile justice systems, homes for delinquent boys and girls, social consequences of drug and substance abuse).

Future research may look into the learning and developmental needs of the at-risk youth group. Although the Ministry of Education (MOE) has implemented the Social-Emotional Learning and Holistic Health Framework (MOE, 2017) to promote holistic development of children and youths, our findings suggest that the programmes
could be better designed to target at delivering the knowledge and skills to specific groups of students.

There is no doubt that the disruption to family composition and change in family structure can significantly affect the development of the adolescents. The results revealed that family adversity predicts problematic behaviours. The findings might help improve policymaking by bringing awareness to the association between parenting, youth behaviours and family adversity. For example, Ministry of Social and Family Development extended the Mandatory Parenting Programme to include parents who are going through divorce and with children below 21 years old (MSFD, 2018). Mandatory Parenting Programme helps couples understand the importance of their parenting and the issues that could impact their children arising from a divorce.

There is a need for more research in the dynamic social environment that sees new influences on family processes that impact adolescent behaviours in Singapore. Hence, more large scale research should be conducted to investigate the dynamics and mechanisms that influence parenting and youth behaviours when the families are challenged with high family adversity the different Singapore families across different cultural contexts. There could also be targeted research that investigate the individual variables that make up the family diversity variable. For example, future study can look into the influences of financial assistance and other financial related-support for low income family on children and adolescent behaviour outcomes.

Although the present study yielded several significant and interesting findings, there were some limitations associated with the study that should be addressed. The first limitation concerns the participants in the study. The sample of the study came from youths in a single year and from one country, thereby limiting the generalizability of the findings. The sole reliance on self-reports of volunteers only for one year does
not allow for investigating other relevant and potentially important variables across a longer period of time. Due to the cross-sectional nature of the study, the conclusions regarding the causal associations of parent and youth conflict, support, and youth adjustment is limited.

One other weakness of this study is the low internal consistency (.69) for the self-report ratings of the APSD scale. APSD subscales have been shown to have borderline internal consistencies (Poythress et al., 2006; Vitacco, Rogers, & Neumann, 2003). While these reliabilities are not that high, it is comparable to what others have found in Singapore as well as in Western countries (Andershed et al., 2002; Li et al., 2017). The participants of the study may also under-report the traits associated with psychopathy which they thought were not socially acceptable (Andershed et al., 2002).

Based on power analysis, for data collection, the number of the participants projected was 800, as the recommended number of participants was 757. However, only 694 agreed to participate in the study. One other limitations is that this study could be possibly underpowered.

Comparison between genders was not possible as the sample consists mainly of males (59.9% boys vs 39.8% girls). To address this imbalance in the current study, it would be appropriate to collect data over a few years. Another interesting and important future research is to examine the role of child gender as well as parent gender on adolescent behaviours. There were studies that potentially found gender to play a role in determining parent and child interactions during childhood (Hastings et al., 2007).

Although these families resembled others in many aspects described in the literature, the sample in this study was not drawn from the population with high cumulative stressors that generated many behavioural problems. Most participants were
middle class, few participants reported abuse, and most families included two parents.

As there is no comparison group of high risk youths or offenders for example, we were unable to examine the differences between youth offenders and non-offenders. Thus, the results from these findings cannot be generalized to other behaviour problem youth groups.

Also, the articles that discussed about family size are based on dated research articles in the western countries thus this limits our interpretation of challenges pertaining to family size in the current Singapore context.

For future research, we could investigate factors such as fathers in single parent families not staying with the households and the role these fathers play in such families. This is to ascertain if these fathers exert the same influence on prosocial and problematic behaviours across these contexts. Through the investigation of possible protective factors, it would provide insights into other factors that could enhance the effectiveness of intervention programs. It is also important to note that the suggested research for specific groups is not intended for profiling of these groups and care should be taken to avoid stigma or discrimination. It is well understood that these factors such as “single father” or “low SES” are merely isolated possible factors. Also, any outcome is multiply determined and is a result of an interplay of not just risk but resilience factors as well.

