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A study of the reasons and functions of non-suicidal self-injury (NSSI) among students in Hong Kong and United Kingdom

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Research Topic: **A Study of the Reasons and Functions of Non-suicidal Self-injury (NSSI) among students in Hong Kong and United Kingdom**

Abstract

This study examines non-suicidal self-injury (NSSI) in a community sample of adolescents and young adults in Hong Kong and United Kingdom. Non-suicidal self-injury (NSSI) refers to direct, deliberate destruction of one's own body tissue in the absence of intent to die. Apart from investigating the reasons and functions of non-suicidal self-injury (NSSI), this study also examined the gender as well as cultural differences in self-injurious behaviors. Functional Assessment of Self-Mutilation (FASM) was used to examine non-suicidal self-injury (NSSI).

Overall, 17.1% (n=46) out of 269 participants (n=269) endorsed engaging in non-suicidal self-injury (NSSI) in the past 12 months, with more females (9.7%) than males (7.1%). 18.2% (n = 49) of participants reported engagement in non-suicidal self-injury (NSSI) at least once in their life time. Stresses and borderline personality disorders (BPD) were found to correlate with self-harm behaviors. No cultural differences in self-harm behaviors between Hong Kong and United Kingdom were shown. Meanwhile, no gender differences were shown in the types of self-harm behaviors engaged and the reasons of engaging in non-suicidal self-injury (NSSI).

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Chapter 1 Introduction

1.1 Background

These days, adolescents and young adults are facing lots of problems, such as interpersonal and love issues, academic problems, etc. They may experience great pressures from these difficulties and adopt ineffective as well as harmful coping strategies. For instance, they are likely to engage in smoking, drinking and self-injury. Some of the youngsters will perform suicidal behaviors in the extreme (Nock, 2009). The Hong Kong Council of Social Service found that 2.73 per 100,000 teenagers aged 10 to 19 committed suicides in 2008 in Hong Kong (The Hong Kong Council of Social Service, n.d.). Based on the figures released by the Office for National Statistics (ONS) in United Kingdom (2012), there were 5,608 suicides in people aged 15 years and over in the UK in 2010.

According to a research conducted by the Center for Child Development (CCD) (2004) of Hong Kong Baptist University (HKBU), around 30% of over 1,600 Form 1 to Form 5

secondary school students in Hong Kong have engaged in self-harm behaviors. More than 43% of the participants have had suicide intention previously. The most common form of self-injury are scratching oneself, hitting or biting oneself and cutting. In United Kingdom, 6.9% of participants out of 6020 pupils aged 15 and 16 years reported an act of deliberate self -harm in 2001 (Hawton, Rodham, Evans & Weatherall, 2002).

Although self-harm is a behavior that would lead to catastrophic consequences on the development of our new generation, the problem is being overlooked in our society. In this study, the reasons and functions of self-injurious behaviors among adolescents and young adults in Hong Kong and United Kingdom would be examined. The cultural differences in non-suicidal self-injury (NSSI) between Hong Kong and United Kingdom would be studied as well in order to understand variation in the prevalence of non-suicidal self-injury (NSSI).

1.2 Objectives and Research Questions

As suggested by the American Psychiatric Association (2010) in the coming diagnostic and Statistical Manual of Mental Disorders (DSM-5), deliberate

self-injurious behaviors would cause clinically significant distress or impairment in interpersonal, academic, or other important areas of functioning. To understand more about the non-suicidal self-injury as well as the cultural differences in self-harm behaviors, the present study would look into the reasons and functions of non-suicidal self-injury among adolescents and young adults in Hong Kong and United Kingdom.

Chapter 2 Literature Review

2.1 Self-mutilation

Self-mutilative behaviors (SMB) stand for deliberate damage to one's own body tissue without suicidal intent and are part of the larger class of self-injurious behaviors that includes actions ranging from stereotypic skin rubbing to completed suicide (Nock & Prinstein, 2004, 2005). Self-harm behaviors can be also named as non-suicidal self-injury (NSSI) and self-injurious behavior (SIB) in plentiful studies. Non-suicidal self-injury (NSSI) refers to direct, deliberate destruction of one's own body tissue in the absence of intent to die (Nock, Joiner Jr, Gordon, Lloyd-Richardson & Prinstein, 2006; Klonsky, 2007; Tang et al., 2011) while self-injurious behavior (SIB) means individual directly and deliberately causes harm to oneself (Nock et al., 2006). To combine the definition of self-mutilation among studies, it indicates that one destructs him or her deliberately without suicidal intention.

Nock and Prinstein (2004) stated that 82.4% of 108 participants engaged in at least one incident of self-injurious behaviors in the past one year. The samples used in Nock and Prinstein's study (2004) were patients drawn from consecutive admissions

to an adolescent psychiatric inpatient unit in New England. Whitlock, Powers & Eckenrode (2006) reported that 490 individuals (17.0%) out of 2875 practiced self-harm behaviors without suicidal intention. Common methods of self-mutilation include cutting or craving on skin, picking at a wound, hitting self, biting self, burning skin and pulling out one's own hair (Nock & Prinstein, 2004; Whitlock et al. 2006; Whitlock, Eckenrode & Silverman, 2006; Klonsky & Olino, 2008;). The average age of onset of self-injurious behaviors was 15 to 16 years old, which was during the middle adolescence stage (Whitlock et al., 2006).

In the proposed fifth edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-5) developed by the American Psychiatric Association (2010), Non-Suicidal Self Injury will be included as one of the psychological disorders. One of the proposed diagnostic criteria of non-suicidal self-injury is ' In the last year, the individual has, on 5 or more days, engaged in intentional self-inflicted damage to the surface of his or her body, of a sort likely to induce bleeding or bruising or pain (e.g., cutting, burning, stabbing, hitting, excessive rubbing), for purposes not socially sanctioned (e.g., body piercing, tattooing, etc.), but performed with the expectation that the injury will lead to only minor or moderate physical harm'. Meanwhile, non-suicidal self-injury behaviors are thought to be associated with a purpose, for example, relief from a

negative feeling, cognitive state or interpersonal difficulty or induction of a positive feeling state.

When it comes to the function of self-mutilative behaviors, Nock and Prinstein (2004) proposed four primary functions of the behavior, including automatic negative reinforcement, automatic positive reinforcement, social negative reinforcement and social positive reinforcement. The validity and reliability of these four functions have been tested and supported by confirmatory factor analyses and reliability analyses (Nock & Prinstein, 2005).

For automatic negative reinforcement, it refers to an individual's use of self-mutilaitve behaviors to achieve a reduction in tension or other negative affective states, such as "to stop bad feelings". Automatic positive reinforcement involves engaging in self-mutilative behaviors to create a desirable physiological state, like "to feel something even if it was pain". When it comes to social negative reinforcement, it means an individual's use of self-mutilative behaviors to escape from interpersonal task demands, for example, "to avoid punishment from others" or "to avoid doing something unpleasant". Social positive reinforcement refers to gaining attention from others or gaining access to materials, such as "to try to get a reaction out of

someone, even if it is negative" or "to let others know now unhappy I am" (Nock & Prinstein, 2004).

In this study, the definition of self-mutilation will be extended to include not only physically self-injurious behaviors like cutting, biting self, but also include health compromising behaviors and reckless behaviors. Health compromising behaviors include eating disorders behaviors such as restrained eating, binge eating as well as smoking and drinking. These health compromising behaviors do not lead to immediate and visible injury in most cases (Laye-Gindhy & Schonert-Reichl, 2005). Reckless behaviors include non-suicidal drug abuse, drunk driving and thrill-seeking behaviors such as speeding.

Only a few studies examined s non-suicidal self-injury (NSSI) behavior across a continuum, including these indirect behaviors (Laye-Gindhy & Schonert-Reichl, 2005). Since some teenagers participants reported they defined eating disordered behaviors and non-suicidal self-harm as self-mutilation (Laye-Gindhy & Schonert-Reichl, 2005), this study will included these indirect behaviors to attend adolescents' viewpoints of self-injury.

