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CITY UNIVERSITY OF HONG KONG

**Cognitive and Emotional Determinants
of Delinquent Behaviour**

A Report Submitted to
Department of Applied Social Studies
in Partial Fulfillment of the Requirements for
the Bachelor of Social Sciences in Psychology

by

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Abstract

Objectives: This article was designed to explore the relationships and the effects of negative emotions and self concepts on delinquent behaviour in a sample of Hong Kong young people (N=269).

Method: With the use of self-report method, prevalence of deviant behaviours, negative emotions (stress, anxiety, and depression) and self concepts (moral reasoning, self-esteem, and moral self) were measured.

Results: Findings revealed that all negative emotions and self concepts (except general self-esteem) were significantly predictive of delinquent behaviour in general. Mediation analysis showed that depression significantly mediated the effect of moral self on delinquent behaviour, whereas stress mediated the effect of moral reasoning on delinquent behaviour.

Conclusions: Overall, the current study provided evidences for the facilitating effect of negative emotions with the association of moral self or moral reasoning on deviant behaviour, suggesting negative emotions, the personal formation of moral self and the development of moral reasoning are significant treatment targets in dealing with the problems of delinquents.

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Table of Contents

Abstract	ii
Acknowledgments	iii
Table of Contents	iv
List of Tables	vi
1. Introduction and Literature Review	
1.1 Introduction	1
1.2 Delinquent Behaviour	2
1.3 Emotion – Stress, Anxiety and Depression	4
1.4 Self Cognition – Moral Reasoning, Moral self and Self-esteem	7
1.5 Formulation of Hypotheses	10
2. Methodology	
2.1 Participants.....	11
2.2. Materials	11
2.3. Procedures	13
3. Results	
3.1. Descriptive Statistics of Delinquent Behaviour, Negative Emotions, and Self Cognition	14
3.2. Correlation between Delinquent Behaviour, Negative Emotions, and Self Cognition	17
3.3. Regression Analyses for the effects of Negative Emotions and Self Cognition on Delinquent Behaviour	19
4. Discussion and Conclusions	
4.1. Major Findings and Limitations of this study	23
4.2. Conclusions	26
References	27

Appendices

Appendix A	34
Appendix B	41
Appendix C	42

List of Tables

Table 1.	Respondent's delinquent behaviour	14
Table 2.	Gender difference in the prevalence of delinquent behaviour, moral reasoning, negative emotions, and self concepts.....	16
Table 3.	Correlation table of delinquent behaviour, negative emotions, and self concepts.....	18
Table 4.	Hierarchical Regression Analysis of the predicting effect of self cognition and negative emotions on delinquent behaviour	20
Table 5.	Mediation analysis of the three models which fulfilled the criteria of having three significant predicting paths.....	21

Cognitive and Emotional Determinants of Delinquent Behaviour

The problem of delinquent behaviour among young people has been a prominent issue in Hong Kong for years. Topics such as “13-years-old teenager taking drug” (The Sun, 2012), “the increasing phenomenon of teenage girls working as dating partners and prostitutes” (Takungpao, 2012), “three teenagers attempted stealing but being caught” (RTHK, 2012), “seven teenagers declaring oneself to be a member of Triad are under suspicion of physical assault” (RTHK, 2012), and “35% of youths started gambling before the age of 18” (Hong Kong Commercial Newspaper, 2008) are widely posted on newspaper in Hong Kong.

Research had been examining different risk factors or antecedent variables of delinquent behaviour for many years. Warr (1993) suggested that the peer association with delinquents in single had the strongest prediction on delinquent behaviour. And, the parenting styles with the focus of punishment or love-withdrawal were related to the children’s delinquent behaviour (Shaw & Scott, 1991). Also, it was found that good family relationship was associated with decreased affiliation with delinquent peer (Huey, Henggeler, Brondino, & Pickrel, 2000). These studies supported that peer influence and parental guidance are well-known predictors on delinquent behaviour.

From another point of view, however, involving in a delinquent behaviour is a personal issue and decision by the teenagers themselves. In a study of Pardini, Loeber, and Stouthamer-Loeber (2005), it was found that the increase of parent-child conflict only predicted changes in the adolescents’ beliefs about delinquent behaviour. Therefore, it is important to be aware of the development of moral reasoning and how much the teenagers internalize the moral belief as moral self, which in turn may affect the engagement of actual delinquent behaviour. Moreover, regarding the personal emotions of the delinquents, it was found that they had significantly higher level of negative

emotions than the control sample (Plattner, Karnik, Jo, Hall, Schallauer, Carrion, Feucht, & Steiner, 2007). And, emotional expression was found to be not related to delinquent peer affiliation, but, emotion serves as a context to influence their adjustment indirectly (Forgatch & Stoolmiller, 1994). Thus, it is believed that both the negative emotions and the cognitive beliefs may have effects on delinquent behaviour.

In this present study, the cognitive and emotional determinants of delinquent behaviour are focused. The study aims to examine the relationships between negative emotions, self cognition and delinquent behaviour. More importantly, the effect of negative emotions and self cognitions on the delinquent behaviour are studied and to see their mediating role on delinquent behaviour.

1.2 Delinquent Behaviour

Delinquency refers to those anti-social behaviours which are more serious, and the delinquent may be put under arrest when the behaviour were noticed to the police, emphasizing the importance of legal aspects of an act in a particular culture (Tolan & Cohler, 1993). Therefore, there is no unique definition of delinquency for all research because of the cultural difference.

According to Hong Kong Annual Digest of Statistics in 2010, there was a decreasing trend of the number of delinquent aged 16 to 20 being arrested from 2004 to 2009 in general, but an increasing number of delinquent aged more than 21 being arrested. In particular, the number of juvenile delinquent for those aged 16 to 20 has been dropped significantly from 2003 to 2004, and then it fluctuated slightly in the later three years. Then, it decreased dramatically from 2007 to 2009, falling to the lowest point in 2009 among the six years.

Hong Kong Annual Digest of Statistics (2010) also included statistics from Hong Kong Police Force in 2009. Based on these statistics, there were more delinquents who

aged 16 to 20 being arrested for non-violent crime (for example, burglary, shop theft, and criminal damage) than violent crime (for example, rape, wounding, and murder). However, it is believed that some crime cases are not being reported. Among the age group of 16-20, the types of offence with larger proportion of person being arrested for violent crimes were serious assault, wounding, criminal intimidation and indecent assault. For non-violent crimes, the types of offence with larger number of person being arrested were serious narcotics offences, shop theft, unlawful society offences, and sexual offences (other than rape and indecent assault).

However, the above statistics only showed the number of person being arrested by the police. Still, there are substantial proportion of delinquent behaviour excluded from the official statistics if the delinquents are not prosecuted because the crime is minor and such decision had been approved by the parents of both victim and offender.