Despite the limitations, the present study provides initial useful insights into the factors influencing prosocial and problematic behaviours in youths. The present study stressed the importance of father’s support as a moderator for psychopathy and problematic behaviours. Findings also highlighted the role of father’s conflict in lowering the levels of problematic behaviours. One suggestion underscored in this study
is the need to encourage fathers’ involvement in interacting positively with their children rather than acting primarily as a disciplinarian.

The results in this study suggested that a warm, positive parental relationship is associated with less problematic behaviours. However, it is possible that the child’s misbehaviour may be the cause for, as well as, the reason that father meted out more negative disciplinary practices. There were evidence that proposed the associations of these variables as bidirectional, and the variables may influence each other over time (e.g., Coley & Medeiros, 2007; Maggs & Galambos, 1993). The mediation and moderation role of parental support and conflict, and how these variables are influenced by the youth’s own adjustment and behaviours need to be further explored. Furthermore, assessment of the type and frequency of the conflict might help to make clearer the quality of the relationship formed.

Apart from the influences of child-related characteristics (e.g., psychopathy) and familial factors (e.g., family adversity), this study also shows that a healthy father and child relationship and firm paternal parenting are significantly associated with behaviour related outcomes in adolescents. Hence, the role of the father should be given special attention and consideration while planning interventions that aim to enhance prosocial behaviours and to prevent problematic behaviours in children and adolescents.

Also, at this adolescent stage where there are multiple changes, the adolescent’s brain alters and adapts to cope with the new demands of relationship and expectations of the self in various roles set in the cultural and societal contexts. One cannot assert enough that during this vulnerable transition period, the adolescents will re-negotiate their relationships with their primary caregivers, authority figures and significant others. At times, the adults may be puzzled about their adolescents pushing them away and they feel that they are no longer needed. However, it is not necessarily the case. The
adolescents may strive to attain more independence and autonomy but it is also during this period that they need supportive and sensitive care from the adults around to help them adjust and transit smoothly to the next phase of life.

Although the other negative parenting styles were not discussed in our study, it is important to note that father’s authoritative parenting style is an optimal parenting style and a significant predictor in our study. In this study, we focused on father’s authoritative parenting because many previous studies have exclusively examined maternal parenting characteristics but excluded paternal parenting from their investigations (Phares & Compas, 1992). One implication for not including mothers in the study is it may limit our understanding of the roles of both mothers and fathers working together for the adolescents’ development. Future study may explore the mothers’ parenting alongside fathers’ parenting using our current framework chosen for this study.

Most past studies examined the relationships of the variables such as specific components of prosocial behaviours and risk-taking behaviours in their studies to focus on the clinical or incarcerated groups of youth. There is a need to continue extending the knowledge in adolescent psychopathy across cultures and in different community groups (Campbell et al., 2004; Kotler & McMahon, 2005). Hence, one of the contribution of this study is the investigation of a non-clinical group of participants in local context.

All the evidence points to the fact that support from significant adult attachment figures during adolescence is important in contributing to positive developmental outcomes in young individuals. When the significant attachment figure – in the case of our study, the fathers were involved and responsive, the youths had good developmental outcomes. The adolescents will need guidance and support to navigate through the
changes, to make correct decisions and make sense of all the interacting factors in their environment.

One of the important contribution of this study is the exploration of the variables in this study using the Greenberg’s risk model emphasizing attachment insecurity to validate the associations of these variables and their influences on adolescents’ behaviours. Our results supports the need to consider the attachment insecurity between parent and child relationship, particularly the father, which can potentially affect the influences of risk factors the adolescents faced. Using Greenberg’s risk model emphasizing attachment insecurity, future research can investigate the combination of different risk factors and their influence on adolescents’ behaviours. There could also be further work in scientific investigation of the different trajectories of the youth behaviours (e.g., alcohol consumption, substance use, aggression and other antisocial behaviours) to identify the specific at-risk adolescents.