2.2 Risk Factors Associated with Self-mutilation

2.2.1 Gender

There are few risk factors associated with self-mutilative behaviors. Wong, Stewart and Lam (2007) showed that deliberate self-injurers were frequently girls, older and with more suicidal ideation. The study done by Ross and Heath (2002) also showed that female (64%) were more likely to engage in self-mutilative behaviors than male (36%) while other studies showed similar gender differences in deliberate self-harm behaviors too (Hawton et al., 2002). The reason for the gender difference suggested by Ross and Heath (2002) was due to the difference in coping behaviors between males and females. Since outward expression of anger is not a socially acceptable coping strategy for female, they tend to express their anger inwardly toward themselves and engage in self-injurious behaviors more easily. Boys, however, tend to direct their emotions outwardly (Crick & Zahn-Waxler, 2003).

Apart from the gender difference in the number of self-harm, the types and motivations of self-harm behaviors are different between male and females. Laye-Gindhu and Schonert-Reichl (2005) proposed that girls are more likely to

engage in cutting-type behaviors whereas boys will use hitting, biting or punching themselves for self-harm. Only females in the study reported substance abuse and eating disordered behaviors as self-mutilative behaviors. The reasons suggest by Laye-Gindhu and Schonert-Reichl (2005) are that females' self-injurious behaviors are motivated by despair and other negative emotions such as depression while boys want to communicate with and influence others by self-harm. Therefore, the types of non-suicidal self-injury are different between male and females. In this study, the reasons and types of non-suicidal self-injury between female and male will be examined for the sake of studying gender differences in self- mutilative behaviors.

Meanwhile, females were significantly more to engage in repetitive self-injurious behaviors than males (Whitlock et al., 2006). Contrary to these results showing females were more likely to engage self-harm behaviors, some studies showed that males were more likely to be engaged in non-suicidal self-injury (NSSI) (Tang et al., 2011). While some studies indicated the gender differences, some researchers reported no significant gender difference in the prevalence of self-injury (Gollust, Eisenberg & Golberstein, 2008; Lloyd-Richardson et al., 2007).

2.2.2 Borderline Personality Disorder (BPD)

Another risk factors causing non-suicidal self0injury (NSSI) behaviors) is borderline personality disorder (BPD). In earlier studies, self-injurious behaviors were usually linked with borderline personality disorder (BPD). Referring to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) published by the American Psychiatric Association (2000), borderline personality disorder (BPD) is a pervasive pattern of instability of interpersonal relationships, self-image, and affects and marked impulsivity beginning by early adulthood. There are nine diagnostic criteria for borderline personality disorder (BPD), for instance, recurrent suicidal behaviors, gestures, or threats or self-mutilating behavior. Due to the impulsivity of borderline personality disorder, patients are more easily in engaging in self-harm behaviors. Moreover, individuals are likely to use self-mutilate behaviors to avoid abandonment when they experience intense abandonment fears and instable interpersonal relationships.

Despite being one of the five diagnostic criteria of Borderline Personality Disorder (BPD) in DSM-IV, self-mutilative behaviors are no longer solely viewed as a pathognomonic of borderline personality disorder (BPD) in some studies.

In other studies, borderline personality disorder (BPD) is still viewed as a causal factor of non-suicidal self-injury (NSSI). Nock, Joiner Jr, Gordon, Lloyd-Richardson and Prinstein (2006) showed that 51.7% of female participants reported self-harm behaviors met criteria for borderline personality disorder (BPD).

2.2.3 Internal Distress

Other risk factors include internal distress such as depressive symptoms and interpersonal distress like peer victimization (Hilt, Cha & Nolen-Hoeksema 2008). Hilt, Cha and Nolen-Hoeksema (2008) stated rumination moderated the relationship between depressive symptoms and self-injurious behaviors while quality of peer communication moderated the relationship between peer victimization and self-harm behaviors.

2.2.4 The development of and maintenance of non-suicidal self-injury (NSSI)

Moreover, Nock (2009) suggested an integrated theoretical model of the development of and maintenance of non-suicidal self-injury (NSSI), indicating distal

risk factors, and intrapersonal as well as interpersonal vulnerability factors for self-injurious behaviors. Distal risk factors contains genetic predisposition for high emotional or cognitive reactivity, childhood abuse and familial hostility. The presences of distal risk factors will increase the probability of developing non-suicidal self-injury (NSSI). For intrapersonal vulnerability factors, it consists of high aversive emotions and cognitions as well as poor distress tolerance. Interpersonal vulnerability is composed of poor communication skills and social problem-solving.

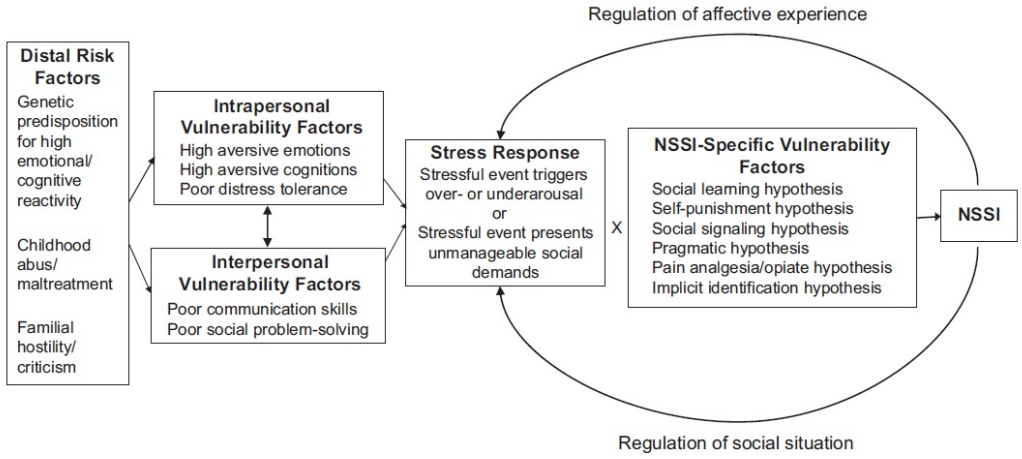

Figure 1: An integrated theoretical model of the development of and maintenance of non-suicidal self-injury (NSSI)

With these three risk and vulnerability factors, they will affect the stress response like over-arousal or under-arousal triggered by stressful events and NSSI-specific

vulnerability factors, for example, pragmatic hypothesis and self-punishment hypothesis, etc. These two factors will mediate the likelihood of engaging in non-suicidal self-injury (NSSI).

Chapter 3 Hypotheses

Based on earlier discussion, there are totally six hypotheses which will be tested in this research.

Teenagers and young adults may report higher level of stress because of the overwhelming problems and difficulties they encounter. For instance, they may worry about their academic results and their future career plan. Thus, they may have high probability to engage in non-suicidal self-injury (NSSI) if they feel too stressful.

Hypothesis 1: Adolescents and young adults are more likely to engage in non-suicidal self-injury (NSSI) when they are stressful and unable to cope with the stressors.
Hypothesis 1: perceived stress will be positively correlated with non-suicidal self-injury (NSSI)

Despite facing problems and difficulties, some teenagers and young adults may not choose to engage in deliberate self-harm behaviors. For those who engage in deliberate self-harm behaviors, it is believed that they may tend to adopt maladaptive coping strategies instead of adaptive coping strategies. Due to

intrapersonal vulnerability factors (Nock, 2009), some adolescents and young adults may have difficulties in expressing their feelings to others and communicating with others. They are overwhelmed by the stressful events and over-aroused by the stressful events, such as academic and intrapersonal problems. Therefore, they may be more likely to engage in non-suicidal self-injurious behaviors.