Based on a study conducted by McQuoid (1994), different types of offence had been grouped into five categories by using the International Self-Report Study of Delinquency (ISRD1) survey in Belfast (Breen, Manning, O'Donnell, O'Mahony, & Seymour, 2010). First, property offences include shoplifting, burglary, car theft, and theft from car. Second, violent offences can be further divided into two sub-categories, including criminal damage (such as, vandalism and arson) and offences against the person (for example, group fighting, robbery, assault, and carrying a weapon). Third, drug offences include the usage of LSD, cocaine, heroin, and drug dealing. Fourth, status offences refer to the acts which are committed by young people while the behaviour are proscribed only for those below certain age (Michelson, Levine, Michelson, & Spina, 1979), for example, alcohol drinking, driving a motor car, and cigarette smoking under age (Hollin, Epps, & Kendrick, 1995). Fifth, computer-related crimes include computer hacking, e-mail harassment, and cyber bullying. However, these five groups only covered the offences, but neglected those delinquent behaviour

which are only misconducts but do not violate the legal aspects, for example, a young person going out all night without parents' permission, premarital sexual behaviour, and buying pirated products. A recent study examined the daily activities of Hong Kong school students and found that young people spent times on watching television, surfing internet, smoking, and hanging out purposelessly (Lo, Cheng, Wong, Rochelle, & Kwok, 2011). Therefore, not only the criminal behaviour, both diligent behaviour and delinquent behaviour should be included in the current study.

1.3 Emotion – Stress, Anxiety and Depression

An emotion is a complex experience which has different components influencing the occurrence of a particular behaviour (Frijda, 1986), and affect our judgment and evaluation on particular behaviour or person. Lerner and Keltner (2001) suggested that emotion caused the appraisal tendency to reproduce the same cognitive appraisal which initially produced the emotion and, in turn, led a person to re-evaluate the situation or behaviour. For example, people who are feeling fear hold pessimistic estimation for risky behaviour, seeing that risky behaviour have uncertain consequences and thus, they are more likely to perceive the risk of that behaviour. Therefore, it is believed that a group of emotions would affect the likelihood of a person participating in a risky behaviour, in particular, delinquent behaviour.

Previous findings clearly showed that certain kinds of negative affection were related to some types of delinquent behaviour, including smoking, substance abuse, addictive gambling, bullying, and stealing (for example, Blaszczynsk, & McConaghy, 1989; Patton, Hibbert, Rosier, Carlin, Caust, & Bowes, 1996; Wagner, 2001). High intensity of cigarette smoking in adolescence was related to generalized anxiety disorder in early adulthood (OR = 5.53, 95% CI = 1.84, 16.66) (Johnson, Cohen, Pine, Klein, Kasen, & Brook, 2000). Also, with the significant association between regular smoking

and panic (OR = 1.5, 95% CI = 1.3, 1.7) and depression (OR = 1.4, 95% CI = 1.3, 1.6), regular smokers were almost twice as likely as occasional smokers to have high level of depression and anxiety, meanwhile, subjects who had high level of self-reported depression and anxiety were more likely to be smokers (likelihood ratio $\chi^2 = 35.5$, $p < .001$) (Patton et al., 1996).

Moreover, substance abuse was negatively correlated with anxiety sensitivity ($r = -.21$, $p < .05$), which refers to the concern about the actual or imagined consequences brought by anxiety (Wagner, 2001). In other words, the more an individual abuse, the less awareness and consideration of the anxiety consequences and the consequences of his performed acts.

Furthermore, pathological gamblers were depressed at moderate level and they were more likely to have a higher state-trait anxiety scores, suggesting that depression and anxiety are important factors in maintaining gambling behaviour (Blaszczynsk & McConaghy, 1989).

In addition, findings regarding the association between bullying and emotion are contradictory. Some studies reported the non-significant association between being a bully and anxiety (Fekkes, Pijpers, & Verloove-Vanhorick, 2004; Wienke, Green, Karver, & Gesten, 2009), whereas some showed positive relationship between them with OR 3.8 (Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000). Also, Klomek, Marrocco, Kleinman, Schonfeld, and Gould (2007) reported that depression was associated with bullying behaviour in school (OR = 3.46, 95% CI = 2.20, 5.46) and outside school (OR = 3.82, 95% CI = 2.27-6.41); similarly, depressive symptoms were associated with bullying others, no matter the bullies are males (OR= 2.0, 95% CI = 1.2, 3.3) or females (OR= 2.4, 95% CI = 2.0, 2.9) (Saluja, Iachan, Scheidt, Overpeck, Sun, & Giedd, 2004). In sum, previous findings failed to provide us a conclusive role of emotion on bullying behaviour.

On the other hand, Bradford and Balmaceda (1983) suggested that a high intensity of stress antedated one's stealing behaviour, showing the association between stress and stealing. In addition, Silverman and Brener (1988) reported that shoplifting in mid life was associated with depression and anxiety, and, more recently, Grant, Potenza, Krishnan-Sarin, Cavallo and Desai (2011) found that stealing was significantly associated with sadness and hopelessness ($\chi^2 = 74.29, p < .0001$), which further endorsed the relationship between stealing behaviour and certain negative emotions.

Overall, these studies did not provide us a clear casual relationship between emotion and delinquent behaviour, even some failed to report significant relationship. But, it is now clear that there is linkage between them, which make researchers to believe that these kinds of negative emotion may have an important role to affect the decision for delinquent act.

Summarized from the above studies, smoking, gambling, substance abuse, bullying and stealing were all reported to be associated with anxiety. While some researchers suggested that anxiety and depression facilitated the smoking and gambling behaviour, others failed to show the role of these negative emotions on other delinquent act. However, Banmeister and Tice (1990) mentioned that anxiety serves as a cue for the likelihood of actual or threatened group exclusion, and thus, it helps to motivate people to avoid those risky behaviours but to act according to the group norms. In other words, peer group among adolescents have great influence on one's behaviour. Moreover, Bradford and Meston (2006) found that both low and high state anxiety group had relatively lower level of physiological sexual arousal than the moderate state anxiety group. Such curvilinear trend suggested the inhibitory effect of anxiety on sexual offence if the offender was under a relatively low or high level of state anxiety. However, if he was under a moderate level of state anxiety, anxiety had a facilitative effect for his delinquent behaviour. In addition, in arguing for the role of facilitating the

delinquent act, general strain theory was proposed to put emphasize on the role of emotional responses when facing negative life experiences in encouraging deviant behaviour (Agnew, 1992). It suggested that stressors induced by negative life experiences would increase negative emotion which created pressure for remedial behaviour, thus, people chose to involve in delinquent or criminal behaviour. This theory also helped to support one study mentioned above, suggesting high level of stress antedating the stealing act.

Based on the above findings, the relationship and the role of negative affective responses on delinquent behaviour are ambiguous; therefore, delinquent behaviour, anxiety, depression, and stress will be examined in this present study.