In conclusion, it is recommended that future studies can cross-validate these findings in other geographic areas, and with different groups of youths, including gender differences. The goal of youth development work is not only to prevent youth offending. It also serves to support the families and youths in developing in a more positive developmental pathway that encourage prosocial behaviours and discourage problematic behaviours.
REFERENCES


Adamson, K., & Johnson, S. K. (2013). An updated and expanded meta-analysis of


of attachment security to adolescents’ paternal and peer relationships, depression, and externalizing behavior. Child Development, 78(4), 1222-1239. doi: 10.1111/j.1467-8624.2007.01062.x


275


Beijersbergen, M. D., Juffer, F., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M.


Bernier, A., Be’langer, M. E., Bordeleau, S., & Carrier, J. (2013). Mothers, fathers, and


is there orbitofrontal cortex dysfunction in boys with psychopathic tendencies?

*Journal of Abnormal Child Psychology, 29*(6), 499-511. doi:
10.1023/A:101227712

10.1023/A:101222510


York: Basic Books.


depression, paternal psychopathology, and adolescent diagnostic outcomes.

*Journal of Consulting and Clinical Psychology, 70*(5), 1075-1085. doi:
10.1037/0022-006X.70.5.1075

10.1016/j.paid.2014.04.005

10.5465/amr.1986.4283909


10.1023/A:1010714715534


290


293


developmental psychopathology. In D. Cicchetti & D. J. Cohen (Eds.),


Carlström, V. (2016, 16 November). *The Nordics have the highest English proficiency in the world – and it's boosting their tech and innovation*. Business Insider.


Cheadle, J. E., Amato, P. R., & King, V. (2010). Patterns of nonresident father contact. *Demography, 47*(1), 205-225. doi: 10.1353/dem.0.0084


between Japanese, Korean, Chinese, and American adolescents. Japanese


Singapore Police Force, in A. Choi & T. W. Lo (eds.), *Fighting youth crime:


and conduct problems in children: II. Implications for subtyping children with

conduct problems. *Journal of the American Academy of Child and Adolescent
Psychiatry, 36*(2), 233-241. doi: 10.1097/00004583-199702000-00014


797-815.


application of attachment theory to risk and psychopathology. In T. H. Ollendick

& R. J. Prinz (Eds.), *Advances in clinical child psychology* (Vol. 17, pp. 1-75).

New York: Plenum Press.


*Current Directions in Psychological Science, 14*(2), 102-105. doi:

10.1111/j.0963-7214.2005.00343.x


303


304


307


Davis-Kean, P. E. (2005). The influence of parent education and family income on


perceptions of relationships with their parents. *Journal of Youth and Adolescence, 38*(1), 75-88. doi: 10.1007/s10964-008-9286-7


Deb, S., Chatterjee, P., & Walsh, K. (2010). Anxiety among high school students in


experience: Gender variations in perceived mattering, anxiety, and depression.


316


adolescent prosocial behavior in the context of parent/adolescent relationships.


Eisenberg, N., Pidada, S., & Liew, J. (2001). The relations of regulation and negative ATTENTION: The Singapore Copyright Act applies to the use of this document. Library and Information Services Centre, National Institute of Education.
emotionality to Indonesian children’s social functioning. *Child Development,* 72(6), 1747-1763. doi: 10.1111/1467-8624.00376


Flouri, E. & Buchanon, A. (2004). Early father’s and mother’s involvement in a child’s
later educational outcomes. *British Journal of Educational Psychology, 74*(2), 41-153. doi: 10.1348/000709904773839806


332


333


George, C., Herman, K. C. & Ostrander, R. (2006). The family environment and


Glen Elder, H. Jr. (1988). The life course as developmental theory. *Child...


Herman, K. C., Ostrander, R. & Tucker, C. M. (2007). Do family environments and
negative cognitions of adolescents with depressive symptoms vary by ethnic
3200.21.2.325

Sciences, 18*(5), 567-580.