These hypotheses can be tested by the strategies used by adolescents and young adults to deal with stress. If they tend to use maladaptive coping strategies such as engage in risky things and hurt themselves on purpose, they may have a higher tendency in engaging in self-harm behaviors.

Hypothesis 2: Maladaptive coping strategies are correlated with non-suicidal self-injury (NSSI) positively.

Due to the cultural differences in Hong Kong and United Kingdom, the prevalence of non-suicidal self-injury (NSSI) is expected to be varied. In Hong Kong, youngsters and young adults are affected by the Chinese cultures, which make them believe in filial piety. The concept of filial piety is crucial to Chinese family systems, prescribing how Chinese children should behave toward their parents (Ho, 1994; Leung, Wong, Wong

& McBride-Chang, 2010). In traditional Chinese cultures, filial piety involves respect and obedience for one's parents, including preserving family honor, avoiding family disgrace (Leung, Wong, Wong & McBride-Chang, 2010). Adolescents and young adults may not dare to engage in deliberate self-injurious behaviors, which may hurt their parents' feelings and break the family honor.

On the contrary, students in United Kingdom are more likely to engage in deliberate self-injurious behaviors because of individualism. Individuals under this culture seek to maintain their independence from others by attending to the self and by discovering and expressing their unique inner attributes (Markus & Kitayama, 1991). They engage in any behaviors they enjoy and take the responsibility by their own. Thus, they may have high possibility in engaging in non-suicidal self-injury (NSSI).

Hypothesis 3: Adolescents and young adults in United Kingdom are more likely to engage in non-suicidal self-injury (NSSI) than that in Hong Kong.

Besides cultural differences, gender differences in non-suicidal self-injury (NSSI) would be investigated. As suggested by Laye-Gindhu and Schonert-Reichl (2005), females and males define non-suicidal self-injury differently. Their reasons for

performing self-injurious behaviors are different as well. This study proposed that females are more likely than males to involve in cutting-type behaviors and health compromising behaviors, particularly eating disorder behaviors as a mean for self-injury. Females tend to express their feelings inwardly under socialization (Crick & Zahn-Waxler, 2003), encouraging the internalization of problems and the use of hidden methods such as cutting and binge eating to relief their feelings.

Hypothesis 4: Females are more likely than males to use cutting and eating disorder behaviors as a mean for self-injury.

What is more, females engage in these types behaviors as a mean of self-harm for automatic reinforcement, such as to stop bad feelings and punish themselves since they are not expressive of their emotions (Crick & Zahn-Waxler, 2003). For males, they aim at using self-injurious behaviors to influence others and communicate with others (Laye-Gindhu & Schonert-Reichl, 2005). Therefore, they may engage in non-suicidal self-injury for social reinforcement, such as getting other people to act differently or change by hitting or punching themselves.

Hypothesis 5: Females are more motivated than males by automatic reinforcement

when performing non-suicidal self-injurious behaviors.

Apart from cultural as well as gender differences, borderline personality disorders (BPD) is often associated with non-suicidal self-injury (NSSI), the rate of borderline personality disorders (BPD) among adolescents with non-suicidal self-injury (NSSI) behaviors are unclear (Nock, Joiner Jr, Gordon, Lloyd-Richardson & Prinstein, 2006). Since recurrent self-mutilative behavior is one of the criteria in diagnosing borderline personality disorders (BPD) under the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), adolescents and young adults may have higher level of non-suicidal self-injury (NSSI) they have higher borderline personality disorders characteristics.

Hypothesis 6: Adolescents and young adults with have higher borderline personality disorders characteristics are prone to engaging in non-suicidal self-injury (NSSI).

Chapter 4 Method

4.1 Participants

Based on the information provided by the Education Bureau (2011), there are eight tertiary institutions funded by the University Grants Committee (UGC). For secondary education, there are 533 secondary schools in the 2010/11 school year in Hong Kong (Education Bureau, 2011). In United Kingdom, there are 41 higher education institutions in London (Department for Education, n.d.). Questionnaires were then being randomly distributed to students studying in secondary schools and universities in Hong Kong and London.

A total of 269 (n=269) questionnaires are randomly distributed to secondary school students and university students in Hong Kong and United Kingdom. 57 (21.2%) questionnaires are disturbed to university students in United Kingdom while 212 (78.8%) questionnaires are disturbed to secondary school and university students in Hong Kong. As in total 269 questionnaires are collected back, the overall response rate is 100%.

Table 1 showed the demographic characteristics of the sample. The sample had 269 participant with a mean age of 19.61 (SD=3.16) and 61.7% (n=166) of the respondents were female. The racial composition was 79.9% Asian, 8.6% British, 1.1% American and 0.7% Germany. 30.1% of the participants were studying in university Year 3, 21.2% were studying in university Year 2, 18.6% were studying in Secondary Form 1 to 3 and 12.3 were studying in Secondary Form 4 to 7.

For the location of school, 74.7% of participates were studying schools in Hong Kong. 74.4% of participants had married parents, 12.3% had divorced or separated home and 8.2% had widowed or single parent.

Table 1. Demographic characteristics of the sample (n=269)

		Frequency (n)	Percentage (%)
Sex	Female	166	61.7
	Male	95	35.3
Race	Asian	215	79.9
	American	3	1.1
	British	23	8.6
	Germany	2	0.7
	Other	17	6.3
Year in School	Form 1-3	50	18.6
	Form 4-7	33	12.3
	Year 1	23	8.6
	Year 2	57	21.2
	Year 3	81	30.1
	Year 4	13	4.8
Location of School	Hong Kong	201	74.7
	United Kingdom	56	20.8
	Other	4	1.5
Family structure	Married parents	201	74.7
	Divorced/Separated Home	33	12.3
	Widowed/Single Parent	22	8.2

4.2 Procedures

Data are obtained through both self-administrated, paper-based questionnaires and online questionnaires. Online questionnaires was being set up on Qualtrics, which was an Online Survey Software used for building online survey. The online questionnaire was being posted on the social-networking site (SNS), Facebook. After collecting the questionnaires from respondents, only the data collected from

paper-based questionnaires were used for analysis while the data collected from online questionnaires are used for references only.

4. 3 Measures

The questionnaire used in this study was based on self-report, which consists of four parts. The first part of the questionnaire was used to examine the stressors and the coping strategies used by teenagers and young adults when they deal with stress. The second part was used to evaluate particular types of deliberate self-harm behaviors, such as health compromising behaviors and reckless behaviors. The third part focused on physical self-harm behaviors and their functions through the Functional Assessment of Self-Mutilation (FASM). The third part evaluated other deliberate self-harm behaviors, such as health compromising behaviors and reckless behaviors. The last part of the questionnaire was used to collect demographic information.

4.3.1 Stressors and Coping Strategies Used to Deal with Stress

This part was used to examine the coping strategies adopted by adolescents to deal

with stress and difficulties. It was a modified version of a self-report questionnaire, "How I deal with stress" designed by Ross and Heath (2002). The questionnaire contained 21 items evaluated by a four-point Likert scales, ranging from 'frequently', 'a couple of times', 'once' and 'never'. The coping strategies listed in the questionnaires comprised of adaptive behaviors, such as 'Try to solve the problem' and maladaptive behaviors like 'pnch yourself'. Besides understanding the coping methods used by teenagers and young adults in Hong Kong and United Kingdom, this part was used as a first screening of any signs of non-suicidal self-injury (NSSI).

Furthermore, different types of problems were listed so that respondents could rate how often they were stressed out by these events. This was used to understand the type of stressors faced by teenagers and young adults briefly.