1.4 Self Cognition – Moral Reasoning, Moral self and Self-esteem

Moral reasoning is defined as the reasons for sustaining norms when the individual is under challenge, usually in a situation of having conflict with another group or social norm (Kohlberg, 1958). In a broader view, Piaget (1932) defined moral reasoning as the reason of an individual showing respect for socially accepted moral rules. Kohlberg expanded the work of Piaget on moral reasoning to stages of adolescence and adulthood. He believed that moral reasoning develops with age according to six stages (Kohlberg, 1969), including (i) pre-conventional morality, in which actions are classified as right or wrong based on the anticipated consequences; (ii) conventional morality, in which actions are evaluated in the basis of the comments from other people; and (iii) post-conventional morality, in which higher-order ethical principles are used to evaluate individuals' actions (Smith, Nolen-Hoeksema, Fredrickson, & Loftus, 2003). Kohlberg believed that adolescents are expected to be capable of performing abstract thinking which is necessary for the level of post-conventional morality. Also, Kohlberg (1958) suggested that moral reasoning is an important factor that provides unity in making the

decision and judgments of moral action. Thus, it is believed that those who are less mature are more likely to be engaged in delinquent behaviour. However, the results of previous findings could not fully support this idea.

A meta-analysis quantitatively integrating the results of 15 studies related to the moral reasoning of juvenile delinquents supported that juvenile delinquents' moral reasoning was less mature than that of non-delinquents (Nelson, Smith, & Dodd, 1990). Among these 15 studies, Lee and Prentice (1988) indicated there was significant difference between the moral reasoning of delinquent and non-delinquent groups, $F(3, 50) = 5.95, p < .001$, showing that the non-delinquents performed at significantly higher level of maturity. Also, with the male offenders from youth correctional institutions who had histories of offence types including drug, violent, or theft, results showed that offenders' moral reasoning development stage was significantly less mature than the controls regardless of the age (Chen & Howitt, 2007). In addition, Raaijmakers, Engels, and Van Hoof (2005) measured moral reasoning and delinquency in three different periods of time and indicated that there was modest but significant negative relationship between these two variables at the same time of measurement ($r = -.13, r = -.08, r = -.10$, respectively; $ps < .05$).

However, there are studies showing the absence of correlation between moral reasoning and delinquent behaviour. Emler, Heather and Winton (1978) found that there was no relationship between moral reasoning and the levels of self-reported delinquent behaviour, suggesting the degree of involvement and the level of seriousness of delinquency are irrelevant to the moral reasoning. Moreover, Tarry and Emler (2007) suggested that a structural measure of moral reasoning level failed to predict self-reported delinquency ($r = -.04, p > .05$), but it can be significantly predicted by moral values ($r = -.27, p < .001$).

On the basis of psychoanalytic perspective, the values and ideals which guide an

individual to act morally are represented in superego within an interactive system of id, ego, and superego. However, contemporary infant researchers suggested that the emergent self appears early in the first year of new born babies, and, the self of a child derives its values through identifying with his or her significant caregivers (Wolf, 1993). Also, through socialization, children acquired a fundamental skill for behaving as a member of the society, or, more specifically, as a member of their own community, and, this skill consists precisely in a person's performance according to the moral rules (Tugendhat, 1993). But, when youngsters reach the level of cognitive ability connected with Kohlberg's stage of conventional morality, they will experience a psychological crisis with a sudden de-idealization. Therefore, teenagers turn to other mediums for the needed experiences, and, new values and ideals become part of the self (Wolf, 1993).

Also, these experiences help to derive a self concept of an individual through making personal judgment about his own qualities and competences in different life domains, which termed as self-esteem (Faulkner, Adlaf, Irving, Allison, Dwyer, & Goodman, 2007). Donnellan, Trzesniewski, Robins, Moffitt and Caspi (2005) provided evidence for the significant relationship between self-esteem and delinquency, showing that self-esteem was negatively associated with delinquency, despite of assessing self-esteem by Rosenberg Self-Esteem Scale ($r = -.35, p < .05$), self-reported ($r = -.39, p < .05$) or teacher-rated version of the Harter Self-Perception Profile for Children ($r = -.39, p < .05$). Not only the level of moral reasoning, the self concepts on moral self and self-esteem may have changed or became consolidated in youth and young adulthood and served as a reference point to guide an individual's decisions and behaviours (Higgins-D'Alessandro, 2006). Therefore, the importance of moral self and self-esteem, as well as moral reasoning, on judgment of delinquent behaviour should not be neglected if it is aimed to capture an in-depth result for the effect of self-cognition on delinquency.

1.5 Formulation of Hypotheses

Studies consistently showed that delinquent behaviour was related to self cognition and negative emotions. However, there were no studies examining the impact of these variables on delinquent behaviour and their interactive relationships among Chinese youth samples. Therefore, the objectives of this study are to investigate the effects of negative emotions and self cognition on delinquent behaviour, and to investigate the relationship among these variables. The hypotheses of the current study are:

- H₁*: Negative emotions (stress/ anxiety/ depression) are positively correlated with self-reported delinquency behaviour.
- H₂*: Self cognition (moral reasoning/ self-esteem/ moral self) are negatively correlated with self-reported delinquency behaviour.
- H₃*: High level of negative emotions (stress/ anxiety/ depression) predicted more engagement of delinquency behaviour.
- H₄*: Low level of self cognition (moral reasoning/ self-esteem/ moral self) predicted more engagement of delinquency behaviour.
- H₅*: Negative emotions (stress/ anxiety/ depression) mediated the effect of self cognition (moral reasoning/ self-esteem/ moral self) on delinquent behaviour.

Methodology

2.1 Participants

This study targeted young people in Hong Kong aged between 17 and 25 ($M = 18.47$, $SD = 1.77$), without a particular requirement of education level. Around half of the participants were recruited from a school, St. Peter's Secondary School, and the others were asked to fill in the questionnaire in other schools, social centers, and bars through random sampling and snowball sampling. A total of 269 valid questionnaires were received. The majority of the participants were 17 years old (35.5%), 18 years old (31.2%), and 19 years old (11.6%). Among the participants, more than half (59.1%) were males and 40.9% were females. And, most of the participants were born in Hong Kong (85.1%), and 12.3% were from mainland China, only 1.4% were born in other countries such as Korea. Regarding the occupational or educational status, 85.5% of participants were studying either in college or secondary school, 9.8% were working, and 4.7% remained unemployed.

2.2 Materials

A self-report questionnaire consisting four sections, including (1) Demographics, (2) Young People's Daily Behaviour Scale, (3) Moral Reasoning Scale, (4) Depression, Anxiety, and Stress Scale, Moral Self Scale, and Self-Esteem Scale. The Chinese versions of the scales were used in this study due to a concern that some young people in Hong Kong may not proficient in English.

(1) Demographics: includes gender, age, educational or occupational status, and birth place.