Children and Adolescents*. John Wiley & Sons.

Hershenberg, R., & Davila, J. (2010). Depressive symptoms and sexual experiences
among early adolescent girls: Interpersonal avoidance as moderator. *Journal of
Youth & Adolescence, 39*(8), 967-976. doi: 10.1007/s10964-009-9446-4

Hetherington, E. M. & Martin, B. (1986) Family factors and psychopathology in
children. In H. C. Quay & J. S. Werry (eds), *Psychopathological Disorders of
Childhood* (pp. 332-390). Wiley, New York, NY, USA.

parenting on children’s adjustment in nondivorced, divorced and remarried
families. In A. Clarke-Stewart & J. Dunn (Eds.), *Families count* (pp. 203-239).
Cambridge: University Press.

not? Five perspectives on the association between marital transitions and

*Journal of Health Psychology, 21*(9), 2021-2032.
https://doi.org/10.1177/1359105315569858

ecological perspectives onparental influ ences during adolescence. *Journal of
Child 350


Hofferth, S. L., Stueve, J. L., Pleck, J., Bianchi, S., & Sayer, L. (2002). The


adjustment in first-year college students. *Journal of Counseling Psychology, 40*(1), 73-78. doi: 10.1037/0022-0167.40.1.73


emotional problems and psychiatric risks in children of parents with a mental
ilness in the Netherlands: I. The scientific basis to a comprehensive approach.
Australian e-Journal for the Advancement of Mental Health, 8(3), 250-263. doi:
10.5172/jamh.8.3.250
Hsu, F. L. K. (1967). *Under the ancestors’ shadows: Kinship, personality, and social
Huddy, V., Kitchenham, N., Roberts, A., Jarrett, M., Phillip, P., Forrester, A.,
measures of impulsivity as predictors of impulsive behaviour and
psychopathology in male prisoners. *Personality & Individual Differences, 113,
173-177. doi: 10.1016/j.paid.2017.03.010
children, caretakers, and inmate mothers in Ohio*. Ph.D. dissertation Columbus,
OH: School of Social Work, Ohio State University
relations between anti-smoking parenting practices and adolescent smoking in a
Dutch sample. *Health Psychology, 26*(6), 762-768. doi: 10.1037/0278-
6133.26.6.762
life trajectories: findings for a mid-20th century cohort. *Longitudinal and Life


358


Adolescents managing their parents’ access to information. *Journal of Adolescence, 33*(2), 255-259. doi: 10.1016/j.adolescence.2009.10.009


Applied Economic and Social Research. The University of Melbourne, Parkville.


365


Attachment and emotion regulation during mother-teen problem solving: A
collectionary analysis. *Child Development, 64*(1), 231-245.

during adolescence: A functionalist perspective. *Developmental Psychology,
7*(1), 183-192. doi: 10.1017/S0954579400006416

theory, research, and clinical intervention. In J. Cassidy & P. R. Shaver (Eds.),
*Handbook of attachment: Theory, research, and clinical applications* (pp. 23-

affect regulation and representations of self and others. *Child Development,
59*(1), 135-146. doi: 10.2307/1130395

during adolescence: A developmental pathway analysis. *Development and
Psychopathology, 3*(4), 461-474. doi: 10.1017/S095457940000763X


temperament in early development of conscience. *Child Development, 64*(2),

Kochanska, G. (1997). Multiple pathways to conscience for children with different
temperaments: from toddlerhood to age 5. *Developmental Psychology, 33*(2),
228-240.