4.3.2 Deliberate Self-harm Behaviors

The second part was used to examine other forms of non-suicidal self-injury (NSSI), such as health compromising behaviors and reckless behaviors. Behaviors, such as substance abuse, smoking and drinking were included. This part was separated from the third part as their natures were different from the self-injurious behaviors

studied in the third part. Apart from examining the frequency of engaging in these self-injurious behaviors, the reasons for performing such self-injurious behaviors were studied. It was a simplified and modified version of the motivations of non-suicidal self-injury in the Functional Assessment of Self-Mutilation (FASM). There were 9 items identifying the motivations and in turn identified the functions of self-injurious behaviors with a four-point Likert scales (1= 'never', 2= 'rarely', 3='some' and 4='often').

4.3.3 Functional Assessment of Self-Mutilation (FASM)

To assess non-suicidal self-injury (NSSI) among adolescents and young adults, the Functional Assessment of Self-Mutilation (FASM) was used in the questionnaire. The Functional Assessment of Self-Mutilation (FASM) was a semi-structured clinical interview designed to evaluates the behavioral functions and the frequency of different methods of non-suicidal self-injury (NSSI) used by adolescents over the previous 12 months as well as other characteristics of this behaviors (Nock et al., 2006). The first part of the FASM was a checklist of non-suicidal self-injury (NSSI) to see whether participants have engaged in 11 different self-injurious behaviors whereas the second part was used to assess the motivations of non-suicidal

self-injury (NSSI) with 22 statements (Lloyd-Richardson, Perrine, Dierker & Kelley, 2007). These 22 statements were rated on a four-point Likert scale, which consisted of “Never”, “Rarely”, “Some” and “Often”.

In order to link and examine the functions of deliberate self-injurious behaviors, the four-factor model of non-suicidal self-injury (NSSI) developed by Nock and Prinstein (2004) are merged with the Functional Assessment of Self-Mutilation (FASM) (Lloyd-Richardson et al., 2007). For instance, item 14, “To stop bad feelings” was linked to Automatic-negative reinforcement whereas item 3, “To get attention” was linked with Social-positive reinforcement. See Appendix B for the table.

4.3.4 Demographic Characteristics

The last part of the questionnaires was used to examine the demographic characteristics, including age, sex and race. Other demographic characteristics, including year in school, location of school and family structured were asked as well.

Chapter 5 Results

For deliberately self-harm behaviors that participants engaged in the past year (Question 5), the most common self-injurious behaviors engaged is 'bit yourself' (9.7%, n=26), following 'hit yourself on purpose' (6.7%, n=18), 'pulled your hair out' (4.8%, n=13) and 'picked at a wound' (4.1%, n=11). Data collected on the descriptive characteristics and the frequencies of the eleven methods of self-injurious behaviors in Functional Assessment of Self-Mutilation (FASM) were presented in Table 2. No participants engaged in other methods of self-mutilative behaviors other than the eleven methods listed in Table 2.

Table 2. Descriptive characteristics and frequency of the eleven methods of self-injurious behaviors

	Incidents									
	Yes		1		2 to 5		6 to 10		≥11	
Method of self-injurious behaviors	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Cut or carved on your skin	10	3.7	2	0.7	1	0.4	0	0	2	0.7
Hit yourself on purpose	18	6.7	4	1.5	2	0.7	1	0.4	0	0
Pulled your hair out	13	4.8	3	1.1	4	1.5	0	0	0	0
Gave yourself a tattoo	4	1.5	2	0.7	0	0	0	0	0	0
Picked at a wound	11	4.1	0	0	0	0	0	0	0	0
Burned your skin (i.e., with a cigarette, match or other hot object)	4	1.5	2	0.7	0	0	0	0	0	0
Inserted objects under your nails or skin	6	2.2	1	0.4	0	0	0	0	0	0
Bit yourself (e.g., your mouth or lip)	26	9.7	5	1.9	2	0.8	1	0.4	1	0.4
Picked areas of your body to the point of drawing blood	10	3.7	0	0	1	0.4	0	0	0	0
Scraped your skin	9	3.3	0	0	1	0.4	0	0	0	0
"Erased" your skin	7	2.6	0	0	0	0	0	0	0	0

In hypothesis 1, it was proposed that participants were more likely to engage in non-suicidal self-injury (NSSI) when they were stressful and not able to cope with the stressors. Higher level of stress was estimated to be positively related to non-suicidal self-injury (NSSI) behaviors. Correlation was used to examine the correlation in self-harm behaviors and stresses. Table 3 and table 4 showed correlational relationship in both direct and health-comprising self-harm behaviors and stresses.

Direct self-harm behaviors included 'cut or carved on your skin' and 'hit yourself on purpose', etc. whereas health-comprising self-injurious behaviors included 'eating disorders behaviors' and 'smoking', etc.

Results showed that direct non-suicidal self-injury (NSSI) behaviors were positively related to stresses ($pr = .206$, $p < .01$). For health-comprising non-suicidal self-injury (NSSI) behaviors, they were correlated with stresses in a positive way as well ($pr = .337$, $p < .01$). With a statistically significant relationship, hypothesis 1 was fully supported.

Table 3. Correlation in direct non-suicidal self-injury (NSSI) and stresses

	Frequency (n)	Mean	Sd	Pearson Correlation	Sig. (2-tailed)	N
Stress	268	11.9067	5.94880	.206	.001	265
NSSI	266	11.4248	1.28415			

NSSI: non-suicidal self-injury

Table 4. Correlation in health-comprising non-suicidal self-injury (NSSI) and stresses

	Frequency (n)	Mean	Sd	Pearson Correlation	Sig. (2-tailed)	N
Stress	268	11.9067	5.94880	.337	.000	267
HNNSI	267	1.8652	2.97050			

HNNSI: health-comprising non-suicidal self-injury

For hypothesis 2, maladaptive coping strategies were hypothesized to correlate with

non-suicidal self-injury (NSSI) positively. Maladaptive coping strategies include 'binge eating', 'stop eating', 'punch yourself', 'hit someone', 'argue with others', 'use drugs', 'smoke', 'reckless behaviors', 'drinking' and 'cut, scratch yourself or hurt yourself'. Correlation was used to investigate the correlation in maladaptive coping strategies and non-suicidal self-injury (NSSI). Table 5 showed correlational relationship in maladaptive coping strategies and self-harm behaviors.

The result presented that non-suicidal self-injury (NSSI) behaviors were related to maladaptive coping strategies positively ($pr = .326$, $p < .05$). Hypothesis 2 was supported.

Table 5. Correlation in non-suicidal self-injury (NSSI) and maladaptive coping strategies

	Frequency (n)	Mean	Sd	Pearson Correlation	Sig. (2-tailed)	N
MCS	26y	1.8652	2.97050	.326	.000	264
NSSI	266	11.4248	1.28415			

MCS: maladaptive coping strategies

Next, table 6 presented the differences in methods of deliberate self-harm behaviors engaged by students in Hong Kong and United Kingdom. The differences between students in Hong Kong and United Kingdom were examined through using cross tabulations. The differences between two groups of students were the largest in 'bit

yourself', followed by 'pulled your hair out' as well as 'picked areas of your body to the point of drawing blood'. No significant chi-square difference were located, except 'hit yourself on purpose'. Participants in Hong Kong and United Kingdom showed significant differences in 'hit yourself on purpose' (chi-square with two degrees of freedom =15.322, p = .000). Hong Kong participants showed higher expected frequency and observed frequency than United Kingdom participants. Hypothesis 3 was, therefore not supported by the results as only one item showed significant difference.

