THE GENERAL THEORY OF CRIME APPLIED TO BULLYING PERPETRATION: DOES SCHOOL CLIMATE MODERATE THE RELATIONSHIP BETWEEN SELF-CONTROL AND BULLYING?

by

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Abstract

In order to understand bullying behaviour, one must consider student characteristics, the social context of the behaviour, and the interactions among them. To this end, this study examined the applicability of Gottfredson and Hirschi's General Theory of Crime to bullying perpetration, which posits that crime and other deviant behaviours are a manifestation of two converging factors: low self-control and opportunity. This study explored whether school climate served as an "opportunity" for bullying behaviour. An ethnically diverse sample of 979 students in grades 4-7 reported on the frequency with which they engaged in bullying, their perceptions of school climate, and their levels of self-control. Results revealed that low self-control and various school climate factors each predicted bullying perpetration, although the interaction between the variables was not significant. That is, students with low self-control were more likely to engage in bullying behaviours, as were individuals with poorer perceptions of school climate. These results highlight the necessity for bullying interventions to consider both individual characteristics and social contexts. Specifically, schools would benefit from implementing programs that address social emotional learning with a particular focus on fostering self-control and positive school climates.

Preface

This thesis is an original work of the author, Lindsay Starosta.

Data for this study was collected as part of a larger, ongoing research project carried out by the Social Emotional Education and Development research group and supervised by Dr. Shelley Hymel. The UBC Behavioural Research Ethics Board (BREB) granted ethical approval for this research [UBC BREB #H14-00894].

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Table of Contents

List of Tables

List of Figures

Acknowledgements

Introduction

Schools are places where children come to learn, where they can develop their sense of self, learn to interact with other people, and feel safe in doing so. Unfortunately, this is not the case for many children; bullying has impeded their feelings of safety at school (Goldweber, Waasdorp, & Bradshaw, 2013).

Bullying is defined as intentional, repeated acts of direct (e.g., pushing, name calling, hitting) or indirect (e.g., spreading rumors, exclusion) aggression towards a less powerful victim (Olweus, 1993). Although once considered harmless, researchers have come to understand the significant negative impact that bullying can have on all those involved. Children who bully report more psychological distress (Stein, Dukes, & Warren, 2007), depressive symptoms (Ybarra & Mitchell, 2004), headaches (Fekkes, Pijpers, & Verloove-Vanhorick, 2004) alcohol abuse (Nansel et al., 2004), failing grades (Ybarra & Mitchell, 2004) and aggressive tendencies (Ybarra & Mitchell, 2007) than uninvolved peers. Children who are victimized report poorer self-esteem (Delfabbro et al., 2006), higher stress levels (Newman, Holden, & Delville (2005), high medication use (Due, Hansen, Merlo, Andersen, & Holstein, 2007), more sleep disturbances (Kshirsager, Agarwal, & Bavdekar, 2007), poorer school achievement (Arseneault et al., 2006), poorer peer relationships (Nansel et al., 2004), and higher suicidality (Park, Schepp, Jang, & Koo, 2006) than uninvolved peers (see McDougall & Vaillancourt, 2015 for a recent review). Youth involved in bullying, as either the perpetrator or the victim, therefore suffer negative consequences across psychological, emotional, social, mental health, physical health and academic domains, effects that remain long after the bullying incidences are over (e.g., Bannink, Broeren, van de Looij–Jansen, de Waart, & Raat, 2014).

In Canada, between 17 and 23% of students reported being involved in regular bullying events (Craig et al., 2009). This means that in a typical class of 25 students, approximately five students are involved in bullying on a regular basis, and therefore at risk for the aforementioned detrimental effects. As such, it is crucial that the causes of bullying be better understood in order to implement effective prevention and intervention programs in schools.