Kraemer, S. (2005). Narratives of fathers and sons: There is no such thing as a father. In


year longitudinal study. *Archives of General Psychiatry, 63*(5), 562-568. doi: 10.1001/archpsyc.63.5.562


Laible, J. D., Carlo, G., & Raffaelli, M. (2000). The differential relations of parent and
peer attachment to adolescent adjustment. *Journal of Youth and Adolescent*,
29(1), 45-59. doi: 10.1023/A:1005169004882


relationships as assessed in a doll story completion task: Links to parenting,
social competence, and externalizing behavior. *Social Development*, 13(4), 551-
569. doi: 10.1111/j.1467-9507.2004.00283.x

Laird, R.D., Marrero, M.D., & Sentse, M. (2010). Revisiting parental monitoring:
Evidence that parental solicitation can be effective when needed most. *Journal of Youth and Adolescence*, 39(12), 1431-1441. doi: 10.1007/s10964-009-9453-5

relevant knowledge and adolescents’ delinquent behavior: Evidence of
correlated developmental changes and reciprocal influences. *Child Development*,
74(3), 752-768.


371


373


*Child Development, 53*(6), 1431-1446.


Lorber, C., Hughes, T.L., Miller, J.A., Crothers, L., & Martin, E. (2010). Callous and


climate a critical review. *Journal of Emotional and Behavioral disorders, 8*(3), 130-140. doi: 10.1177/106342660000800301


parental affection and psychosocial adjustment. *Early Child Development and Care, 180*(1/2), 211-225. doi: 10.1080/03004430903415064


between parental attachment and prosocial behavior among Chinese adolescents.


Nylander, Johan (2016, 14 November). *Singaporeans among top English speakers*;


Oxford, M., Cavell, T., & Hughes, J. (2003). Callous-unemotional traits moderate the


youth relationships and the self-esteem of Chinese adolescents: Collectivism vs.
10.1300/J002v36n03_09

Petersen, A. C., Compas, B. E., Brooks-Gunn, J., Stemmler, M., Ey, S., & Grant, K. E.
10.1037/0003-066X.48.2.155

Peterson, G. W., Steinmetz, S. K., & Wilson, S. M. (2004). Persisting issues in cultural
229-240. doi: 10.1300/J002v36n03_11

Peterson, J. L., & Zill, N. (1986). Marital disruption, parent-child relationships, and
behavioral problems in children. *Journal of Marriage and the Family, 48*(2),

to antisocial personality disorder. *Psychopharmacology, 162*(4), 425-432. doi:
10.1007/s00213-002-1115-1

(2001). Antecedents and behavior-problem outcomes of parental monitoring and
doi: 10.1111/1467-8624.00298|

the developmental course of motherreported monitoring across childhood and
adolescence from early proactive parenting, child temperament, and parents’
3200.21.2.206


410


412


Rothbaum, F., Rosen, K., Ujiie, T., & Uchida, N. (2002). Family systems theory,


Sanches, C., Gouveia-Pereira, M., & Carugati, F. (2012). Justice judgements, school...


Scali, L., Schwab-Stone, M., Merikangas, K. R., Leckman, J. F., Ahang, H., & Kasl,


Teaching reciprocal social skills to parents and their delinquent adolescents,  
*Journal of Clinical Child Psychology*, 15(1), 64-77. doi: 10.1207/s15374424jccp1501_8  


426


role and interaction of attachment and social rank in depression. *Journal of Affective Disorders, 74*(2), 107-121.


Tan, C. & Huang, H. (2010). *More pupils facing academic anxiety, peer pressure and*


Wong, P. T. (2016, 6 December). *S'pore students top in science, maths and reading in 446


Yang, C. (2017, 6 February). *Angus Ross Prize: Cambridge axes top literature prize for*
A-level students. The Straits Times. Retrieved from
https://www.straitstimes.com/singapore/education/cambridge-axes-top-literature-prize-for-a-level-students


Appendix A

Research Support Office

IRB 11/03/09

5 April 2011

A/Prof Viven Huan Swee Leng
National Institute of Education

NTU INSTITUTIONAL REVIEW BOARD APPROVAL
Project Title: Understanding the psychological and behavioural development of youth in a Singapore sample

I refer to your application for ethics approval with respect to the above project.