Table 6. Methods of deliberate self-harm behaviors engaged by students in Hong Kong and United Kingdom

	Hong Kong		United Kingdom		Chi-square
Method of self-injurious behaviors	Frequency (n)	Expected Frequency	Frequency (n)	Expected Frequency	
Cut or carved on your skin	6	7.7	3	2.2	5.573[a]
Hit yourself on purpose	9	13.1	6	3.7	15.322 [a]
Pulled your hair out	11	10.0	2	2.8	.556 [a]
Gave yourself a tattoo	2	3.1	2	.9	1.957 [a]
Picked at a wound	6	8.5	5	2.4	3.975[a]
Burned your skin (i.e., with a cigarette, match or other hot object)	2	3.1	2	.9	1.973[a]
Inserted objects under your nails or skin	5	4.6	1	1.3	.195[a]
Bit yourself (e.g., your mouth or lip)	19	20	6	5.6	1.087a
Picked areas of your body to the point of drawing blood	9	7.7	1	2.2	1.034[a]
Scraped your skin	8	6.9	1	1.9	.797[a]
"Erased" your skin	6	5.4	1	1.5	.364[a]

In addition to the self-injurious behaviors proposed by the Functional Assessment of Self-Mutilation (FASM), other health compromising behaviors and reckless behaviors as a mean of self-harm were being studied. The health compromising behaviors, such as eating disorders behaviors and reckless behaviors, such as thrill-seeking behaviors engaged by Hong Kong and United Kingdom participants were presented

in Table 7. Eating disorders behaviors, including restrained eating and binge eating, followed by drinking were common among participants in Hong Kong than in United Kingdom.

Cross tabulation was used to analyze the data. Three items, including 'smoking' (chi-square with six degrees of freedom = 36.377, p = .000), 'drinking' (chi-square with six degrees of freedom = 27.678, p = .000) and 'thrill-seeking behaviors' (chi-square with six degrees of freedom = 27.368 p = .000) showed significant differences between two locations. As only three items showed significant differences between Hong Kong and United Kingdom, hypothesis 3 was still not supported.

Table 7. Health compromising behaviors and reckless behaviors engaged by Hong Kong and United Kingdom participants

	Hong Kong				United Kingdom			
	Frequency (n)				Frequency (n)			
Behaviors	**Never**	**Once**	**Couple of times**	**Frequently**	**Never**	**Once**	**Couple of times**	**Frequently**
Eating disorders behaviors, e.g. restrained eating/ binge eating	145	22	29	5	3	0	1	0
Smoking	181	6	8	6	33	2	7	13
Drinking	151	14	29	7	29	3	10	13
Substance abuse	190	4	6	1	49	1	2	3

Drunk driving	195	1	3	2	52	1	2	0
Thrill-seeking behaviors, e.g. speeding	188	6	4	2	41	4	7	3

Then, cross tabulations of data were conducted to examine whether females were more likely than males to use cutting and eating disorder behaviors as a mean for self-injury. As shown in table 8, females were more likely than male to use eating disorders behaviors such as binge eating as well as stop eating as a mean for self-injury.

To analyze if there was any significant differences between two gender groups, cross tabulation was used. Only two items showed significant differences between females and males, which were 'binge eating' (chi-square with three degrees of freedom = 11.043, p = .011) and 'eating disorders behaviors' (chi-square with three degrees of freedom = 10.339, p = .016). Females showed higher expected frequency and observed frequency than males for these two items. The differences between two gender groups in cutting behaviors as a mean for self-harm were not significant, thus hypothesis 4 was not supported.

Table 8. Cutting and eating disorders behaviors as a mean for self-injury engaged by female and male participants

	Female				Male			
	Frequency (n)				Frequency (n)			
Behaviors	**Never**	**Once**	**Couple of times**	**Frequently**	**Never**	**Once**	**Couple of times**	**Frequently**
Binge eating	75	29	39	22	60	16	14	4
Stop eating	113	32	16	5	72	10	11	1
Cut, scratch yourself or hurt yourself	146	10	3	6	81	8	5	0
Eating disorders behaviors, e.g. restrained eating/ binge eating	106	27	26	7	75	4	13	2
	Yes		**No**		**Yes**		**No**	
Cut or craved on your skin	5		160		5		90	

Furthermore, it was proposed that females were more motivated than males by automatic reinforcement when performing non-suicidal self-injurious behaviors in hypothesis 5. Automatic reinforcement could be divided into automatic-negative reinforcement and automatic-positive reinforcement. Automatic-negative reinforcement included ‘to relieve feeling numb or empty’ and ‘to stop bad feelings’ whereas automatic-positive reinforcement included ‘to feel something, even if it was pain’, ‘to punish yourself’ and ‘to feel relaxed’. Independent sample T-test was used

to examine the differences in using automatic reinforcement as a reason for self-harm behaviors between females and males.

Table 9 showed the differences in automatic reinforcement as a reason for self-harm behaviors between two gender groups. In terms of automatic-negative reinforcement, both 'to relieve feeling numb or empty' (t (99) = .679, n.s.) and 'to stop bad feelings' (t (95) = .576, n.s.) showed no statistically differences in two groups. The mean of two automatic-negative reinforcements in females were higher than that in males.

For automatic-positive reinforcement, 'to feel something, even if it was pain' (t (96) =. 809, n.s.), 'to punish yourself' (t (94) = -.98, n.s.) and 'to feel relaxed' (t (95) =-1.45, n.s.) showed no statistically significant difference between females and males. The mean of 'to feel something, even if it was pain' in females was higher than males. For 'to punish yourself' as well as 'to feel relaxed', however, the mean was higher in males than in females.

All of the five automatic reinforcements as a reason for self-harm behaviors showed no statistically significant difference between two gender groups. Thus, hypothesis 5

was not supported.

Table 9. Automatic reinforcement as a reason for self-harm behaviors between females and males

Reasons		Frequency (n)	Mean	Sd	Sig.	t	df	Sig. (2-tailed)
To relieve feeling numb or empty	Female	63	0.6	0.943	0.247	0.415	99	0.679
	Male	38	0.53	0.83				
To stop bad feelings	Female	61	0.72	0.985	0.063	0.576	95	0.566
	Male	36	0.61	0.766				
To feel something, even if it was pain	Female	61	0.54	0.867	0.082	0.809	96	0.42
	Male	37	0.41	0.686				
To punish yourself	Female	61	0.41	0.739	0.173	-0.98	94	0.332
	Male	35	0.57	0.85				
To feel relaxed	Female	61	0.67	0.961	0.237	-1.45	95	0.151
	Male	36	0.97	1.028				

Regarding hypothesis 6, it proposed that adolescents and young adults with have higher borderline personality characteristics were prone to engaging in non-suicidal self-injury (NSSI). With higher level of borderline personality disorders characteristics, participants were expected to engage in more non-suicidal self-injury (NSSI)

behaviors. Regression was used In order to study the relationship of non-suicidal self-injury (NSSI) behaviors by borderline personality disorders characteristics. The correlational relationship between borderline personality disorders characteristics and non-suicidal self-injury (NSSI) behaviors were presented in table 9.

By referring to the result, non-suicidal self-injury (NSSI) behaviors correlated with r borderline personality characteristics ($r = .281$, $p < .05$). Non-suicidal self-injury (NSSI) correlated with the level of borderline personality disorders characteristics positively. As a result, hypothesis 6 was supported with the statistically significant relationship.

Table 10. Correlational relationship between borderline personality characteristics and non-suicidal self-injury (NSSI)

	Mean	Sd	Pearson Correlation	Sig. (1-tailed)	N	R	R Square
BPC	7.4235	6.61073	.281	.000	255	.281[a]	.079
NSSI	11.4392	1.30837					

BPC: borderline personality characteristics; NSSI: non-suicidal self-injury

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Chapter 6 Discussions and Conclusions

6.1 Discussions

The present study investigated the prevalence, correlates, reasons and functions of non-suicidal self-injury (NSSI). Overall, 17.1% (n=46) of participants responded non-suicidal self-injury (NSSI) in the past 12 months, with more females (9.7%) than males (7.1%). 18.2% (n = 49) of participants endorsed engaging in non-suicidal self-injury (NSSI) at least once in their life time. The prevalence rates, including gender differences were consistent with some recent researches related to adolescents' self-harm behaviors (Hawton et al., 2002; Laye-Gindhy & Schonert-Reichl, 2005; Ross & Heath, 2002; Tang et al., 2011).