Over the past two decades, researchers across many disciplines have investigated the causes and correlates of engaging in bullying behaviour, with many focussing on the individual characteristics that shape bullying behaviour. More recently, however, scholars have argued for a social-ecological framework in understanding bullying behaviour (e.g., Espelage, Rao, & De La Rue, 2013; Swearer, Espelage, Vaillancourt, & Hymel, 2010). Specifically, Swearer et al. (2010) suggest that to effectively address school bullying, we must consider both individual characteristics and the social contexts that shape youths' behaviours, as well as the interactions between them. The goal of the present study is to do just that by examining the applicability of a classic criminological theory, the General Theory of Crime (Gottfredson & Hirschi, 1990), in order to investigate the effects of individual characteristics, social contexts, and their interaction on bullying behaviour, with the intention of guiding bullying prevention and intervention efforts from a social-ecological perspective.

General Theory of Crime

Gottfredson and Hirschi (1990) defined crime as the use of fraud or force in the pursuit of self- interest. They suggest that crime is a manifestation of low self-control; individuals engage in criminal acts when an opportunity presents because they have low self-control. Therefore, in order to understand crime and why individuals engage in it, one must first understand what is meant by low self-control and what is meant by opportunity.

Low self-control. Individuals with low self-control are described as living in the here and now, being unable to defer gratification, being active and adventuresome, having minimal tolerance for frustration, and seeking easy and simple ways to gratify their desires. Gottfredson and Hirschi (1990) suggest that low self-control is comprised of six elements: impulsivity, preference for simple tasks, preference for physical activities, self-centered tendencies, risk-seeking behaviours, and short temperedness.

Furthermore, Gottfredson and Hirschi (1990) highlight that criminal acts tend to be short-lived, immediately gratifying, simple, risky, require little skill, and involve a lack of concern for the welfare of the victim. Therefore, individuals with low self-control have a difficult time resisting the immediate gratification provided by criminal acts, and having low self-control removes the normal hesitations that prevent most individuals from committing these crimes. Moreover, individuals with low self-control are also expected to engage in a variety of other imprudent behaviours (e.g., smoking, drinking, using drugs) because of the instant gratification that they too provide.

Given these bold claims, the first assertion of the General Theory of Crime received a lot of attention, with many researchers empirically confirming the theory's hypothesis that low self-control leads to crime and deviant behaviours. For example, Grasmick, Tittle, Bursik, and Arneklev (1993) found that adults with low self-control were more likely to have committed crimes of fraud and force than those with higher self-control. Indeed, these results were replicated numerous times, culminating in the conclusion, through a meta-analysis (Pratt & Cullen, 2000), that low self-control is consistently one of the strongest predictors of crime for women and men, as well as adults and juveniles.

Low self-control has also been found to be implicated in a variety of imprudent behaviours. College students with low self-control were significantly more likely to engage in risky sexual behaviours and pathological gambling (Jones & Quisenberry. 2004), academic fraud, binge drinking, drunk dialing, and public profanity (Reisig & Pratt, 2011), and sexting (Reyns, Henson, & Fisher, 2014). Furthermore, pre-adolescents (Grades 5-7) with low self-control engaged in significantly more deviant behaviours (delinquency, substance-use, and rule breaking behaviours) than their peers with higher self-control (Kuhn & Laird, 2013).

These results confirm that the General Theory of Crime not only applies to criminal behaviours, but also to a variety of behaviours considered to be deviant. They also demonstrate that its applicability as a theory is not limited to the adult population; rather, adolescents with low self-control also engage in more criminal and/or imprudent behaviours than those with higher self-control.

Development of low self-control. Gottfredson and Hirschi (1990) state that self-control is primarily taught through effective parenting that involves monitoring a child's behaviour, recognizing and punishing deviant behaviour, and also caring and showing concern for the child. Gottfredson and Hirschi further posit that low self-control develops due to ineffective parenting, a hypothesis that has received empirical support in several subsequent studies (e.g., Hay, 2001). However, children also spend time in environments where other individuals can monitor and discipline their behaviours, and therefore these other institutions can also serve as socializing agents. In particular, Turner, Piquero, and Pratt (2005) found that for children who were not sufficiently socialized by their parents, the school served as an important socializing agent in the development of self-control.

The General Theory of Crime stipulates that self-control is a relatively stable trait that crystallizes between the ages of eight and ten (Gottfredson & Hirschi, 1990; Hirschi & Gottfredson, 1995). Although an individual's absolute level of self-control may fluctuate slightly over the years, his/her ranking in relation to peers remains stable, suggesting that socializing agents, including parents and schools, have limited opportunities to exert their effects on self-control after a certain age.