The Board has deliberated on your application and noted from your application that your research involves administering questionnaires on subjects.

You have also confirmed that informed consent will be obtained from the participants and you have guaranteed the confidentiality of your participants' biodata obtained from them.

The Board is therefore satisfied with the bioethical considerations for the project and approves the ethics application under Expedited review.

Prof Lee Sing Kong,
Chair, NTU Institutional Review Board

cc Director, National Institute of Education
    Members, NTU Institutional Review Board
IRB 11/03/09 amendment

30 June 2015

Associate Professor Viven Huan Swee Leng
National Institute of Education

NTU INSTITUTIONAL REVIEW BOARD APPROVAL
Project Title: Understanding the psychological and behavioural development of youth in a Singapore sample

I refer to your application for ethics approval with respect to the above project.

The Board has deliberated on this application and accepted the change in:
1. Procedures
2. Increase in number of subjects to 800
3. Research site

The Board is therefore satisfied with the bioethical considerations for the project and approves the ethics application

[Signature]

Professor Lee Sing Kong,
Chair, NTU Institutional Review Board
encl.

cc Director, National Institute of Education
Members, NTU Institutional Review Board
Dear Parent/Guardian,

I am a research student from National Institute of Education (NIE). As part of my course requirement, I will be writing my dissertation on understanding the psychological and behavioral development of youth in a Singapore sample, under the supervision of Associate Professor Huan Swee Leng Vivien (National Institute of Education) and Associate Professor Rebecca Ang (Nanyang Technological University).

This research study is conducted to understand the profiles of youth and their parent/guardian. The findings from this study will help in developing new developmental, intervention and prevention programmes, and improving existing ones. We hope to benefit future youth and their families.

The student will complete one survey in class which will take about 30 minutes. The survey will take place at a time that will not disrupt the curriculum and learning time of the students. In the surveys, questions to the youth will be about:

- How they feel about themselves, and the strengths and difficulties they face as shown through their behaviour
- How they feel about their relationship with their parent/guardian
- How they perceive the parenting styles of their parent/guardian
- How they perceive about their family

Your child may choose not to respond to the questions which he/she prefers not to answer. Your child’s standing in the school will not be affected whether he/she chooses to participate in the study. The answers will remain confidential. Students do not need to write their names on the survey.

Please contact me if you have any queries or do not wish for your child to participate in this survey. I am contactable at 90901000 (Handphone) or via email at limyenniehelena@gmail.com.

Thank you for your participation in this research and your support in helping researchers better understand the needs of youth and their families.

Yours sincerely,

Lim Yen Nie, Helena
CHILD ASSENT/ CONSENT FORM

Investigator: Lim Yen Nie, Helena (Research Student of National Institute of Education)
Telephone: 90901000    Email: limyenniehelena@gmail.com

1. What’s the study about? This study looks at a group of youth to understand their psychological development, their relationship with their parent/guardian and the parents’ parenting styles.

2. What will happen? If you agree to participate, you will be asked to complete some measures/questionnaires.

3. Will I be paid? No.

4. Confidentiality: All data collected will remain confidential and will be used for research purposes only. Names will not be used.

5. How long will it take? 30 minutes

6. Any risks? There is no risk to you.

7. Any potential benefits? There are no direct benefits to you. But findings from this study will help researchers better understand the needs of youth and their families. Finding out more about the quality of parent-child relationship and the parenting styles are important to help strengthen family ties and relationships.

8. Do I have to be in the study? You do not have to be in the study. You can choose whether you want to participate in the study. You may also wish to skip any questions in the questionnaire if you do not wish to answer them. You will be given a copy of this assent form later.

9. Do my parents know about this? This study was explained to your parents/guardian and they said that you could be in it.

10. Questions? If you have any questions about this study, please feel free to contact me at 90901000 or limyenniehelena@gmail.com.

11. Assent/ Consent: I have been told what the study is about and what I will do if I agree to be part of this study.

Child’s Name : ........................................

