



**UNIVERSITI PUTRA MALAYSIA**

***CALLOUS-UNEMOTIONAL TRAITS, SOCIAL PREFERENCE AND  
AGGRESSION AMONG JUSTICE-INVOLVED ADOLESCENTS  
IN WEST MALAYSIA***

**NG ENG ENG**

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IN WEST MALAYSIA**

By

**NG ENG ENG**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra  
Malaysia, in Fulfilment of the Requirements for  
the Degree of Master of Science**

**January 2021**

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in  
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**January 2021**

**Chair : Mohd Najmi Daud, PhD**  
**Faculty : Human Ecology**

Callous-unemotional traits have been widely associated with aggression among adolescents. Researchers have also studied poor social preference leading to psychopathic traits and aggression respectively. Despite the breadth of previous findings, it is not well established as to whether the Uncaring, Callousness, and Unemotional factors of callous-unemotional traits would predict reactive aggression and proactive aggression. In addition, the role of social preference or adolescent peer likability on the interrelationships between callous-unemotional traits and aggression is unclear. As adolescents spend much of their time with their peers, finding out adolescents' perceptions is vital.

With the above research gaps in mind, this study: (1) Examined Uncaring, Callousness, Unemotional, reactive aggression, and proactive aggression together in a single model and (2) investigated the moderating role of social preference on the hypothesized model. Consistent with the study objectives, 168 juveniles aged 12 to 18-years old from selected approved schools located throughout West Malaysia were sampled via the two-stage cluster and simple random sampling method. The respondents completed self-report measures representing the study variables of Uncaring, Callousness, Unemotional, social preference, reactive aggression, and proactive aggression.

The two-stage Structural Equation Modeling (SEM) technique was used to test the proposed model of this study. Firstly, the structural model ( $X^2(60) = 100.309$ ,  $p < .01$ , normed  $X^2 = 1.672$ , GFI = .915, CFI = .960, RMSEA = .063) revealed direct links from the Callousness factor of the callous-unemotional traits to reactive aggression and proactive aggression, but not for the Uncaring and Unemotional factors. Secondly, the multi-group analyses tested for the moderating effect of social preference on callous-unemotional traits towards aggression. Further Critical Ratio Differences (CRD) analyses of the model revealed that low social preference ( $\beta = .35$ ,  $p < .05$ ) and moderate social preference ( $\beta = .20$ ,  $p > .05$ ); and low social preference ( $\beta = .35$ ,  $p < .05$ ) and high social preference ( $\beta = .25$ ,  $p > .05$ ) levels moderated the relationship between the Callousness factor and reactive aggression. In addition, low social preference ( $\beta = .38$ ,  $p < .05$ ) and high social preference ( $\beta = .40$ ,  $p > .05$ ); and moderate social preference ( $\beta = .31$ ,  $p < .05$ ) and high social preference ( $\beta = .40$ ,  $p > .05$ ) levels moderated the relationship between the Callousness factor and proactive aggression. Thus, social preference moderated the relationships of Callousness on both reactive aggression and proactive aggression. However, the overall moderation model only approached significance. Social preference did not moderate all other relationships. This study has redefined the mechanisms of how social preference actually affected the relationship between Callousness, reactive aggression, and proactive aggression. Interventions should be targeted at peer rejected individuals who have a calloused attitude toward people or things, possibly leading to aggression.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia  
sebagai memenuhi keperluan untuk ijazah Master Sains

**TRET TIDAK BERPERASAAN-TIDAK BEREMOSI, KEUTAMAAN  
SOSIAL DAN SIFAT AGRESIF DALAM KALANGAN REMAJA YANG  
TERLIBAT DALAM PROSES KEADILAN JENAYAH  
DI SEMENANJUNG MALAYSIA**

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Tret tidak berperasaan-tidak beremosi sering dikaitkan dengan sifat agresif dalam kalangan remaja. Para penyelidik juga mendapati bahawa keutamaan sosial yang rendah membawa kepada pembentukan tret psikopati dan sifat agresif. Walaupun terdapat banyak dapatan kajian sebelum ini, namun tidak dapat dipastikan sama ada faktor-faktor sifat Tidak Peduli, Tidak Berperasaan, dan Tidak Beremosi daripada tret tidak berperasaan-tidak beremosi dapat meramal keagresifan reaktif dan keagresifan proaktif. Tambahan pula, peranan keutamaan sosial atau penerimaan rakan sebaya terhadap saling hubungan antara tret tidak berperasaan-tidak beremosi dengan sifat agresif juga masih tidak jelas. Memandangkan golongan remaja menghabiskan kebanyakan masa mereka dengan rakan sebaya, maka memahami persepsi golongan ini amatlah penting.