Although several studies have demonstrated some stability in self-control (e.g., Arneklev, Cochran, & Gainey, 1998; Coyne & Wright, 2014), few have shown that it is as stable as Gottfredson and Hirschi (1990) hypothesized. For example, in a longitudinal study, Hay and Forrest (2006) found that 84% of their participants' relative rankings in self-control remained stable from 7 to 15 years of age, although the remaining relative rankings fluctuated. Furthermore, results from studies conducted by Burt, Simons, and Simons (2006) and Burt, Sweeten, and Simons (2014) did not find support for the stability of self-control. In their sample of African American pre-adolescents (10-14 year olds), self-control was neither absolutely stable nor relatively stable. Additionally, improvements in parenting practices and attachment to teachers continued to affect levels of self-control after the proposed age of crystallization. The investigators therefore concluded that self-control continues to evolve after the age of 10, as individuals adapt to their social environments (Burt et al., 2014).

Taken together, evidence for the General Theory of Crime demonstrates that low self-control is an important component of crime and imprudent behaviour. However, contrary to Gottfredson and Hirschi's (1990) initial assertions, self-control does not appear to crystallize by age 10, and socializing agents can continue to affect self-control past this age. As such, it is

imperative that researchers continue to test the assumptions of the theory during these formative years.

Opportunity. The second component of Gottfredson and Hirschi (1990)'s theory, the role of opportunity in crime and imprudent behaviour, has been overlooked in many of the studies conducted to date. Gottfredson and Hirschi were careful to point out that low self-control can exist without crime or imprudent behaviour. Indeed, in order for low self-control to lead to crime and/or imprudent behaviour, there must be opportunity. Conversely, even in the presence of an opportunity to engage in a crime or imprudent behaviour, individuals with high self-control can resist the lure, implying that opportunity moderates the relationship between self-control and crime.

Unfortunately, in Gottfredson and Hirschi's (1990) original work, little elaboration is given for what constitutes an opportunity or how opportunity should be incorporated into studies testing the theory. Consequently, many studies have ignored the role of opportunity when looking at low self-control and crime (e.g., Burton, Cullen, Evans, Alarid, & Dunaway, 1998). Some researchers, however, have attempted to operationalize opportunity in order to validate this component of the theory. Through various conceptualizations and definitions of opportunity, it has been shown that offenders' perceived opportunities for deviance, the difficulty of the crime, and the likelihood of getting caught, in addition to low self-control, predict adults' crime and/or imprudent behaviours (e.g., Bolin, 2004). This implies that greater opportunities for crime and imprudent behaviour exist in situations where force or fraud can provide immediate benefits, when it is easy to commit the crime, and when there is less worry of detection (Desmond, Bruce, & Stacer, 2012). In accordance, several years after the introduction of the General Theory of Crime, Gottfredson and Hirschi (2003) elaborated on their conceptualization of opportunity,

explaining that opportunities to commit crimes are abundant and limitless, but each specific crime has a unique set of conditions necessary for the crime to be committed. These sets of conditions serve as opportunity.

Furthermore, the implied function of opportunity as moderating the relationship between self-control and crime and analogous behaviours was subsequently verified in a handful of studies (e.g., Longshore, 1998). Of particular interest to the present study, was its demonstrated applicability to youth. For example, Desmond et al. (2012) found that self-control and opportunity interacted to predict deviant behaviour in teens (Grade 7-12). Specifically, individuals with low self-control *and* who had friends who used substances ("opportunity") were the most likely to smoke, drink, and use marijuana ("deviant behaviour"), explaining that a norm for deviance within a peer group provided greater "opportunity" to engage in the behaviour, and less fear of being detected. Similarly, Kuhn and Laird (2013) found that pre-adolescents (Grade 5-7) with low self-control were more likely to engage in anti-social behaviour when their peers were involved in anti-social behaviours, and when they had more unsupervised time and fewer family rules.