Child’s Signature : ........................................

Date : ..........................
# DEMOGRAPHIC AND OTHER INFORMATION

<table>
<thead>
<tr>
<th>Your Age:</th>
<th>Gender (please circle one):</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Ethnicity** (please circle one):
- Chinese
- Indian
- Malay
- Eurasian
- Other ___________________

**Citizenship** (please circle one):
- Singaporean
- Permanent Resident (PR)
- Foreigner

**Parents’ marital status** (please circle one):
- Married
- Separated
- Divorced
- Never Married
- Widowed

**Your birth order** (e.g., only child, 1st child, 4th child): ___________________

**Number of brothers:** ____________  **Number of sisters:** ____________

**CHILD’S MOTHER:**

**Race** (please circle one):
- Chinese
- Indian
- Malay
- Eurasian
- Other ___________________

Currently employed:  YES  NO  If yes: Please specify occupation: ____________

**Highest Educational level** (please circle one):
- Primary
- Secondary
- Pre-University/Poly
- University/Post-grad

**CHILD’S FATHER:**

**Race** (please circle one):
- Chinese
- Indian
- Malay
- Eurasian
- Other ___________________

Currently employed:  YES  NO  If yes: Please specify occupation: ____________

**Highest Educational level** (please circle one):
- Primary
- Secondary
- Pre-University/Poly
- University/Post-grad
**OTHERS:**

List the number of people living with your family (including immediate, extended family, and domestic help): _______

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has your mother had a physical illness (e.g. heart, lung problems, etc.) that limited her functioning?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has your father had a physical illness (e.g. heart, lung problems, etc.) that limited his functioning?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has your mother had a psychological illness (e.g. major depression, schizophrenia, anxiety) that limited her functioning?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has your father had a psychological illness (e.g. major depression, schizophrenia, anxiety) that limited his functioning?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has your mother have a criminal record other than traffic violations?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has your father have a criminal record other than traffic violations?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you run out of things that you need in the household?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your family have trouble meeting financial obligations?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there are lots of bad feelings in the family?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have reasonable transport?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### SECTION A:

Please read each statement and decide how well it describes you. Rate each of the items below by putting a circle around either 0 (not true at all), 1 (sometimes true), or 2 (definitely true).

- **0 = Not true at all**
- **1 = Sometimes true**
- **2 = Definitely true**

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I blame others for my mistakes.</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>I engage in illegal activities.</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>I care about how well I do at school/work.</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>I act without thinking of the consequences.</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>I emotions are shallow and fake.</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>I lie easily and skillfully.</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>I am good at keeping promises.</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>I boast a lot about how good I am, the good things I have done, or the things/possessions I have.</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>I get bored easily.</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>I use or “con” other people to get what I want.</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>I tease or make fun of other people.</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>I feel bad or guilty when I do something wrong.</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>I do risky or dangerous things.</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>I act charming and nice to get things I want.</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>I get angry when corrected or punished.</td>
<td>0</td>
</tr>
<tr>
<td>16</td>
<td>I think I am better or more important than other people.</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>I do not plan ahead or I leave things until the “last minute.”</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>I care about the feelings of others.</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>I hide my feelings or emotions from others.</td>
<td>0</td>
</tr>
<tr>
<td>20</td>
<td>I keep the same friends.</td>
<td>0</td>
</tr>
</tbody>
</table>
### SECTION B: Rate each item by circling the number that best describes how things have been for you over the last six months. It would help us if you answered all items as best you can even if you are not absolutely certain.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Not true</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Somewhat true</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Certainly true</td>
<td></td>
</tr>
</tbody>
</table>