Berdasarkan jurang kajian tersebut, kajian ini: (1) Meneliti Sifat Tidak Peduli, Tidak Berperasaan, Tidak Beremosi, keagresifan reaktif, dan keagresifan proaktif dalam satu model tunggal dan (2) menyiasat peranan penyederhanaan keutamaan sosial terhadap model yang dihipotesis. Selaras dengan objektif kajian, 168 orang pesalah laku jenayah juvana berumur dalam lingkungan 12

hingga 18 tahun dari sekolah-sekolah terpilih yang terletak di seluruh Semenanjung Malaysia telah diambil melalui proses kaedah persampelan kluster dan persampelan rawak mudah dua peringkat. Responden kajian telah melengkapkan penilaian lapor sendiri yang mewakili pemboleh ubah Tidak Peduli, Tidak Berperasaan, Tidak Beremosi, keutamaan social, keagresifan reaktif, dan keagresifan proaktif.

Teknik Pemodelan Persamaan Berstruktur dua peringkat telah digunakan untuk menguji model yang dicadangkan dalam kajian ini. Pertama, model berstruktur ( $X^2(60) = 100.309, p < .01, \text{normed } X^2 = 1.672, \text{GFI} = .915, \text{CFI} = .960, \text{RMSEA} = .063$ ) mendapati bahawa terdapat hubungan langsung antara faktor Tidak Berperasaan bagi tret tidak berperasaan-tidak beremosi dengan keagresifan reaktif dan keagresifan proaktif, tetapi tiada hubungan antara faktor Tidak Peduli dan faktor Tidak Beremosi. Kedua, analisis pelbagai kumpulan telah digunakan untuk menguji kesan penyederhanaan keutamaan sosial bagi tret tidak berperasaan-tidak beremosi terhadap sifat agresif. Analisis Perbezaan Nisbah Gending selanjutnya memperlihatkan nilai keutamaan sosial yang rendah ( $\beta = .35, p < .05$ ) dan nilai keutamaan sosial yang sederhana ( $\beta = .20, p > .05$ ); dan nilai keutamaan sosial yang rendah ( $\beta = .35, p < .05$ ) dan nilai keutamaan sosial yang tinggi ( $\beta = .25, p > .05$ ) menyederhanakan hubungan antara faktor Tidak Berperasaan dengan keagresifan reaktif. Tambahan pula, nilai keutamaan sosial yang rendah ( $\beta = .28, p < .05$ ) dan nilai keutamaan sosial yang tinggi ( $\beta = .40, p > .05$ ); dan nilai keutamaan sosial yang sederhana ( $\beta = .31, p < .05$ ) dan nilai keutamaan sosial yang tinggi ( $\beta = .40, p > .05$ ) menyederhanakan hubungan antara faktor Tidak Berperasaan dengan keagresifan proaktif. Pemboleh ubah keutamaan sosial ini menyederhanakan hubungan antara faktor Tidak Berperasaan dengan sifat keagresifan reaktif dan keagresifan proaktif. Walau bagaimanapun, model kesederhanaan tersebut hampir mencapai nilai genting. Pemboleh ubah keutamaan sosial ini tidak menyederhanakan kesemua hubungan yang lain. Kajian ini telah mendefinisikan semula mekanisme bagaimana keutamaan sosial sebenarnya menjejaskan hubungan antara faktor Tidak Berperasaan, keagresifan reaktif, dan keagresifan proaktif. Intervensi perlu disasarkan kepada individu yang tidak diterima oleh rakan sebaya dan tidak mempunyai sebarang perasaan terhadap orang atau perkara lain, yang mungkin membawa kepada keagresifan.