In summary, Gottfredson and Hirschi's General Theory of Crime (1990), which posits that low self-control coupled with opportunity results in crime, has received plenty of empirical support, with studies demonstrating that opportunity moderates the relationship between low self-control and crime. Furthermore, the theory's applicability to imprudent behaviours has been well documented, with researchers continuing to investigate the various anti-social behaviours that are affected by an individual's low self-control, as well as the diverse situations that constitute as opportunities for crime. Given the continual expansion of the theory, the documented applicability to adolescents, as well as the evidence to suggest that self-control

continues to be malleable during the school years, the current study aimed to further this expansion by testing the applicability of the General Theory of Crime to bullying behaviour.

Applying the General Theory of Crime to Bullying Behaviours

Bullying behaviours and crime. Bullying is increasingly being recognized in many places as a crime (Cornell & Limber, 2015). Moreover, even if not considered a crime, bullying constitutes as an imprudent behaviour, sharing several characteristics with criminal acts. The very definition of bullying details that the individual perpetrating the bullying behaviour has more power than the victim (Olweus, 1993). The power differential can come from a number of different sources (e.g., age, strength, socio-economic status, popularity) (Chaux & Castellanos, 2015). Nonetheless, the imbalance creates a situation for the bully that facilitates aggression, therefore creating a simple task, analogous to a core characteristic of criminal acts. Furthermore, bullying is often impulsive, a reaction to someone else's actions, and therefore fulfils the impulsive characteristic of criminal acts. Finally, when an individual engages in bullying behaviour, they may not recognize or feel concern about the hurt they have caused to the victim, similar to that which is shown when an individual engages in a criminal act (Unnever & Cornell, 2003). Given the shared characteristics of bullying and criminal acts, it follows that the General Theory of Crime might be applicable to bullying, in that low self-control and opportunity would interact to have a similar effect on bullying perpetration as they exert on crime and imprudent behaviour.

Low self-control and bullying. Several studies have unintentionally investigated elements of the theory by examining the relationship between components of low self-control, such as lacking empathy and being impulsive, and bullying perpetration. For example, Joliffe and Farrington (2011) found that greater impulsivity in adolescents (age 13-17) was related to

more bullying perpetration for both male and female students. Furthermore, after conducting a meta-analysis across 21 studies, Mitsopoulou and Giovazolias (2015) concluded that empathy was negatively associated with bullying. Although these results provide some evidence that bullying behaviour might be influenced by low self-control, they do not study low self-control as it was conceptualized by Gottfredson and Hirschi (1990), comprised of impulsivity, preference for simple tasks, preference for physical activities, self-centered tendencies, risk-seeking behaviours, and short temperedness. In fact, only a handful of studies have looked at this relationship.

Unnever and Cornell (2003) investigated the relationship between Attention Deficit Hyperactivity Disorder (ADHD), low self-control, and bullying perpetration in early adolescence (Grade 6-8). Self-control was measured using the self-control scale developed by Grasmick et al. (1993), which conceptualizes self-control according to Gottfredson and Hirschi (1990)'s original definition, containing subscales for impulsivity, preference for simple tasks, preference for physical activities, self-centered tendencies, risk-seeking behaviours, and short temperedness. Despite the six subscales, a single dimension of self-control emerged after factor analysis (Grasmick et al., 1993). Results from this study revealed a strong significant relationship between low self-control and bullying other students; in fact, ADHD status was no longer related to bullying after self-control was statistically controlled (Unnever & Cornell, 2003).

Moon, Hwang, and McCluskey (2011) also examined the relationship between low self-control and bullying perpetration, using Korean 8th grade students as participants. Results revealed that low self-control was significantly related to bullying perpetration initially. However, this significant effect disappeared once other factors such as examination-related strain and depression were included in the equation.

It is important to note that neither of the two aforementioned studies examined the General Theory of Crime in its entirety, as neither one included an operationalization of opportunity. Further consideration is needed to determine what should be included as opportunity for bullying perpetration.

Opportunity and bullying. In accordance with previous research, an opportunity should exist when bullying behaviours can easily occur without detection, and immediate gratification may occur (Desmond et al., 2012). Although this provides an endless supply of options for opportunity, keeping with arguments for a social-ecological perspective in studying bullying (Swearer et al., 2010), it follows that the social context of bullying behaviour, or aspects of the school environment should be evaluated as opportunity.