Tang et al. (2011) indicated that 15.5% of respondents in the sample (n=2013) engaged in non-suicidal self-injury (NSSI) in the previous year, with 10.5% and 5% of adolescents engaged in minor self-injurious behaviors and moderate or severe self-injurious behaviors respectively. The samples of the study were drawn from two

junior high schools, two high schools and a college in Wuhan, China. In United Kingdom, Hawton et al. (2002) expressed 6.9% of participants reported an act of deliberate self-injurious behaviors in the past year, with sample drawn from 41 schools in England. Females (11.2%) reported more non-suicidal self-injury (NSSI) behaviors than male (3.2%) (Hawton et al., 2002).

Nevertheless, the prevalence rates of non-suicidal self-injury (NSSI) in the previous 12 months in this study were lower than some researches with hospitalized inpatients sample. The study conducted by Nock and Prinstein (2004) reported overall 82.4% (n = 89) of the adolescents engaged in at least one incident of self-harm behaviors in the past year. The sample found Nock and Prinstein (2004) found was patients drawn from consecutive admissions to an adolescent psychiatric inpatient unit in New England.

When compared with some studies using community samples, this present studies have a lower prevalence rates. Hilt, Cha and Nolen-Hoeksema (2008) found that 56% of the female adolescents engaged in non-suicidal self-injury (NSSI) at least once in their life time and 36% had engaged in non-suicidal self-injury (NSSI) in the past year. Their higher rates of non-suicidal self-injury (NSSI) reported my due to demographic

characteristics, for instance, lower socio-economic statues, which leaded to high levels of chronic stress (Hilt et al., 2008). In this study, data were collected in secondary school and universities. With higher educational background, participants may have higher socio-economic statues, leading to lower levels of chronic stress.

Also, the rates of non-suicidal self-injury (NSSI) were higher in Hilt, Cha and Nolen-Hoeksema's study (2008) as their sample only consisted of girls, fitting the results of some studies which showed gender differences in self-harm behaviors (Hawton et al., 2002; Ross & Heath, 2002).

With regard to non-suicidal self-injury (NSSI) behaviors, participants were more likely to engage in both health-comprising and direct self-injurious behaviors when they were stressful and unable to cope with the stressors. With limited resources, teenagers and young adults may not be able to cope with stressors will effective coping strategies. They are overwhelmed by the stressful events and over-aroused by stressors, leading to their engagement in maladaptive coping methods. These maladaptive coping methods included self-injurious behaviors such as 'bit yourself' as well as other health-comprising non-suicidal self-injury (NSSI) like 'eating disorders behaviors' and 'substance abuse', etc. This showed the positive

correlational relationship between maladaptive coping strategies and non-suicidal self-injury (NSSI).

Laye-Gindhy & Schonert-Reichl (2005) presented that both male and female self-harmers reported significantly more than non-self-harmers to have tattoo as well as engaging in other risky behaviors, for instance, thrill-seeking behaviors. Based on adolescent conceptualizations of self-injurious behaviors, 16% of participants reported pills abuse, 7% reported eating disordered behaviors and 5% reported reckless behaviors (Laye-Gindhy & Schonert-Reichl, 2005).

Then, adolescents and young adults in United Kingdom were not more likely to engage in non-suicidal self-injury (NSSI) than that in Hong Kong. Despite of the cultural differences between two locations, the difference was significant only for 'hit yourself on purpose'. Under individualism in United Kingdom, expression of angry may be more acceptable. Adolescent and young adults in United Kingdom may be more likely to commit on self-hitting behaviors to express their negative feelings than those in Hong Kong. The comparison between students in Hong Kong and United Kingdom was limited as well because of the great differences in the sample between two groups of students.

Next, females were not more likely than males to use cutting as a mean for self-injury. Referring to eating disorders behaviors, female participants reported engaging in higher level of binge eating and eating disorders behaviors than male participants. This showed that self-injurious behaviors related to eating were more popular among female. As female were more subjected to socialization, they tended to use hidden methods such as eating disorders behaviors to express their distresses inwardly. For cutting as mean for self-injury, female participants may not dare to engage in them due to the direct hurt to their body. Female participants may care more about their appearance than males and not willing to destruct their body.

Moreover, females were not more motivated than males by automatic reinforcement when performing non-suicidal self-injurious behaviors, which was contradict to previous study. Lloyd-Richardson, Perrine, Dierker and Kelley's study (2007) demonstrated 46.5% (n=293) of the sample from schools located in both the southern and mid-western United States (n=633) endorsed engaging in non-suicidal self-injury (NSSI) in the past 12 months. Their study showed that 22% to 28% of all self-injurers endorsed engaging in non-suicidal self-injury (NSSI) for automatic reinforcement (Lloyd-Richardson et al., 2007). Since the sample size in the present

study was smaller, with low prevalence rate of non-suicidal self-injury (NSSI), the differences in reasons for self-harm may not be significant between females and males.

When it comes to borderline personality disorders (BPD), it was often associated with non-suicidal self-injury (NSSI). In this present study, borderline personality characteristics were positively correlated with non-suicidal self-injury (NSSI). Since the criteria for borderline personality disorders (BPD), such as 'intensive feelings of abandonment' and 'unstable and intense interpersonal relationships' were negative and stressful situations, adolescents and young adults may feel distressed with higher level of borderline personality characteristics. Under the constraints of intrapersonal vulnerability factors caused by their high level of borderline personality characteristics, it was possible for participants to experience difficulties in expressing their feelings to others and communicating with others (Nock, 2009).

Participants may engage in maladaptive coping strategies, especially non-suicidal self-injury (NSSI) behaviors, for example 'cut or craved on your skin' and 'picked at a wound' as well as other health-comprising self-injurious behaviors for the sake of dealing with their distress. Consequently, the positive correlational relationship

between borderline personality characteristics and non-suicidal self-injury (NSSI) was built.

6.2 Limitations and Future Directions

In this study, a number of limitations need to be considered. Due to the limitation on settings and difficulties on finding sample for research, the sample found in this study was relatively small. Meanwhile, the samples found for this study were normal and hospitalized sample from local secondary schools and universities, lowering the possibility of finding significant results of non-suicidal self-injury (NSSI) behaviors.

Different from some studies, researchers were able to found psychiatric sample for study. Nock and Prinstein (2004) conducted a study using the Functional Assessment of Self-Mutilation (FASM) as well. The sample Nock and Prinstein (2004) found was patients drawn from consecutive admissions to an adolescent psychiatric inpatient unit in New England, which favored their study for self-injurious behaviors greatly. In their study, overall 82.4% (n = 89) of the adolescents engaged in at least one incident of self-harm behaviors in the past year (Nock & Prinstein, 2004). Another sample found by Nock and Prinstein (2005) were 89 psychiatric inpatients admitted to an

adolescent psychiatric inpatient unit, who reported engaging in non-suicuidal self-injury (NSSI) in the past 12 months. The study done by Nock et al, (2006) collected data from 89 adolescent selected from consecutive admissions to an inpatient psychiatric unit who reported engaging in NSSI in the previous 12 months The samples drew from inpatient unit could favore the study in self-mutialtive behaviors

At the same time, the sample size differences between secondary school and university students in Hong Kong and United Kingdom were large because of the constraints in resources. The large differences between two groups of sample leaded to difficulties in comparing two groups of students in terms of reasons and method of self-mutilative behaviors.

Additionally, the control of collecting data from similar number of both genders was difficult due to limited resources, affecting the representative power of the findings. The gender ratio in this study was 166 females to 95 males, showing females may be overrepresented in the study. As consequences, the gender differences in the reasons and functions of non-suicidal self-injury (NSSI) behavior could not be explored in the present study. Referring to some previous studies, female

participants were found to be more prone to self-harm behaviors than male participants ((Whitlock et al., 2006), while some studies showed no differences between two gender groups (Gollust, Eisenberg & Golberstein, 2008).