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## LIST OF ABBREVIATIONS

AMOS	Analysis of a Moment Structures
APSD	Antisocial Process Screening Device
AVE	Average Variance Extracted
CALC	Center of the Advancement for Language Competency
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CPS	Childhood Psychopathy Scale
CR	Composite Reliability
CRD	Critical Ratio Differences
DSM	Diagnostic and Statistical Manual of Mental Disorders
EFA	Exploratory Factor Analysis
GFI	Goodness-of-Fit Index
GOF	Goodness-of-Fit
ICU	Inventory of Callous-Unemotional Traits
IRPA	Instrument for Reactive and Proactive Aggression
K-S Statistics	Kolmogorov-Smirnov Statistics
Q-Q Plots	Quantile by Quantile Plots
RM	<i>Ringgit Malaysia</i> (Malaysian Dollars)
RMSEA	Root Mean Square Error of Approximation
S-W Statistics	Shapiro-Wilk Statistics
SEM	Structural Equation Modeling
SES	Socio-economic status
SPRM	Social Peer Rejection Measure
SPSS	Statistical Package for Social Sciences
TBS	Tunas Bakti School
UPM	Universiti Putra Malaysia
VIF	Variance Inflation Factor
YPI	Youth Psychopathic Traits Inventory



# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

The first chapter of this thesis introduces the study background, statement problem, research questions, study objectives, and study significance. Finally, this chapter closes with key terminology that is defined and operationalized.

### 1.2 Background of Study

Without a doubt, human beings are imperfect and flawed. Yet, mankind appears to suffer from more than just imperfections or flaws. Man is deprived as reflected in his capability of inflicting harm upon himself, others, and the world around him. While human beings are naturally able to distinguish – to a limited extent – right actions and attitudes from wrong ones, they break the same moral code of laws which govern acceptable and unacceptable attitudes or behaviors (Sezzaferri et al., 2017). Humanity is not only powerful in achieving new innovations for the common good, but also potent in destroying the very fabric of society it constitutes.

A clear evidence of harmful, destructive behaviors is found in accounts of recorded aggressive behaviors whereby more powerful aggressors exert their control over perceived less powerful victims (Mat Hussin et al., 2014; Shetgiri, 2013; Vivolo-Kantora et al., 2014). Globally, instances of aggressive problem behaviors are ever increasing. Violations of people and property, along with substance abuse, are recorded in countries with stable crime rates. Approximately 1,163,146 violent crimes occurred in the United States as of 2013 (Soreff et al., 2020). Besides the United States, Australia reported 11,775 and 58,021 cases of robbery and motor vehicle theft in 2019 (Australian Bureau of Statistics, 2020). Similarly, Malaysia recorded 16,902 violent crimes in 2018, of which 60.80% were robbery; 71,760 property crimes, of which 50.10% were vehicle theft; and 25,267 drug addiction cases (Department of Statistics Malaysia, 2018).

The above statistics are red flags indicating that the social problem of aggression remains a ubiquitous threat to the well-being of humankind. Key steps must be taken to understand the precursors surrounding aggression within the comprehensive context of a person's developmental lifespan stages. A vulnerable group exposed to such aggressive behaviors and problem conduct has emerged in research. Scholarly work has offered to shed light on aggression that remains hidden in childhood, but emerges and perpetuates at the "onset" of adolescence (Frick, Cornell, Barry, et al., 2003; Frick & Ellis, 1999).

Like any other key developmental group, the adolescent period is not exempted from the development of aggressive and violent behavioral problems. In fact, adolescents are especially vulnerable to risk-taking activities which may involve invoking harm towards themselves, others, and things around them. From the lifespan developmental perspective, adolescents attempt to move away from their parents, make sense of their existence, and develop their own identities apart from familial influences (Muñoz et al., 2008). As they move away from their families as sources of growth and support, adolescents seek out acceptance from their peer groups, with whom they spend much of their time. Since they are no longer under their parents' influence, they also do not come under the influence of other authority figures (i.e., teachers) or seek validation from them. Without the influence of wiser authority figures, adolescents are vulnerable to peer deviant influences which may manifest themselves in aggression.

Statistics showed that adolescent crime and violence are still pervasive issues worldwide. Approximately 200,000 homicides occur among adolescents (aged 10 – 29 years) per year (World Health Organization, 2020). Besides homicide, other pervasive forms of violence cover physical attack and sexual assault. Crime reports by country supported the global statistics. In Malaysia, the Ministry of Health reported that the rate of aggression amongst Malaysian adolescents stands at 41% as of the year 2000 (Teoh et al., 2009). The Malaysian Global School-Based Health Survey reported aggressive behaviors such as bullying and physical fighting were reported among 27.40% of adolescents (Mat Hussin et al., 2014).