The role of school climate, or the overall social atmosphere of the school, and bullying has recently received growing attention. Thapa, Cohen, Guffey, and Higgins-D'Alessandro (2013) define school climate as the norms, goals, and values of a school community that are exhibited by its members. In their review of research on school climate, Thapa et al. distinguished several different dimensions, including safety, relationships, teaching and learning, institutional environment, and the school improvement process, each of which can be further subcategorized into several components (e.g., relationships can be subcategorized into respect for diversity, school connectedness, etc.). The question therefore becomes, which of these aspects of school climate facilitate bullying behaviour and can serve as "opportunity" when exploring the role of self-control, opportunity, and bullying perpetration. Previous research has shown that schools with lower levels of perceived teacher support (Elsaesser, Gorman-Smith, & Henry, 2013; Espelage, Polanin, & Low, 2014; Gage, Prykanowski, & Larson, 2014; Harel-Fisch et al., 2011), less respect for cultural diversity (Gage et al., 2014), fewer positive peer interactions

(Elsaesser et al., 2013; Turner, Reynolds, Lee, Subasic, & Bromhead, 2014), unfair enforcement of school rules (Cornell, Shukla, & Konold, 2015), and poor school bonding (Hymel et al., 2014; Turner et al., 2014), as well as higher levels of perceived safety problems (Hymel et al., 2014) are associated with higher levels of bullying.

Low self-control, opportunity and bullying. To date, only two studies have explored the relationships among bullying, low self-control and opportunity. Nofziger (2001) investigated the applicability of the General Theory of Crime to incidents of intimidation and fighting, including bullying perpetration, in 1200 students (Grade 9-11; 87% Caucasian). Parental supervision, participation in unstructured activities, and deviant peer influence were combined and used as an indicator of one's general opportunity to engage in crimes. Using structural equation modelling, the authors found that low self-control and opportunity each contributed to the likelihood of bullying perpetration. Lower self-control was associated with higher levels of bullying perpetration and more general opportunity to engage in crime was also associated with higher levels of bullying perpetration.

More recently, Moon and Alarid (2015) considered the effect of low self-control and opportunity on bullying perpetration in a younger sample of Hispanic pre-adolescents (Grade 6-7). Opportunity was operationalized as number of close friends who engaged in bullying behaviours, parental supervision and monitoring, school disorder and violence, and negative teacher experiences. Using negative binomial regression, Moon and Alarid (2015) found that low self-control and opportunity each significantly predicted bullying perpetration. However, the strength of the relationship between self-control and bullying weakened when the opportunity measures were included in the model, indicating that peer group, school disorder and violence, parental involvement, and negative teacher experiences were stronger explanations of bullying

than low self-control. The authors concluded that these results highlight the importance of including opportunity measures when studying the relationship between self-control and bullying (Moon & Alarid, 2015).

It is important to note that although both of these studies included low self-control and opportunity in their research, neither study directly investigated whether opportunity *moderated* the relationship between low self-control and bullying, as is implied by the General Theory of Crime (Gottfredson and Hirschi, 1990) and verified in subsequent studies (e.g., Kuhn & Laird, 2013). It is therefore crucial that moderation be examined when applying this theory to bullying perpetration. Furthermore, both studies' samples of participants were ethnically homogenous, thus compromising the generalizability of these results, and underscoring the need for results to be replicated using a diverse sample. Moreover, although both studies used bullying perpetration as the outcome measure, items measuring bullying did not explicitly include the three key elements of bullying: intentionality, a power differential, and repetition (Olweus, 1993), nor were participants given a definition of bullying as a reference point. Previous research has demonstrated that youths' perceptions of bullying rarely include these three key features, that different rates of bullying perpetration are found when definitions are provided (Vaillancourt et al., 2008), and that more negative outcomes are found for victims of bullying where power imbalances and repetition occurred (Ybarra, Espelage, & Mitchell, 2014). It is therefore difficult to ascertain whether these studies truly measured bullying perpetration or other similar constructs such as teasing, and it is therefore crucial that the findings be replicated using appropriate measures.