In further studies of non-suicidal self-injury (NSSI), a balanced sample between two gender groups as well as two locations for cultural differences studies could be found to ensure the representative power of findings.

Apart from the limitations in the sample, the collection of data from participants was limited. Since the collection of data relied on retrospective adolescent-report of self-injury, they may give false or inaccurate information, lowering the validity and the representation power of the study and social desirability too. In this study, questionnaires for participants studying in secondary school were distributed through their school and teachers. Despite of the statement of confidentiality shown on the cover page of questionnaires, participants, especially those from secondary school may not willing to give true and accurate information related to their self-injurious behaviors. It was possible for participants to be afraid of the disclosure of their information, leading to the punishment from their teachers. Further work on self-injurious behaviors could develop and include other formats such as

observational methods to ensure validity.

Furthermore, it was unclear if borderline personality disorders (BPD) was associated with non-suicidal self-injury (NSSI). Based on the positive relationship found between borderline personality characteristics and non-suicidal self-injury (NSSI), further studies could examine the reasons causing the correlational relationship.

Further studies on this field were required in order to develop a better understanding of self-injurious behaviors among adolescents and young adults, so that effective treatments could be developed to prevent and alleviate the non-suicidal self-injury (NSSI).

6.3 Conclusion

In conclusion, the present study focused on the reasons and functions of non-suicidal self-injury (NSSI) among secondary schools and universities students in Hong Kong and United Kingdom. Cultural as well as gender differences related to non-suicidal self-injury (NSSI) was investigated too. Despite of the limitations and constraints, this study provided us with some insights about self-injurious behaviors, helping us to

develop a better understanding about the reasons and functions of non-suicidal self-injury (NSSI) in future study.

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Appendix 1 Questionnaire (English Version)

A. There are a number of coping strategies in the following. Please indicate the frequency of using these strategies in the past 3 months when you are dealing with stress and difficulties.

Frequency / Strategies	Never	Once	Couple of Times	Frequently
1. Try not to think about it	0	1	2	3
2. Stay alone	0	1	2	3
3. Talk to others, e.g. friend, parents	0	1	2	3
4. Try to solve the problem	0	1	2	3
5. Encourage yourself	0	1	2	3
6. Listen to music	0	1	2	3
7. Play sports	0	1	2	3
8. Go shopping	0	1	2	3
9. Binge Eating	0	1	2	3
10. Stop eating	0	1	2	3
11. Punch yourself	0	1	2	3
12. Hit someone	0	1	2	3
13. Argue with others	0	1	2	3
14. Use drugs	0	1	2	3
15. Smoke	0	1	2	3
16. Reckless behaviors	0	1	2	3
17. Drinking	0	1	2	3
18. Cry	0	1	2	3
19. Sleep	0	1	2	3
20. Cut, scratch yourself or hurt yourself	0	1	2	3
21. Others:_____	0	1	2	3

B. Do you feel stressful because of the following things in the past 3 months? Please rate the frequency.

Frequency / Problems	Never	Rarely	Sometimes	Often

1. Academic/ Study	0	1	2	3
2. Interpersonal issues	0	1	2	3
3. Family issues	0	1	2	3
4. Love and relationship	0	1	2	3
5. Future career	0	1	2	3
6. Others:_____	0	1	2	3

C. In the <u>past year</u>, have you engaged in the following behaviors?

Frequency / Behaviors	**Never**	**Once**	**Couple of Times**	**Frequently**
1. Eating disorders behaviors, e.g. restrained eating/ binge eating	0	1	2	3
2. Smoking	0	1	2	3
3. Drinking	0	1	2	3
4. Substance abuse	0	1	2	3
5. Drunk driving	0	1	2	3
6. Thrill-seeking behaviors, e.g. speeding	0	1	2	3

D. How often do you engage in the above behaviors for these reasons?

Frequency / Reasons	**Never**	**Once**	**Couple of Times**	**Frequently**
1. Relieve feeling numb or empty	0	1	2	3
2. Stop bad feelings	0	1	2	3
3. Punish yourself	0	1	2	3
4. For fun	0	1	2	3
5. Out of boredom	0	1	2	3
6. Receive more attention from others, e.g. parents or friends	0	1	2	3
7. Gain control	0	1	2	3
8. Influence others	0	1	2	3
9. Express yourself for communication	0	1	2	3

E. In the <u>past year</u>, have you engaged in the following behaviors to <u>deliberately</u>

harm yourself (check all that apply):

	No	Yes	How many times?	Have you gotten medical treatment?
1. Cut or carved on your skin				
2. Hit yourself on purpose				
3. Pulled your hair out				
4. Gave yourself a tattoo				
5. Picked at a wound				
6. Burned your skin (i.e., with a cigarette, match or other hot object)				
7. Inserted objects under your nails or skin				
8. Bit yourself (e.g., your mouth or lip)				
9. Picked areas of your body to the point of drawing blood				
10. Scraped your skin				
11. "Erased" your skin				
12. Other: _____				

F. If not in the past year, have you EVER done any of the above acts? □Yes □No

If yes to any of the above behaviors in the past year, please complete the questions (G-L) below:

G. While doing any of the above acts, were you trying to kill yourself? □Yes □No

H. How long did you think about doing the above act(s) before actually doing it?

□ None □ "A few minutes" □ < 60 minutes □ > 1 hour but < 24 hours

□More than 1 day but less than a week □Greater than a week

I. Did you perform any of the above behaviors while you were taking drugs or alcohol? □Yes □ No

J. Did you experience pain during this self-harm?

□ Severe pain □Moderate pain □Little pain □No pain

K. How old were you when you first harmed yourself in this way? _____

L. Did you harm yourself for any of the reasons listed below?

0 **Never**	**1** **Rarely**	**2** **Some**	**3** **Often**

Reasons	**Rating**			
1. To avoid school, work, or other activities	0	1	2	3
2. To relieve feeling "numb" or empty	0	1	2	3
3. To get attention	0	1	2	3
4. To feel something, even if it was pain	0	1	2	3
5. To avoid having to do something unpleasant you don't want to do	0	1	2	3
6. To get control of a situation	0	1	2	3
7. To try to get a reaction from someone, even if it is a negative reaction	0	1	2	3
8. To receive more attention from your parents or friends	0	1	2	3
9. To avoid being with people	0	1	2	3
10. To punish yourself	0	1	2	3
11. To get other people to act differently or change	0	1	2	3
12. To be like someone you respect	0	1	2	3
13. To avoid punishment or paying the consequences	0	1	2	3
14. To stop bad feelings	0	1	2	3
15. To let others know how desperate you	0	1	2	3

were				
16. To feel more a part of a group	0	1	2	3
17. To get your parents to understand or notice you	0	1	2	3
18. To give yourself something to do when alone	0	1	2	3
19. To give yourself something to do when with others	0	1	2	3
20. To get help	0	1	2	3
21. To make others angry	0	1	2	3
22. To feel relaxed	0	1	2	3
23. Other:				

Demographics

Age: _____

Sex: □Female □Male

Race: □Asian □American □British □Germany
□Others: _____

Year in School: □Form 1-3 □Form 4-7 □Year 1 □Year 2 □Year 3 □Year 4

Location of School: □Hong Kong □United Kingdom □Others: _____

Family Structure: □Married Parents □Divorced/Separated Home
□*Widowed* Single *Parent*

All of the information collected will be used for educational research only.

Thank you.