Aggressive conduct among adolescents is shown to originate from a myriad of external and internal precursors. External precursors include surrounding environmental stimuli while internal precursors refer to individual characteristics. In support of studying aggression in light of both external and internal factors, the theoretical framework consisting of conscience development, moral depravity, and social learning is presented. The theory of

conscience development posits that the conscience or response to a person's cognition leads to one's moral behaviors (Frick et al., 2014a). Conversely, impairments in the conscience at varying degrees may result in deviancy. Thus, the theory of conscience development is also consistent with the concept of moral depravity whereby people act against what they believe – to a certain degree – is right and good. In quoting the famous cliché that “no man is an island”, a person's maladaptive behaviors not only influence others, but also derive from exposure to others' maladjustments. In line with behavioral influence and exposure, Akers' and Bandura's social learning theory facilitates conscience development (Akers, 2017; Akers & Jennings, 2016; Hawes, Price, & Dadds, 2014). Exposure to maladaptive behaviors increases the likelihood of future aggression.

Besides exposure to peer influences, inherent trait characteristics of the individual may explain the individual predisposition for aggressive behaviors. In particular, burgeoning studies have associated aggression with a group of psychopathic traits called callous-unemotional traits (Baskin-sommers et al., 2015; Fanti et al., 2009; Feilhauer & Cima, 2013; Fragkaki et al., 2016; Frick, Cornell, Barry, Bodin, & Dane, 2003; Kahn et al., 2012; Kimonis, Frick, Munoz, & Aucoin, 2007). Adolescents display a lack of concern for others' well-being which manifests in poor emotional sensitivity and callous treatment of others. Although a plethora of studies has identified the linkages between callous-unemotional traits and aggression, research uncovering the direct and indirect links between individual dimensions of callous-unemotional traits and aggression is inconclusive. Since peers play an important role in adolescence, it is also important to understand how peers can play a formative role among adolescents with callous-unemotional traits and externalizing problems. Therefore, social preference is selected as one of the essential variables of interest measuring peer influences.

### **1.3 Statement of Problem**

The statement of problem introduces the issues that call for the need to conduct the study (Creswell, 2014). Why is there a need for aggression and its underlying mechanisms to be studied among juvenile adolescents in Malaysia? Not only is aggressive conduct remaining a stable problem among offending adolescents in Malaysia, but also known problematic indicators associated with aggression such as callous-unemotional traits remaining understudied in the Malaysian context. Additionally, adolescent misconduct precurs risk for adulthood problematic conduct (Eisenbarth, Demetriou, Kyranides, & Fanti, 2016; Fanti et al., 2009; Richardson & Green, 2006). Coupled with adolescent developmental

problems, criminal populations have higher rates of callous-unemotional traits (Docherty et al., 2017) and aggression (Idrus et al., 2012). Thus, the current study aims to fulfill the need to examine problematic traits and behaviors against the context of peer rejection, which is thought to underlie the mechanisms of misconduct. With these issues forming the backdrop of this study, the literature gaps of how callous-unemotional traits and aggression are understudied in their individual dimensions and how social preference may explain these relationships further reinforce the need for the current research to be conducted – especially in the Asian context such as the Malaysian context.

Aggression is still a relatively serious existing problem amongst adolescents in Malaysia (Azizan, 2017). Mat Hussin et al. (2014) observed that Malaysia has a 30% rate of aggression among adolescents. Recorded crimes often involve aggression leading to arrest. The Department of Statistics Malaysia (2016) reported that the highest percentages of juvenile offenders in 2015 consisted of crimes against property (36.00%), drug (29.70%), and people (13.40%). Although the number of juvenile offenders has decreased by 10.30% from 5,096 cases in 2014 to 4,569 cases in 2015 and the number of first time criminal offenders has reduced by 12.10%, recurring juvenile crimes increased by 12.40% from 371 cases in 2014 to 417 cases in 2015. News reports also seemed to indicate that adolescent aggression is a stable problem in Malaysia. A recent news article highlighted the incident whereby adolescent boys set fire to a religious school in response to an alleged conflict over their smoking activities (Azizan, 2017).

Individuals engaging in aggressive behaviors threaten the well-being of their victims and those around them. At the larger level, aggression and violence against the law or community place the social fabric at stake (Idrus et al., 2012). Whether aggression is acted out in a deliberate or impulsive manner, aggression aims to cause harm, injury, or even, death to the perceived, less powerful victim (Mat Hussin et al., 2014). Adolescents who are exposed to aggressive behaviors may develop the inclination toward psychological distress and serious maladjustments as they enter into adulthood (Lundh et al., 2014). Thus, it is important that researchers investigate the underlying factors surrounding the problem of aggression against others.