(2) Young People's Daily Behaviour Scale, was adopted from a similar research conducted (Lo et al., 2011) and based on the interview of a focus group of young people ($N=8$) in Hong Kong. It includes 44 items showing list of daily behaviours, including

both diligent behaviours, delinquent behaviours and offences. Items 5, 6, 11, 23, 36, 37, and 43 were added after the interview with focus group. Participants were asked to rate their frequency of behaviours in the past three months on a 5-point scale, in which “1” indicates “never” and “5” indicates “always”. The scale obtained a reliability score of .903 in this study.

(3) Moral Reasoning Scale (9 items), was adopted based on similar study conducted with young people (Jou, 2004: 102-108). It was based on Piaget’s stages of moral reasoning. It includes 9 dilemmas with 2-3 answers provided for each dilemma. Each dilemma represents a unique theme for the construction of moral reasoning, including subjective responsibility on stealing, subjective responsibility on lying, parent-child reciprocal punishment, peers reciprocal punishment, personal responsibility, connoted justice, distributed justice, equality, and surrender. Participants were told that there were no standard correct answers and were asked to choose among the given answers for each dilemma.

(4) Depression, Anxiety, and Stress Scale (21 items), Moral Self Scale (8 items), and Self-Esteem Scale (8 items). The 21-items of Depression, Anxiety, and Stress Scale (DASS-21) is the short version of DASS, which have been shown that it is able to distinguish the features of agitation, depression, autonomic arousal and psychological tension as well as DASS does (Antony, Bieling, Cox, Enns, & Swinson, 1988). Its reliability was relatively high at $\alpha = .927$ in present study. The Moral Self Scale and Self-Esteem Scale were adopted based on similar study (Cheng, 2005). Each scale consists 8 items. In this study, it obtained a reliability at $\alpha = .893$ which is relatively high. To fill in these three scales, participants were asked to rate on a 4-point scale to indicate how much the statement represent themselves, in which “0” indicates “totally different from” and “4” indicates “fully agree with”.

2.3 Procedure

An invitation letter (Appendix C) was first sent to St. Peter's Secondary School for inviting the students to join the current study. For the students in this school, only the hardcopy version of question (Appendix A) was given. For the questionnaires collected from other sources, both the online version (https://docs.google.com/spreadsheet/viewform?hl=en_US&formkey=dEJHQTRCTktYdTVicEdRcEpzQnZGOVE6MQ#gid=0) and hardcopy version of questionnaire were used.

Before the start of doing the questionnaire, participants were required to read the instruction. It briefly introduced the purpose and the aim of this study, and invited the participants to join the study. It also stressed the confidentiality by telling the participants that it is voluntary, anonymous and all the collected questionnaires will be destroyed after the study completed. Participants who were given a hardcopy version of questionnaire were asked to sign on the consent form (Appendix B) before they proceed to the next page of the questionnaire. Signature was not required from the participants who did the online version of questionnaire, but they were told that they can freely leave the current browsing page if they do not want to participate in this study.

Due to the time limit, data from both the online version and hardcopy version were collected and analyzed after three to four months.

Results

3.1. Descriptive Statistics of Delinquent Behaviour, Negative Emotions, and Self Cognition

Table 1 shows the prevalence of the respondents' delinquent behaviour in descending order according to the sum of the percentage of answering "sometimes", "often", and "always". The most common delinquent behaviour of the respondents was alcohol consumption, 21% of the respondents sometimes consume alcohol and 16% often or always have alcohol intake. Followed by verbal bullying, in which 20% sometimes perform verbal bullying to other people and 9 % often or always involve in verbal bullying. And, the third common delinquent behaviour of the respondents was watching or reading pornography materials, with 26% of the respondent sometimes, often, or always review pornography materials.

Table 1

Respondent's delinquent behaviour

	Never, Seldom (%)	Some- times (%)	Often, Always (%)	Mean	SD
Alcohol consumption	63	21	16	2.20	1.28
Verbal bullying	71	20	9	2.08	1.07
Watching/ reading pornography materials	73	15	12	1.98	1.25
Stay outside home all night without parent's permission	74	12	14	1.88	1.38
Engage in pre-marital sex	77	12	11	1.69	1.22
Cigarette smoking	77	10	13	1.73	1.32
Buying Mark Six	78	14	8	1.75	1.30
Buying pirated products	84	12	4	1.56	.94

(To be continued)

(Table 1 continued)

	Never, Seldom (%)	Some- times (%)	Often, Always (%)	Mean	SD
Horse racing or soccer betting	85	8	7	1.50	1.06
Contact with triad members	88	8	6	1.46	1.00
Physical bullying	86	7	7	1.61	.99
Stay at game centre/ internet café	87	6	7	1.61	1.08
Gamble in casino or mah-jong hall	88	6	6	1.37	.93
Involvement of illegal gambling	89	7	4	1.36	.86
Littering/ Spitting	91	6	3	1.34	.79
Taking restrained medicine without doctor's instruction	93	5	2	1.22	.71
Vandalism	94	4	3	1.23	.73
Fighting or assault	93	5	2	1.26	.73
Theft at home	93	4	3	1.27	.76
Drug taking/ Medicine misuse	94	3	3	1.18	.66
Carrying a weapon	94	4	2	1.17	.60
Causing damage to public facilities	95	4	1	1.18	.56
Shoplifting	95	2	3	1.16	.65
Taking public transportation without paying fee intentionally	95	3	2	1.17	.61
Driving without legal driving license	96	3	1	1.14	.57
Causing damage to others' houses or shops	97	2	1	1.10	.47
Break into other's house without permission	97	2	1	1.16	.55
Theft from the car	99	1	0	1.04	.31
Theft at friend's house	99	1	0	1.04	.32

Gender differences in respondents' delinquent behaviour being grouped into different categories, moral reasoning, negative emotions, and self cognitions are shown in Table 2. Significant gender differences were found that males were more likely to be

involved in delinquent behaviour in general ($p < .01$), gambling behaviour ($p < .01$), violent offence ($p < .01$), gangs behaviour ($p < .01$), and sexual misconduct ($p < .01$) than females.