The Current Study

The purpose of the current study was to replicate and build upon the applicability of the General Theory of Crime to bullying perpetration. The present study expanded on previous studies by including a diverse sample of participants, testing the applicability in a younger sample, expanding the conceptualization of opportunity, using scales that explicitly measure bullying, and examining whether opportunity moderates the relationship between low self-control and bullying. Specifically, the current study examined whether self-control, perceptions of school climate (school bonding, teacher support, consistency and clarity of rules and expectations, positive peer interactions, negative peer interactions, disciplinary harshness, support for cultural pluralism, safety problems, student engagement, student input in decision making, instructional innovation), and the interaction between self-control and perceptions of school climate predicted bullying perpetration for pre-adolescents (Grades 4-7). In other words, the present study investigated whether the relationship between self-control and bullying was moderated by perceptions of school climate, where the predictor measure was self-control, the outcome measure was bullying, and perceptions of different aspects of school climate were the moderators.

Given the extensive research that has demonstrated the role of low self-control in crime and analogous behaviours across the lifespan, the present study hypothesized that increases in self-control would predict decreases in bullying perpetration. Furthermore, given the literature on the role of school climate in bullying, it was expected that perceptions of school climate would serve as appropriate indicators of opportunity, and would therefore negatively predict bullying perpetration. Finally, based on the support found previously regarding the moderation of opportunity in the relationship between low self-control and crime/imprudent behaviours, it was

expected that self-control would interact with school climate variables to predict bullying such that students with low self-control and who had poor perceptions of school climate would exhibit the highest levels of bullying perpetration. In other words, perceptions of school climate would serve as a moderator, interacting with self-control to predict bullying.

Method

Data for the current research study came from the 2015 School Climate and Bullying Research Project conducted across several urban/suburban schools in southern British Columbia. This project is an ongoing initiative overseen by Dr. Shelley Hymel and the Social Emotional Education and Development Research Group since 2009. The project serves as a way to investigate the role of school climate in bullying and victimization, as well as a forum to begin discussions with interested schools on ways to improve their school climate. Each year, in addition to the core survey, which includes questions about school climate, school bonding, and bullying, new outcome measures are added to the survey. The 2015 survey measured emotional competence, emotion regulation, self-control, anxiety, students' experiences with bullying, and students' perceptions of school climate, including perceptions of school bonding, teacher support, consistency and clarity of rules, student engagement, negative peer interactions, positive peer interactions, student input in decision making, instructional innovation, support for cultural pluralism, disciplinary harshness, and safety problems. Student responses to selected parts of this survey provided the data for the current study and are described in greater detail below.

Participants

A total of 979 students (49% male, 51% female), from Grades 4 through 7, were recruited from eight schools across two school districts in southern British Columbia. This age group was chosen because Gottfredson and Hirschi (1990) propose that self-control crystallizes during these years. Furthermore, this age group has been shown to have high levels of bullying perpetration (e.g., Craig et al., 2009) and the scales measuring self-control have shown to be reliable at these ages (e.g., Moon & Alarid, 2015).

The sample was culturally diverse, with 33% of participants identifying as Asian, 21% as Caucasian, 18% as mixed cultures, 11% as South Asian, 3% as Middle Eastern, 2% as African, 2% as Native, 2% as Latin American, and the remainder not knowing how to identify. This is important given the homogeneity of participants used in past research (Moon & Alarid, 2015; Nofziger, 2001), and allows for the results of the current study to be more generalizable.

Procedure

Passive consent procedures were used in one of the two participating school districts. Information letters, describing the research, were sent to guardians of all students in Grades 4 to 7 (see Appendix A), and those wishing to decline participation could do so by contacting their child's school. Active consent procedures were used in the other district. Consent forms were sent to guardians of all students in Grades 4 to 7 (see Appendix B). In order to encourage response rates, students who returned completed consent forms (whether guardians consented or not) were entered into a draw for ITunes gift certificates.