Having problematic traits is found to predict aggression (Kerig & Stellwagen, 2010; Robertson et al., 2018). Callous-unemotional traits, an emerging area of aggression-linked maladjustment, describes a low emotional sensitivity and high calloused attitude toward others which may translate into harmful and violent conduct against others. A dearth of studies has examined the issue of

callous-unemotional traits leading to aggression in Malaysia. Only studies conducted in the Malaysian context has retained callous-unemotional traits in its emotional aspect such that the fear of compassion as a positive emotion posed risk for higher callous-unemotional traits among adolescents from juvenile detention centers (Akmal & Foong, 2018), and that the poor emotional literacy and low emotional self-awareness increased deviancy among a community sample of adolescents with disciplinary problems (Chong et al., 2015; Elias et al., 2007). Together with aggression-linked crime rates among adolescents in Malaysia, the current study intends to fill the gap in literature by examining the relationship between callous-unemotional traits and aggression among offender adolescents in Malaysia.

Interventions surrounding adolescent psychopathy have generally zoned into two places of interest: At (1) home and at (2) school (Mat Hussin et al., 2014). The focus on interventions at home and at school comes from the understanding that parents and teachers are primary authority figures with whom adolescents come into contact. From childhood, parents play key roles in their children's development. Furthermore, teachers come into contact with these adolescents during school hours, providing opportunities to observe their students' aggressive behaviors. Despite the important roles that parents play in the development of their children's lives and teachers in the observation of student behaviors, adolescent spend most of their time with their peer groups rather than with authority figures. However, experiencing rejection from non-deviant peers (Muñoz et al., 2008) and biased, negative self-interpretations of ambiguous social cues (Stickle et al., 2009) may lead adolescents to form social ties with like-minded, deviant peers. Building upon these findings, a protector against continuing callous-unemotional traits and aggression emerges, namely, the role of positive peer groups. Since peer groups play vital roles in influencing adolescents, interventions could focus on establishing better peer relations to counter against maladjustment. While the quality of peer friendships between deviant and non-deviant peers suffers (Fanti et al., 2016), deviant peers are still able to form and maintain friendships with non-deviant peers (Muñoz et al., 2008).

Although replete literature has investigated social preference and aggression (Miller-Johnson et al., 2002; Ojanen & Nostrand, 2014; Pung et al., 2015; Stickle et al., 2009), a limited coverage of literature has examined callous-unemotional traits and social preference. A scale commonly used to measure adolescent aggression did not clearly differentiate between its functions and types, suggesting the need for an alternative measure of aggression. Furthermore, this study sought to address the research gap which builds upon Mat Hussin et al.



(2014)'s findings, which revealed other influential delinquent activities in the role of physical aggression such as smoking, alcohol-drinking, and drug usage. The present study extended this finding by looking at the personality traits and peer associations which may underlie such delinquent activities. Since peers are likely to reject adolescents who show undesirable characteristics such as violence and aggression, peers may also reject adolescents who display uncaring, callous attitudes. Hence, this study explored social preference as a possible moderating factor in the relationship between callous-unemotional traits and aggression.

## **1.4 Theoretical Framework**

### **1.4.1 Theoretical Perspective of Conscience Development**

The theory of conscience development originates from the understanding that the individual's conscience encapsulates one's awareness of emotional-behavioral regulation, empathetic ability, and moral reasoning (Frick et al., 2014a; Schalkwijk et al., 2014). Conscience refers to a person's appraisal of his or her identity (Schalkwijk et al., 2014). An individual evaluating his own conscience would ask: How can I relate my actions and thoughts to myself? Based on the theory of conscience development, peripheral indicators guide moral behaviors which then determine cognition (Frick et al., 2014a). As an example, emotional arousal or the individual's normal emotional experience (such as guilt or empathy) is one peripheral indicator which may affect a person's cognition. The person's emotional experiences leading to cognitive thought direct morally acceptable behaviors. In contrast, deficiencies in the conscience lead to impairments in emotional arousal experiences preceding maladaptive behaviors. A person with psychopathic tendencies, for instance, fails to attribute others' distress as a warning against performing deviant behaviors. Rather, the individual aims to achieve his goal-directed, deviant behaviors despite others' distress (Vien, AnhBeech, 2006). Whilst individuals with impaired traits may experience affective deficiencies in their conscience which posed risks for further emotional dysregulation and externalizing problems, they are able to mentally represent emotions to a limited extent.