However, no significant gender differences were found in property offence and drug offence, as well as the moral reasoning. Among the three negative emotions, significant gender difference was only found in depression that males were more likely to be depressed when compared to females ($p < .05$). Regarding the self-concepts,

Table 2

Gender difference in the prevalence of delinquent behaviour, moral reasoning, negative emotions, and self concepts

	<u>Male</u>		<u>Female</u>		<i>t</i>	<i>Cohen's d</i>	<i>r_yλ</i>
	Mean	SD	Mean	SD			
Delinquent behaviour	1.56	.67	1.26	.44	4.35**	.52	.25
Gambling behaviour	1.66	1.02	1.25	.50	4.39**	.51	.25
Violent offence	1.48	.66	1.23	.44	3.83**	.45	.22
Property offence	1.16	.43	1.09	.38	1.38	.17	.08
Gangs behaviour	1.72	1.00	1.36	.66	3.62**	.43	.21
Sexual misconduct	2.12	1.19	1.42	.76	5.93**	.74	.35
Drug offence	1.24	.73	1.15	.58	1.06	.13	.06
Moral Reasoning	6.07	1.31	5.97	1.14	.65	.08	.04
Stress	8.72	4.91	8.12	4.33	1.04	.13	.07
Anxiety	5.94	4.36	5.36	3.80	1.15	.14	.07
Depression	6.85	4.73	5.49	4.42	2.41*	.30	.15
Self-esteem	13.81	5.20	14.92	4.82	-1.79	-.22	-.11
Moral self	12.69	4.53	14.83	3.71	-4.30**	-.52	-.25

* $p < .05$, ** $p < .01$, *d.f.* = 239.94 - 273.35 due to missing values.

significant gender difference was found only in moral self but females showed higher degree of moral self than males ($p < .01$).

3.2. Correlation between Delinquent Behaviour, Negative Emotions, and Self Cognition

Correlation analyses were conducted on the relationship between delinquent behaviour, negative emotions, and self-concepts (see Table 3). Delinquent behaviour were further divided into different categories, including gambling, violent offence, property offence, gangs behaviour, sexual misconduct, and drug offence. All these various categories of delinquent behaviour were significantly correlated with each other, ranging from $-.186$ to $.887$ ($ps < .01$). And, some of these categories of delinquent behaviour were significantly correlated with moral reasoning, including gambling ($r = -.137$, $p < .05$), property offence ($r = -.249$, $p < .01$), sexual misconduct ($r = -.191$, $p < .05$), and drug offence ($r = -.137$, $p < .01$). Other types of offence did not show a significant correlation with moral reasoning, but, in general, delinquent behaviour was significantly correlated with moral reasoning ($r = -.186$, $p < .01$), showing that the more the individual can perform moral reasoning, the less the delinquent behaviour.

Moreover, all three negative emotions separately showed significant positive correlation with all the categories of delinquent behaviour, with the correlation ranging between $.178$ and $.413$ ($ps < .01$). Also, an individual's degree of moral reasoning was negatively associated with these negative emotions, including stress ($r = -.171$, $p < .01$), anxiety ($r = -.155$, $p < .05$), and depression ($r = -.130$, $p < .05$). The above results showed that anxious, depressed, or stressful people were more likely to be involved in delinquent behaviour and less capable to have moral reasoning.

On the other hand, moral self was found to be significantly and negatively correlated with certain kinds of delinquent behaviour including gambling ($r = -.130$, $p < .05$), gangs act ($r = -.175$, $p < .01$), and sexual misconduct ($r = -.166$, $p < .01$), and

Table 3

Correlation table of delinquent behaviour, negative emotions, and self concepts

	1	2	3	4	5	6	7	8	9	10	11	12	13
1 Delinquent behaviour	1	.854**	.887**	.773**	.855**	.845**	.792**	-.186**	.413**	.263**	.328**	.005	-.153*
2 Gambling		1	.675**	.490**	.618**	.725**	.585**	-.137*	.368**	.200**	.226**	.053	-.130*
3 Violent offence			1	.722**	.741**	.660**	.773**	-.053	.347**	.265**	.299**	.068	-.054
4 Property offence				1	.662**	.525**	.732**	-.249**	.335**	.254**	.219**	.040	-.010
5 Gangs behaviour					1	.688**	.645**	-.102	.293**	.188**	.282**	-.003	-.175**
6 Sexual misconduct						1	.574**	-.191**	.319**	.178**	.273**	.010	-.166**
7 Drug offence							1	-.137*	.397**	.359**	.316**	-.062	-.085
8 Moral reasoning								1	-.171**	-.155*	-.130*	.152*	.139*
9 Stress									1	.755**	.708**	-.401**	-.112
10 Anxiety										1	.756**	-.491**	-.111
11 Depression											1	-.639**	-.218**
12 Self esteem												1	.514**
13 Moral self													1

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

also delinquent behaviour in general ($r = -.153, p < .05$). However, self-esteem was not found to be correlated with any delinquent behaviour. Predictably, both moral self and self-esteem were significantly correlated with moral reasoning ($r = -.139; r = -.152, ps < .05$). Also, significant and negatively high correlations were found between self-esteem and anxiety ($r = -.491, p < .01$), depression ($r = -.639, p < .01$), and stress ($r = -.401, p < .01$), suggesting that anxious, depressed, and stressful people were more likely to have low self-esteem. Similar correlations were also found between moral self and depression ($r = -.218, p < .01$), but except stress and anxiety. Since moral self and self-esteem are both measuring the self concepts, they were highly correlated ($r = -.514, p < .01$).

3.3. Regression Analyses for the effects of Negative Emotions and Self Cognition on Delinquent Behaviour

Multiple regressions were conducted for different variables to show their effects on delinquent behaviour. Table 4 was a hierarchical regression analysis showing a general picture of the effects of the variables (moral reasoning, self-esteem, moral self, stress, anxiety, and depression) on delinquent behaviour. To be specific, each variable were examined individually for its own effect on delinquent behaviour. But, it was found that not all variables had a significant predicting effect on delinquent behaviour. Mediation analysis was computed for the models which met the criteria that three paths of the independent variable, mediator, and dependent variable were found to have significant predictions on each other. In this study, only two models were found to have significant mediation and one was found to have partial mediation (see Table 5).

In model 1, moral self significantly predicted delinquent behaviour with $\beta = -.153$ ($p < .05$) in which increased in moral self signified decreased in delinquent behaviors. Depression, as a proposed mediator, also significantly predicted delinquent

Table 4

Hierarchical Regression Analysis of the predicting effect of self cognition and negative emotions on delinquent behaviour

	Std β	SE	R	R ² change
Step 1				
<i>Self Cognition</i>				
Moral reasoning	-.166**	.031	.290	.084**
Self-esteem	.148*	.009		
Moral self	-.263**	.011		
Step 2				
<i>Self Cognition</i>				
Moral reasoning	-.122*	.026	.604	.280**
Self-esteem	.556**	.009		
Moral self	-.339**	.009		
<i>Negative Emotions</i>				
Stress	.364**	.011		
Anxiety	-.088	.014		
Depression	.418**	.013		

DV: Delinquent behaviour, * $p < .05$, ** $p < .01$

behaviors ($\beta = .309$, $p < .001$), showing that depression had a strong direct effect on delinquent behaviors. Also, increased in moral self significantly predicted a decrease in depression ($\beta = -.218$, $p < .001$). A multiple regression was computed since the above regressions were all found to be significant, and the β -value decreased from $-.153$ ($p < .05$) to $-.086$ ($p > .05$), indicating that depression significantly mediated the effect of moral self on delinquent behaviour. In other words, depressed people with low moral self were more likely to be involved in delinquent behaviour.