Appendix 2 Questionnaire (Chinese Version)

1. 以下是一些關係處理問題及壓力的解決方法。請選出在過去三個月在面對困難及壓力時，你曾使用的解決方法的次數。

次數 / 解決方法	從不	一次	數次	經常
1. 將問題拋開，不去想它	0	1	2	3
2. 獨處	0	1	2	3
3. 找別人傾訴，如朋友及家長	0	1	2	3
4. 嘗試解決問題	0	1	2	3
5. 鼓勵自己	0	1	2	3
6. 聆聽音樂	0	1	2	3
7. 運動	0	1	2	3
8. 逛街	0	1	2	3
9. 暴飲暴食	0	1	2	3
10. 停止進食	0	1	2	3
11. 打或攻擊自己	0	1	2	3
12. 打或攻擊別人	0	1	2	3
13. 與別人爭執	0	1	2	3
14. 使用藥物	0	1	2	3
15. 吸煙	0	1	2	3
16. 魯莽行為	0	1	2	3
17. 飲酒或以酒精麻醉自己	0	1	2	3
18. 哭	0	1	2	3
19. 睡覺	0	1	2	3
20. 自殘，如界，抓或傷害自己	0	1	2	3
21. 其他:_____	0	1	2	3

2. 在過去三個月，你曾否因為以下事件已感到大壓力？請圈出次數。

次數 / 事情	從不	甚少	有時	常常

7. 不滿意 GPA/學業成績	0	1	2	3
8. 考試表現	0	1	2	3
9. 與朋友不和及爭執	0	1	2	3
10. 覺得被忽略	0	1	2	3
11. 與家庭成員不和及爭執	0	1	2	3
12. 家庭狀況改變，如父母離婚	0	1	2	3
13. 與男/女朋友不和及爭執	0	1	2	3
14. 與男/女朋友分手	0	1	2	3
15. 畢業後找不到工作	0	1	2	3
16. 對前路感到迷茫	0	1	2	3
17. 外表，如體重	0	1	2	3
18. 其他:_____	0	1	2	3

3. 在過去<u>一年</u>，你曾否出現以下所述的行為？

次數 / 行為	從不	一次	數次	經常
1. 飲食失調，如不准飲食或暴飲暴食	0	1	2	3
2. 吸煙	0	1	2	3
3. 飲酒或酗酒	0	1	2	3
4. 濫用藥物	0	1	2	3
5. 醉駕	0	1	2	3
6. 尋求刺激的行為，如超速駕駛	0	1	2	3

4. 為什麼你會參與以上的行為？請就各原因圈出其次數。

次數 / 原因	從不	一次	數次	經常
10. 舒緩麻木及空虛的感覺	0	1	2	3
11. 停止不快的感覺	0	1	2	3
12. 懲罰自己	0	1	2	3
13. 從中得到快感	0	1	2	3
14. 感到沈悶	0	1	2	3
15. 得到別人的注意，如家長及朋友	0	1	2	3
16. 自我控制	0	1	2	3
17. 影響別人	0	1	2	3
18. 以行為來表達自己	0	1	2	3

5. 在過去<u>一年</u>，你曾否用以下的行為蓄意傷害自己？

	沒有	有	次數	有否得到藥物治療？
1. 界身體某部份				
2. 蓄意打及攻擊自己				
3. 扯或拔掉自己的頭髮				
4. 紋身				
5. 對傷口加以傷害				
6. 灼自己的身體，如煙頭，火柴等				
7. 插東西入指甲或皮膚				
8. 咬自己，如嘴唇				
9. 令自己受傷流血				
10. 刮損皮膚				
11. 擦損皮膚				
12. 其他: _____				

6. 如不是在過去一年裡，你**曾否有過**以上的行為？ ☐有 ☐沒有

如果你在過去一年曾有以上的行為，請回答問題 7 - 12。

7. 當你有這些行為的時候，你有否想過自殺？ ☐有 ☐沒有

8. 你思考了多久才進行這些行為？
☐ 沒有 ☐ 數分鐘 ☐少於 60 分鐘 ☐多於 1 小時，少於 24 小時
☐多於 1 天，少於 1 星期 ☐多於 1 星期

9. 當你進行這些行為時，你有否吸煙或飲酒？ ☐有 ☐沒有

10. 當你進行自殘行為時，你有否感到痛楚？
☐強烈痛楚 ☐中度痛楚 ☐輕度痛楚 ☐全沒痛楚

11. 你第一次進行自殘行為時，你的歲數是？ _____

12. 你是否為了以下的原因而有自殘行為？

0 從不	**1** 甚少	**2** 有時	**3** 常常

原因	**次數**			
1. 逃避參與學校，工作或其他活動	0	1	2	3

2. 舒緩麻木及空虛的感覺	0	1	2	3
3. 吸引注意	0	1	2	3
4. 得到一些感覺，即使是痛楚的感覺	0	1	2	3
5. 逃避你不喜愛或不想做的事情	0	1	2	3
6. 控制一個情況	0	1	2	3
7. 獲得別人的反應，即使是負面的反應	0	1	2	3
8. 從朋友或家人身上獲得注意	0	1	2	3
9. 逃避與人接觸	0	1	2	3
10. 懲罰自己	0	1	2	3
11. 改變其他人的做法	0	1	2	3
12. 令到你喜歡的人尊重你	0	1	2	3
13. 逃避懲罰或責任	0	1	2	3
14. 停止不快的感覺	0	1	2	3
15. 讓別人感受到你的絕望	0	1	2	3
16. 讓你更容易融入某個群體	0	1	2	3
17. 令到你的父母明白或注意你	0	1	2	3
18. 在獨處時有事情可做	0	1	2	3
19. 與別人一起時有事情可做	0	1	2	3
20. 獲得幫助	0	1	2	3
21. 令別人生氣	0	1	2	3
22. 令自己放鬆	0	1	2	3
23. 其他: _____				

13. 在過去 6 個月，你曾否經歷過以下事情？請圈出次數。

次數 / 事情	從不	一次	數次	經常
1. 有強烈被遺棄的感覺	0	1	2	3
2. 付出很大的努力去避免現實或想像中被遺棄的感覺	0	1	2	3
3. 不穩定或緊張的人際關係	0	1	2	3
4. 理想化你身邊的人	0	1	2	3
5. 與別人出現爭執時便貶低對方	0	1	2	3
6. 不穩定的情緒	0	1	2	3
7. 出現強烈的空虛感	0	1	2	3
8. 不合理及強烈的憤怒	0	1	2	3
9. 控制憤怒情緒時出現困難	0	1	2	3
10. 自毀行為，如吸毒，魯莽駕駛，暴飲暴食	0	1	2	3

11. 不斷出現自殘行為	0	1	2	3

個人資料

14. 年齡：_____
15. 性別：☐女　☐男
16. 種族：☐亞洲人　☐美國人　☐英國人　☐德國人　☐其他:_____
17. 就讀年級：☐ 中學 Form 1-3 ☐中學 Form 4-7 ☐大學 Year 1 ☐大學 Year 2 ☐大學 Year 3 ☐大學 Year 4
18. 學校地點：☐香港　☐英國　☐其他:_____
19. 家庭狀況：☐與父母同住　☐父母離異　☐單親家庭/父母一方離世

Appendix 3 The Four Functions of Non-suicidal Self-Injury (NSSI)

i. Automatic-negative reinforcement
2. To relieve feeling numb or empty
14. To stop bad feelings
ii. Automatic-positive reinforcement
4. To feel something, even if it was pain
10. To punish yourself
22. To feel relaxed
iii. Social-negative reinforcement
1. To avoid school, work or other activities
5. To avoid doing something unpleasant you don't want to do
9. To avoid being with people
13. To avoid punishment or paying the consequences
iv. Social-positive reinforcement
3. To get attention
7. To try to get a reaction from someone, even if it's negative
8. To receive more attention from your parents or friends
16. To feel more a part of a group
17. To get your parents to understand or notice you
6. To get control of the situation
11. To get other people to act differently or change
12. To be like someone you respect
15. To let others know how desperate you were
18. To give yourself something to do when alone
19. To give yourself something to do with others
20. To get help
21. To make others angry

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