### **1.4.2 Theoretical Perspective of Social Learning**

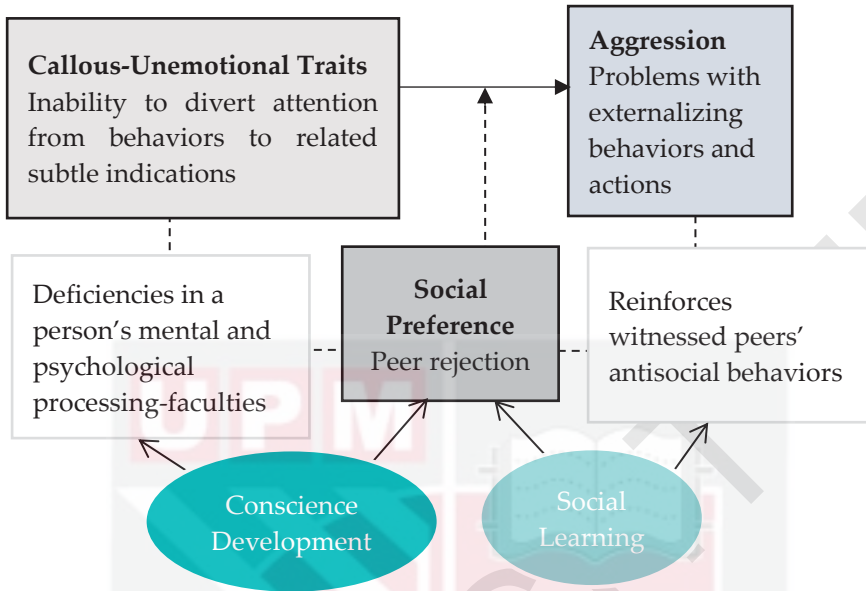
The social learning theory based its origins not only on reinforcements of behavior, but also extensions into differential associations. According to Albert Bandura's social learning theory, authority figures (i.e., parents or teachers) use positive reinforcements to encourage desirable behaviors and negative

reinforcements to discourage negative behaviors (Hawes et al., 2014). In other words, desirable behaviors are rewarded while undesirable behaviors are punished. The social learning theory has developed in an attempt to shed light on criminality. Ronald Akers' social learning theory proposed that differential association, that is, the exposure to favorable and unfavorable conditions of crime may impact one's normative judgments of right and wrong behaviors (Akers, 2017). In peer groups, the social learning theory interplay is seen in that exposure to deviant peers is a "reward" that increases admiration for such conduct, leading to the actual execution of deviant behaviors (Akers, 2017; Fox, Perez, Cass, Baglivio, & Epps, 2015).

Peer behaviors partly facilitate conscience development through social learning when delinquent peers further reinforce deviancy (Kong, Chong, & Samsilah, 2012; Pung, Yaacob, Baharudin, & Osman, 2017). Witness of peer aggression manifests in two major ways: Peer rejection and group aggression. When their peers reject these adolescents by showing dislike, adolescents not only internalize such experiences, but also witness aggressive behaviors. Rejected individuals go on to "model" the aggressive behaviors, acting them out on others. Moreover, peer influence among deviant adolescents is clearly seen in group aggression. Group aggression occurs when adolescents commit deviant behaviors together with their fellow like-minded and deviant peers. In support of the social learning theory, children and adolescents with high maladaptive traits commit delinquent activities alongside their deviant peers (Muñoz et al., 2008). Peer pressure and popular striving motivate adolescents' desire to emulate norm-defying activities of like-minded peers (Eisenbarth et al., 2016).