On the other hand, in model 2, increased in moral reasoning significantly predicted a decrease in delinquent behaviour ($\beta = -.180$, $p < .01$) and a decrease in stress ($\beta = -.171$, $p < .01$). And, stress, which was proposed as a mediator in this model, significantly predicted delinquent behaviour, in which higher stress predicted the

increasing involvement of delinquent behaviour ($\beta = .401$, $p < .001$), showing that stress had a strong direct effect on delinquent behaviour. Since all the above pathways were found to be significant, the multiple regression was computed for this model and it was found that stress significantly mediated the effect of moral reasoning on delinquent behaviour, by decreasing the β -value from $-.180$ ($p < .01$) to $-.113$ ($p > .05$). In sum, a stressful person with low ability of moral reasoning was more likely to perform delinquent behaviour.

Table 5

Mediation analysis of the three models which fulfilled the criteria of having three significant predicting paths

	Std β	SE	R	R ² change
Model 1.				
<i>Step 1</i>				
Moral self (IV)	-.153*	.008	.153	
<i>Step 2</i>				
Moral self (IV)	-.086	.008	.339	.091**
Depression (MV)	.309**	.008		
Model 2.				
<i>Step 1</i>				
Moral reasoning (IV)	-.180**	.031	.180	
<i>Step 2</i>				
Moral reasoning (IV)	-.113	.029	.443	.164**
Stress (MV)	.410**	.008		
Model 3.				
<i>Step 1</i>				
Moral reasoning (IV)	-.180**	.031	.180	
<i>Step 2</i>				
Moral reasoning (IV)	-.120*	.029	.411	.136**
Negative emotions (MV)	.374**	.009		

DV: Delinquent behaviour, * $p < .05$, ** $p < .01$

In model 3, anxiety, depression and stress were grouped into a single variable named negative emotions and it was found that it significantly predicted delinquent behaviour ($\beta = .374, p < .001$), in which the increased negative emotions signified the increased delinquent behaviour. And, it was found that increased level of moral reasoning predicted decreased negative emotions ($\beta = -.166, p < .01$). With all the pathways being significant, the multiple regression was computed for this model with the negative emotion as the mediator, and the result showed that negative emotion partially mediated the effect of moral reasoning on delinquent behaviour since the β – value decreased from $-.180 (p < .01)$ to $-.120 (p = .045, \text{with marginally significance})$.

Discussion and Conclusions

4.1. Major Findings and Limitations of this study

To my best knowledge, there was limit of study related to delinquents' emotions and self cognition on Chinese youth samples. Therefore, this study contributed to the local context with significant results on some proposed hypotheses. In general, it revealed that, in this sample, Hong Kong youths generally were less involved in all kinds of delinquent behaviors with the means for different items of delinquent behaviour ranging from 1.04 to 2.20, but had a larger proportion of involvement on diligent behaviors, with the means of different diligent behaviors ranging between 1.69 and 4.08. Gender difference was found in the measurement of delinquent behaviour and some sub-types of delinquent behaviour, as well as depression, suggesting the importance of more guidance and awareness on the boys. However, several studies showed an opposite findings that females were more likely to be depressed when compared to males (Nolen-Hoeksema, & Girgus, 1994; Turner, Laine, Cosler, & Hauck, 2003), especially after the age of 15, due to more challenges and risk factors carried or faced by girls in adolescents. A possible explanation for the current result is the gender difference in coping. Females tended to use emotion-focused coping strategies and were more likely to seek social support from others when encountering a stressful problem, while males had a tendency to use problem-focused coping strategies and tried to solve the problem on their own (Ptacek, Smith, & Dodge, 1994). Therefore, boys tended not to seek others' support even when they cannot handle their problems well, leading to a frustrated situation and depressed emotion may occur.

Hypotheses 1 and 3 were supported with all three negative emotions, including anxiety, stress, and depression, significantly correlated with all kinds of suggested delinquent behaviour. More importantly, they were found to be the significant positive predictors of the youth's engagement of delinquent behaviour. These findings revised

the mixed results of previous studies, suggesting that higher level of negative emotions facilitated an individual's involvement of delinquent act.

However, hypotheses 2 and 4 were partially supported by this study. To be specific, moral reasoning and moral self were significantly correlated with and predicted delinquent behaviour in general. But, the current study failed to show a significant correlation between self-esteem and any types of delinquent behaviour, and, self-esteem was not a significant predictor of delinquent behaviour as well. Self-esteem is an evaluation of an individual by his/ her own. It can be a motivator of achievement in school or in the youth culture group, but, self-esteem can also be restored from engaging delinquent behaviour if the teenagers failed to obtain self-esteem from school (Bynner, O'Malley, & Bachman, 1981). Moreover, the relationship between self-esteem and delinquency may not be a direct linear one, and hence it cannot be shown by linear regression or correlation analysis. A recent study found that self-esteem was relatively low prior to the emerge of delinquent behaviour, however, self-esteem can be gradually enhanced after the adolescent involved in delinquent behaviour and gained peer support from the delinquent group (Lo et al., 2011). In other words, the relationship could be a curvilinear one. Thus, it is not necessary that delinquents are correlated with low self-esteem. Also, the effect of self-esteem on delinquent behaviour may be mediated by some other variables, for example, parental support or school achievements, it is suggested that these third variables could be added in future study when measuring the effect of self-esteem on delinquency.

The major findings of current study were the mediation effects of negative emotions which mediated the effect of moral self and moral reasoning on delinquent behaviour separately, thus, hypothesis 5 was partly supported by the current results. In model 1, depression mediated the effect of moral self on delinquent behaviors. This result can be best explained by the relationship between depression and cognition. Since

moral self is one of the cognition of self, depression affected cognition as well as its component, moral self. Studies discovered that depression had significant main effect on cognitive performance test, showing that more depressive symptoms associated with poor cognition (Bierman, Cornijs, Jonker, & Beekman, 2005), or even caused selective cognition deficit (Gallassi, Morreale, & Pagni, 2001). Therefore, depressed people with poor cognitive functioning and poor cognition for moral self failed to make moral judgment efficiently on the situation and these people were placed at a high risk of performing delinquent behaviour. In model 2, stress mediated the effect of moral reasoning on delinquent behaviour, which can be elaborated by the relationship of stress and the power of judgment since moral reasoning is the ability to make judgment on moral issues. Kowalski-Trakofler, Vaught and Scharf (2003) suggested that stress narrowed an individual's focus of attention. Also, in regarding the pattern of solving problem, it was found that people under stressful condition put focus on the problem's general outline, but people who were not in a stressful condition focused on in-depth analysis for solving the problem (Dorner & Pfeifer, 1993). Narrowing the focus may help to eliminate those information which are not essential, however, stressful people tended to focused on a general outline of the issue, in which they were not able to filter out the unimportant information and to make an effective judgment. In turn, the ability of moral reasoning was influenced by poor judgment. Therefore, stressful people who had particular poor moral reasoning were more likely to take part in delinquent behaviour. Similarly, in model 3, negative emotions including stress, anxiety, and depression partially mediated the effect of moral reasoning on delinquent behaviors. However, there were little studies on the direct relationship between anxiety or depression and the power of judgment. Anxiety is a common response to a stressful situation, and, if this stressful event continues but an individual is unable to cope with it effectively, depression may occur (Smith et al., 2003). Thus, the result of partial

mediation in current study may largely due to the mediating role of stress.