1. I try to be nice to other people. I care about their feelings. 0 1 2
2. I am restless, I cannot stay still for long. 0 1 2
3. I get a lot of headaches, stomach-aches or sickness. 0 1 2
4. I usually share with others, for example CDs, games, food. 0 1 2
5. I get very angry and often lose my temper. 0 1 2
6. I would rather be alone than with people of my age. 0 1 2
7. I usually do as I am told. 0 1 2
8. I worry a lot. 0 1 2
9. I am helpful if someone is hurt, upset or feeling ill. 0 1 2
10. I am constantly fidgeting or squirming. 0 1 2
11. I have one good friend or more. 0 1 2
12. I fight a lot. I can make other people do what I want. 0 1 2
13. I am often unhappy, depressed or tearful. 0 1 2
14. Other people my age generally like me. 0 1 2
15. I am easily distracted, I find it difficult to concentrate. 0 1 2
16. I am nervous in new situations, I easily lose confidence. 0 1 2
17. I am kind to younger children. 0 1 2
18. I am often accused of lying or cheating. 0 1 2
19. Other children or young people pick on me or bully me. 0 1 2
20. I often offer to help others (parents, teachers, children). 0 1 2
21. I think before I do things. 0 1 2
22. I take things that are not mine from home, school or elsewhere. 0 1 2
23. I get along better with adults than with people my own age. 0 1 2
24. I have many fears, I am easily scared. 0 1 2
25. I finish the work I’m doing. My attention is good. 0 1 2
## SECTION C:
Rate the following items and circle the number that best describes your relationship with your father.

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How often do you go to your father when you have a problem?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>How often do you go to your father when you need help?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>When you are sad, how often do you go to your father to make you happy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>How much does your father like you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>How much does your father think you’re good at many things?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>How much does your father like the things you do?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>How much does your father get angry with you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>How much do you quarrel with your father?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>How much do you argue with your father?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>How much does your father say that you are bad?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>How much does your father scold you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>How much does your father say bad things to you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
**SECTION D:**
Think of your father, father figure in the home or male guardian. Circle the number that best describes how it applies to you and your father / father figure / male guardian.

1 = Strongly disagree       2 = Disagree       3 = Neutral       4 = Agree   5 = Strongly agree

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My father feels that children can do whatever they like.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>My father feels that it is for our own good even if we are forced to follow what he thinks is right.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>When my father asks me to do something, he wants me to do it immediately without asking any questions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>When my family chooses to do something, my father will discuss the reasons for the choice with the children.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>My father always tells me to discuss with him whenever I feel that family rules are too strict.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>My father feels that children should be free to make up their own mind about what they want to do, even if parents don’t agree with it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>My father does not allow me to ask him why he did this or why he did that.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>My father talks to me and discusses with me the things I do and how I should behave.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>My father feels that parents must use more force to get children to act the way they are supposed to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>My father feels that I don’t have to obey rules just because a teacher or parent says so.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>I know what I am supposed to do but I can also say how I feel when these rules are too strict.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>My father feels that smart parents must teach children early that parents have the control in the family. Children do not have the control.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>My father does not give me rules for how I must act and behave.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>My father follows and does whatever the children want him to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>My father tells us how we should act and explains to us the reasons why.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>My father will get very angry if I disagree with him.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>My father feels that parents should not stop children from doing what they want or like to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Number</td>
<td>Description</td>
<td>Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I know what my father wants me to do and he will punish me if I don’t do what he wants.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>My father allows me to choose most things for myself.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>My father will listen to what the children say but will not choose to do something just because the children say so.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>My father does not think that he should tell me how I must behave.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>We have clear rules on how to behave at home, but my father is willing to change some of these rules if needed because each child is different.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>My father has rules for how I must behave but he is always willing to listen to what I say and to discuss the rules with me.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>I am allowed to choose for myself what I want to do.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>My father feels that parents must be very strict with children when they disobey rules in the home.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>My father always tells me what to do and how to do it.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>I know what I am supposed to do but my father understands when I disagree with him.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>My father does not tell the children what to do or what they cannot do.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>I know what my father wants me to do and he will force me to do what he wants just because he says so.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>If my father does something to hurt me, he will say he is sorry if it is his fault.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>