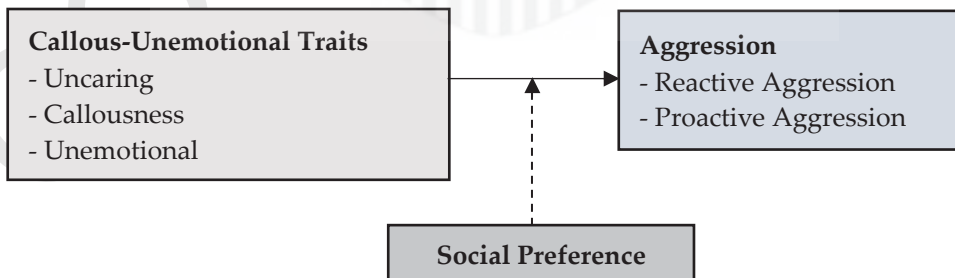
### 1.4.3 Theoretical Framework



**Figure 1.1: Theoretical Framework: Theories of Conscience Development and Social Learning**

The present study built on the concept of moral depravity holding up the tenets of two prominent theories: (1) conscience development and (2) Ronald Akers and Albert Bandura’s social learning theory (Figure 1.1).

### 1.4.4 Conceptual Framework



**Figure 1.2: Conceptual Framework**

The current study examined the possible moderating role of social preference between individual callous-unemotional traits and aggression (Figure 1.2). Individual callous-unemotional traits were hypothesized to predict reactive aggression and proactive aggression, and these interrelationships were hypothesized to be moderated by social preference.

### 1.5 Research Questions

The current study answered the research questions below:

1. What is the extent of callous-unemotional traits, social preference, and aggression patterns?
2. Are there any relationships between callous-unemotional traits (Uncaring, Callousness, and Unemotional) and aggression (Reactive and Proactive)?
3. To what extent does social preference moderate the relationship between callous-unemotional traits and aggression?
4. What is the unique predictor of callous-unemotional traits (Uncaring, Callousness, and Unemotional) and social preference on aggression?

### 1.6 Objectives of Study

The present study proposed the following objectives:

1. To determine the extent of the callous-unemotional traits, social preference, and aggression patterns.
2. To examine the relationship between callous-unemotional traits (Uncaring, Callousness, and Unemotional) and aggression (Reactive and Proactive).
3. To examine whether social preference moderates the relationship between callous-unemotional traits and aggression.
4. To determine the unique predictor from callous-unemotional traits (Uncaring, Callousness, and Unemotional) and social preference of aggression (Reactive and Proactive).

### 1.7 Hypotheses of Study

The present study tested the following alternative hypotheses:

- H<sub>A1</sub>:** There is a significant positive relationship between the Uncaring factor of the callous-unemotional traits and Reactive Aggression.
- H<sub>A2</sub>:** There is a significant positive relationship between the Callousness factor of the callous-unemotional traits and Reactive Aggression.

- H<sub>A3</sub>**: There is a significant positive relationship between the Unemotional factor of the callous-unemotional traits and Reactive Aggression.
- H<sub>A4</sub>**: There is a significant positive relationship between the Uncaring factor of the callous-unemotional traits and Proactive Aggression.
- H<sub>A5</sub>**: There is a significant positive relationship between the Callousness factor of the callous-unemotional traits and Proactive Aggression.
- H<sub>A6</sub>**: There is a significant positive relationship between the Unemotional factor of the callous-unemotional traits and Proactive Aggression.
- H<sub>A7</sub>**: Social preference moderates the relationship between the Uncaring factor of the callous-unemotional traits and Reactive Aggression.
- H<sub>A8</sub>**: Social preference moderates the relationship between the Callousness factor of the callous-unemotional traits and Reactive Aggression.
- H<sub>A9</sub>**: Social preference moderates the relationship between the Unemotional factor of the callous-unemotional traits and Reactive Aggression.
- H<sub>A10</sub>**: Social preference moderates the relationship between the Uncaring factor of the callous-unemotional traits and Proactive Aggression.
- H<sub>A11</sub>**: Social preference moderates the relationship between the Callousness factor of the callous-unemotional traits and Proactive Aggression.
- H<sub>A12</sub>**: Social preference moderates the relationship between the Unemotional factor of the callous-unemotional traits and Proactive Aggression.
- H<sub>A13</sub>**: The standardized beta coefficients for callous-unemotional traits and social preference do not equal zero when regressed against aggression.