4.2. Conclusions

To conclude, delinquency is a problem with multiple inter-related causes and effects, larger samples and more variables should be included for a comprehensive view on the situation of delinquent behaviour. But, the current study provided a general view for the situation of delinquency among Hong Kong youths. More importantly, the emotions and self concepts of the youths should be considered more. In Hong Kong, at least one social worker had been assigned to each school to help the students by providing counseling and promoting mental health at school. For those who had been working, they can also seek help from The Mental Health Association of Hong Kong which provides websites, talks and first aid courses on handling mental health problem. However, even the helping sources are available, teenagers may not realize their own issues. Therefore, not only the teachers and social workers at school, other parties such as peers and parents should make efforts to provide guidance to the teenagers away from delinquent behaviour.

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Appendix A – Questionnaire

第一部份

編號: _____

請只『✓』一項或在橫線上作答。

性別: ☐男 ☐女

年齡: _____

教育/ 就業狀況: ☐中五 ☐中六 ☐中七☐副學士 ☐大專____年級 ☐就業 ☐無業/ 待業出生地點: ☐香港 ☐中國 ☐其他地方(請註明: _____)

第二部份

在最近三個月，你有沒有以下的行為 / 習慣？請於下列各題圈出一個最適合的數字，作為你的答案。

		沒有	很少	間中	頗多	經常
1	在家中看影帶 / 影碟	1	2	3	4	5
2	吸煙	1	2	3	4	5
3	玩電腦遊戲 / 電子遊戲	1	2	3	4	5
4	上網瀏覽網頁	1	2	3	4	5
5	群黨在公園 / 球場溜連	1	2	3	4	5
6	玩 MSN	1	2	3	4	5
7	學音樂 / 樂器練習	1	2	3	4	5
8	在店鋪偷竊	1	2	3	4	5
9	蓄意在街上掉垃圾 / 吐痰	1	2	3	4	5
10	閱讀報紙 / 書刊	1	2	3	4	5
11	逗留網吧 / 遊戲機中心	1	2	3	4	5
12	未獲得父母的准許，整晚外出不回家	1	2	3	4	5
13	在公眾地方塗鴉 / 塗劃牆壁	1	2	3	4	5
14	偷竊汽車內的東西	1	2	3	4	5
15	閱讀漫畫	1	2	3	4	5
16	在街上『撩』人、侮辱人或打架	1	2	3	4	5
17	看色情物品(包括刊物 / 電影 / 錄影帶 / VCD / 網頁等)	1	2	3	4	5
18	進行康體活動如: 球類活動 / 游泳	1	2	3	4	5

		沒有	很少	間中	頗多	經常
19	飲酒	1	2	3	4	5
20	用說話欺凌別人	1	2	3	4	5
21	以實際行動欺凌別人	1	2	3	4	5
22	看電視 / 聽收音機	1	2	3	4	5
23	參與非法賭博 (例如: 外圍投注)	1	2	3	4	5
24	未經許可, 進入別人的屋內	1	2	3	4	5
25	做義工 / 參與社會服務	1	2	3	4	5
26	與黑社會朋友來往	1	2	3	4	5
27	閱讀小說 / 雜誌	1	2	3	4	5
28	進行婚前性行為	1	2	3	4	5
29	蓄意乘車不付車資	1	2	3	4	5
30	溫習 / 讀書	1	2	3	4	5
31	無牌駕駛車輛	1	2	3	4	5
32	在朋友家中偷竊	1	2	3	4	5
33	攜帶武器以備打架時用	1	2	3	4	5
34	破壞公共設施	1	2	3	4	5
35	破壞別人房子或店鋪	1	2	3	4	5
36	買六合彩	1	2	3	4	5
37	吸毒/ 濫藥 (例如: 非法使用精神科藥物)	1	2	3	4	5
38	到賭場/ 麻雀館進行有賭博成份的活動	1	2	3	4	5
39	在家中偷錢	1	2	3	4	5
40	行商場 / 逛街	1	2	3	4	5
41	未經醫生指示服用受管制藥物或毒品	1	2	3	4	5
42	購買翻版物品 (包括手袋 / CD / VCD / 電腦軟件等)	1	2	3	4	5
43	賭波/ 賭馬	1	2	3	4	5
44	參加社區中心 / 兒童或青年中心的活動	1	2	3	4	5

請翻閱下頁繼續第三部份

第三部份

請小心閱讀以下每一題故事，並在每題結尾右方圈上一數字，表示你認為最適合的答案。

例子

你認為那一位的做法比較好？	1. 甲同學 2. 乙同學
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第一題

小齊碰到一個還沒吃晚餐的窮朋友，可是身上卻沒有錢，於是走進超商，趁店員不注意的時候，偷了一些東西出來給他的朋友吃。

安琪走進了一家百貨公司。她看見一條美麗的絲巾，心裡想如果把它結在衣服上該多好。於是趁店員不注意的時候，偷了絲巾，立刻就走。

你認為誰比較不應該？

1. 小齊 2. 安琪

第二題

甲小孩到街上去散步，碰到一條大狗，把他嚇了一大跳。因此，他回家告訴媽媽，說他看見一條大狗像牛那麼大。

乙小孩從學校放學回家，告訴媽媽他今天考試的成績很好。媽媽就高興的鼓勵他。事實上，今天並沒有考試。

你認為那一個孩子比較不對？

1. 甲 2. 乙

第三題

一個小孩在房間裡玩，媽媽叫他去買晚餐要吃的米，他不肯立刻去，說等一會才去。一個鐘頭後，還是沒去。晚餐時，沒有飯可吃，爸爸不高興，正猶豫著不知要用那個最公平的方法來懲罰這個小孩。請你替爸爸決定吧！爸爸所想到的三個方法是：

1. 小孩很想騎木馬，那麼就禁止他第二天到兒童樂園騎木馬。
2. 不給他吃任何飯（昨天還剩下一點飯）。
3. 告訴他：「你既然不幫媽媽的忙，以後你需要人幫忙的時候，我就不幫你的忙。」

你認為爸爸的那一種方法比較好？

1. 2. 3.