## 1.8 Significance of Study

### 1.8.1 Body of Knowledge

The present study is unique in its kind by examining the linkages between callous-unemotional traits, social preference, and aggression. Callous-unemotional traits have been related to aggression (Ansel, Barry, Gillen, & Herrington, 2014; Kimonis, Graham, & Cauffman, 2017; Lee-rowland, Barry, Gillen, & Hansen, 2016). Previous literature has evidenced that callous-unemotional traits and aggression are multi-dimensional constructs (American Psychiatric Association, 2013; Essau et al., 2006; Frik & Whitse, 2008; Muñoz & Frick, 2012). Theoretically, previous studies have investigated social preference and callous-unemotional traits with aggression. Only a limited number of studies have hinted at the underlying mechanisms between social preference and callous-unemotional traits (Fanti et al., 2016; Kimonis et al., 2004; Muñoz et al., 2008; Rowe et al., 2010). However, burgeoning research has revealed that aggressive adolescents experience more peer dislike and rejection in contrast to non-aggressive adolescents (Choukas-Bradley & Prinstein, 2014b; Guerra et al.,

2004; Stepp et al., 2011). Hence, it is reasonable to suggest that adolescents with callous-unemotional traits also experience peer dislike and rejection. This study posited that social preference moderates the relationship between individual callous-unemotional traits and aggression.

Adolescent misconduct may translate into adulthood (Eisenbarth, Demetriou, Kyranides, & Fanti, 2016; Fanti et al., 2009; Richardson & Green, 2006). In contrast to community populations, however, criminal populations have higher rates of callous-unemotional traits (Docherty et al., 2017) and aggression (Idrus et al., 2012). Henceforth, this study built on other scholarly work by examining the interrelationships of callous-unemotional traits, social preference, and aggression among justice-involved adolescents enrolled in approved schools. Many past studies examining these problematic traits and behaviors were conducted in Western countries such as Sweden (Saunders et al., 2018a), Italy (Muratori et al., 2017), and the United States (Kerig & Stellwagen, 2010). A limited number of studies were conducted in Asian contexts. In regards to sampling, this study sought to fill the gaps in methodology by using a juvenile sample from the Asian country of Malaysia.

### **1.8.2 Policy Development for Relevant Stakeholders**

The understanding of the interactions between callous-unemotional traits, social preference, and aggression intends to shape policy-making for school counsellors and governing authorities who are involved in caring for justice-involved adolescents detained at Malaysian approved schools. Deviant problem behaviors may be a consequence of callous-unemotional traits present among these adolescents. Since peer rejection behaviors may exacerbate the interactions between callous-unemotional traits and aggression, forming healthy peer influences could be a viable intervening factor against further perpetuation of psychopathic tendencies, thereby, making a difference in these detained adolescents' lives.

### **1.9 Definitions of Key Terminology**

#### *Adolescent*

Conceptual: A young person aged from 10 to 18-years old (American Psychological Association, 2018; Percetakan Nasional, 2006).

Operational: A young person sent to approved schools by court-order when they were aged between 10 to 18-years old (inclusive).

### *Approved School*

**Conceptual:** A school under the jurisdiction of Section 65 whereby adolescent offenders are placed apart from adult offenders as well as away from families to be educated, trained, and detained due to prior records of criminal offences or uncontrollable behaviors (Percetakan Nasional, 2006).

**Operational:** Tunas Bakti schools located in West Malaysia.

### *Aggression (Reactive Aggression/Proactive Aggression)*

**Conceptual:** Behaviors causing instrumental (reactive) and non-instrumental (proactive) physical or psychological harm toward others (American Psychological Association, 2018; Fanti et al., 2009).

**Operational:** Adolescents' total score on the Reactive Aggression and Proactive Aggression subscales of the Instrument for Reactive and Proactive Aggression (IRPA). Higher scores indicate greater aggression (Rieffe et al., 2016).

### *Callous-Unemotional Traits (Uncaring, Callousness, and Unemotional)*

**Conceptual:** The absence of guilt, remorse, care for others' feelings, emotional depth and expression, and performance in vital activities (Frick et al., 2014).

**Operational:** Adolescents' total score on the subscales (Callousness, Uncaring, and Unemotional) of the Inventory of Callous–Unemotional Traits (ICU). Higher scores indicate greater callous-unemotional traits (Kimonis, Frick, Skeem, et al., 2008).

### *Social Preference*

**Conceptual:** The degree of an adolescent's peer likability i.e., how well he is liked or disliked by his peers (Choukas-Bradley & Prinstein, 2014a).

**Operational:** Adolescents' total score on the Social Peer Rejection Measure (SPRM). Higher scores indicate greater peer dislike (Lev-Wiesel et al., 2013).

## **1.10 Summary of Chapter**

This study examined the linkages between callous-unemotional traits and aggression, with social preference as the moderator. With moral depravity as the context, the theories of conscience development and social learning formed the primary research framework.

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