第四題

有個幫派老大被警察抓走了。小黑和寶哥知道後，兩人都想當老大，於是參加幫中老大選舉，結果小黑當選。寶哥很生氣，就寫了一封匿名信向警察密告，指控小黑和全體弟兄曾做了一樁搶劫案，他還告訴警察小黑藏匿的地方和逮捕的方法，結果小黑被捕了。幫中弟兄們知道這件事，決定懲罰寶哥。

他們該怎麼辦？

1. 在一個月內不分錢給他。
2. 把他攆出幫派，不讓他參加了。
3. 照樣用匿名信告發他也是同黨。

第五題

媽媽告訴三個孩子，在她外出的時候不要玩剪刀。她一走，老大說：「讓我們來玩剪刀吧！」老二就拿了些報紙來剪。老三說：「不！媽說我們不可以玩的，我不玩。」媽媽回來，看見地板上有些剪碎的報紙，知道一人玩剪刀，於是三個孩子都一起懲罰了。

媽媽這樣做，你認為對不對？

1. 對 2. 不對

第六題

阿海跟阿強正在果園裡偷蘋果。突然間，警察來了，他們拔腿就跑。阿海被抓到，阿強繞著路逃回家，但經過一座破橋的時候，竟掉進水裡去了。

如果阿強沒有偷蘋果，可是同樣地走過那一座破橋，你認為他會不會掉進水裡去？

1. 會 2. 不會

第七題

一個假日的早上，媽媽帶著孩子們去遠足。到了中午的時候，她就分叉燒包給他們，一人一個。大家都在吃，只有老么不小心，把叉燒包掉進池塘裡，沒得吃。

你認為媽媽該怎麼辦？

1. 不應再給老么一個了。
2. 應再給老么一個，但其他孩子也應再給一個。
3. 應再給老么一個，因為他最小。

第八題	
有個星期四下午，爸爸工作累了，就叫他的兒子和女兒幫忙做家事：女兒擦盤子，兒子拖地板。可是兒子卻跑到街上去玩。於是爸爸就叫女兒把所有的工作做完。	
爸爸這樣做，你認為怎樣？	1. 對 2. 不對
第九題	
學校裡，有個國三學長欺負了一個國一學弟。學弟力氣不夠大，不敢抵抗。有一天，下課的時候，學弟就用小石頭丟那個學長。	
你認為怎樣？	1. 學弟不應該丟。 2. 學弟丟得對。

請翻閱下頁繼續第四部份

第四部份

請小心閱讀以下每一個句子，並在其右方圈上一數字，表示「過往一個星期」如何適用於你。
答案並無對錯之分。請不要花太多時間在某一句子上。

評估量表：

0＝不適用

1＝頗適用，或間中適用

2＝很適用，或經常適用

3＝最適用，或常常適用

1	我覺得很難讓自己安靜下來	0	1	2	3
2	我感到口乾	0	1	2	3
3	我好像不能再有任何愉快、舒暢的感覺	0	1	2	3
4	我感到呼吸困難（例如不是做運動時也感到氣促或透不過氣來）	0	1	2	3
5	我感到很難自動去開始工作	0	1	2	3
6	我對事情往往作出過敏反應	0	1	2	3
7	我感到顫抖（例如手震）	0	1	2	3
8	我覺得自己消耗很多精神	0	1	2	3
9	我憂慮一些令自己恐慌或出醜的場合	0	1	2	3
10	我覺得自己對將來沒有甚麼可盼望	0	1	2	3
11	我感到忐忑不安	0	1	2	3
12	我感到很難放鬆自己	0	1	2	3
13	我感到憂鬱沮喪	0	1	2	3
14	我無法容忍任何阻礙我繼續工作的事情	0	1	2	3
15	我感到快要恐慌了	0	1	2	3
16	我對任何事也不能熱衷	0	1	2	3
17	我覺得自己不怎麼配做人	0	1	2	3
18	我發覺自己很容易被觸怒	0	1	2	3
19	我察覺自己在沒有明顯的體力勞動時，也感到心律不正常	0	1	2	3
20	我無緣無故地感到害怕	0	1	2	3
21	我感到生命毫無意義	0	1	2	3

22	我覺得我有些優點	0	1	2	3
23	我樂於助人	0	1	2	3
24	我信任自己	0	1	2	3
25	我樂於為人服務	0	1	2	3
26	我有充足的自信心	0	1	2	3
27	我心地善良	0	1	2	3
28	很多時候我覺得自己無用	0	1	2	3
29	別人不信任我	0	1	2	3
30	我覺得我是個失敗者	0	1	2	3
31	我富責任感	0	1	2	3
32	我沒有甚麼值得自豪	0	1	2	3
33	誠實是我的優點	0	1	2	3
34	很多時候我懷疑自己的才幹	0	1	2	3
35	我懂得為別人著想	0	1	2	3
36	總括來說我對自己頗滿意	0	1	2	3
37	我以真誠待人	0	1	2	3

全卷完，謝謝！

Appendix B – Consent Form**香港城市大學 - 學生畢業論文**

您好，本人是香港城市大學心理學三年級學生，現正進行有關本港青少年行為習慣與情緒及判斷能力之關係的研究，當中包括正面及違規行為。

您的參與對此研究尤其重要，故誠邀閣下抽空片刻完成本問卷。閣下所提供之所有資料絕對保密並僅作為是次研究之用途，問卷資料將於研究完成後銷毀。此問卷均無標準答案，請如實填寫即可。在填寫問卷前，請先簽署有關此問卷的同意書(見下文)；如不同意，請歸還空白問卷即可。

如您對此研究有任何疑問，歡迎電郵至 ytwan9@student.cityu.edu.hk 查詢。在此感謝閣下的參與。

同意書

我同意參與上述研究及填寫問卷。

我知道我可以在任何時候自由退出此計劃，而且，我提供的任何未處理的數據將在研究完成後被銷毀，並知道這個計劃將不會以任何形式發表任何參與者的名字或個人資料。

簽署：_____

Appendix C – Invitation Letter



人文社會科學院
College of Liberal Arts and Social Sciences



香港城市大學
City University
of Hong Kong

香港九龍達之路
Tat Chee Avenue, Kowloon,
Hong Kong

應用社會科學系
Department of
Applied Social Studies

聖伯多祿中學劉校長：

我是香港城市大學心理學三年級的學生，現正進行一項有關本港青少年行為、情緒及判斷能力之研究，當中包括正面及違規行為。

是次研究的對象為中六至中七學生，我們擬派發大約一百二十份問卷以收集資料。因此，我們誠邀 貴校作為是次研究的參加者，提供寶貴的資料，本人將親臨 貴校派發問卷給學生，以協助完成此次調查報告。

如有任何查詢，請直接致電61997460或電郵ytwan9@student.cityu.edu.hk與溫玉婷小姐(Yuki)聯絡，或向本研究指導鄭漢光博士查詢(電郵 sshkc@cityu.edu.hk)。

如蒙答應，謹此致謝，佇候回覆。

敬祝
教安

香港城市大學心理學三年級學生

溫玉婷



謹啟

指導老師：鄭漢光博士

二零一一年十一月二十五日