In both districts, surveys were administered by two trained research assistants in school, during class time. Participants were allotted one hour to complete the 115 items. Before completing the surveys, students' informed assent was obtained (see Appendix C). The demographics, school bonding, and bullying and victimization items of the survey were read aloud to participants. They were then able to complete the remainder of the survey independently, although the research assistant was available to continue reading aloud for any participants that required it (see Appendix D for complete survey). Participants were instructed to refrain from putting identifying information on the surveys in order to protect their confidentiality and anonymity. Participants were, however, given the option to request additional help from a school staff at a later point by self-identifying. Principals were notified regarding all

students requesting help and agreed to follow up with each student who did so. This identifying information was separated from completed surveys, and therefore did not compromise confidentiality or anonymity.

Measures

Self-control. Participants' perceptions of their self-control were assessed by the *Self-Control Scale* developed by Grasmick et al. (1993), which assesses the six aspects of low self-control proposed by Gottfredson and Hirschi (1990): impulsivity (4 items, e.g., *"I don't devote much thought and effort to preparing for the future."*), preference for simple tasks (4 items, e.g., *"The things in life that are easiest to do bring me the most pleasure."*), risk-seeking behaviour (4 items, e.g., *"Sometimes I will take a risk just for the fun of it."*), preference for physical activity (3 items, e.g., *"I seem to have more energy and a greater need for activity than most other people my age."*), self-centered (4 items, e.g., *"I try to look out for myself first, even if it means making things difficult for other people."*) and temper (3 items, e.g., *"When I'm really angry, other people better stay away from me."*). All 22 items were answered on a 5-point, Likert scale from "really disagree" (1) to "really agree" (5).

The original measure demonstrated good reliability ($\alpha= 0.81$) and a unidimensional factor of self-control (Grasmick et al., 1993), with subsequent studies also revealing these properties with adolescent samples ($\alpha= 0.88$) (Kuhn & Laird, 2013). Accordingly, in the present study a single composite score of self-control was computed by averaging participants' responses to all 22 items. In line with previous research, the composite score demonstrated good reliability in the present study ($\alpha=.83$). All responses were reverse coded such that a higher score reflected higher levels of self-reported self-control.

Bullying. Participants were first provided with a definition and explanation of what bullying was, based on the Olweus (1993) definition, and then were asked to rate how often this school year they had taken part in: bullying others, physically bullying others, verbally bullying others, socially bullying others, and cyber bullying others. Examples of each type of bullying behaviour were provided. Responses were made on a 5-point, Likert scale (1= *never*; 2= *once or a few times*; 3= *every month*; 4= *every week*; 5= *several times a week*).

A principal component analysis was conducted on the five bullying items. This analysis method was chosen instead of an exploratory factor analysis because the purpose was to reduce the data, while still retaining as much of their original variance, in order to limit the number of dependent variables in the present study, rather than to identify the nature of the five items' underlying construct. Results revealed a single factor and therefore no rotation could be performed. Based on the results of the principal component analysis (see Table 1), a composite score of bullying perpetration was created by averaging students' responses to the five bullying items. The composite score also demonstrated adequate reliability in the present study (α=.73). Higher scores reflected more frequent involvement in bullying perpetration.

School bonding. The 8-item, *Bonds with School Scale* (Murray & Greenberg, 2001) was used to assess participants' perceptions of school bonding (e.g., "*Most mornings I look forward to going to school.*"). Participants responded on a 4-point, Likert scale indicating how true each sentence was for them (1= *not at all true* or *almost never true*; 2= *hardly ever true*; 3= *often true*; 4= *almost always true* or *always true*). A composite score of school bonding was created by averaging students' responses to the scale's items. Originally, this composite score demonstrated good reliability (α= 0.80), which was confirmed in the present study (α= .76).

Table 1. Principal Component Analysis for Bullying Items

Item	Factor Loading
Taken part in bullying others	.84
Taken part in verbally bullying others	.82
Taken part in socially bullying others	.67
Taken part in physically bullying others	.58
Taken part in cyber bullying others	.52
Total Variance Explained	49%
Internal Consistency (α)	.73

School climate. The *Inventory of School Climate- Student Version* (Brand, Felner, Shim, Seitsinger, & Dumas, 2003) was used to assess students' perceptions of ten different aspects of school climate: teacher support (6 items, e.g., *"Teachers go out of their way to help students."*), consistency and clarity of rules and expectations (5 items, e.g., *"When teachers make a rule, they mean it."*), negative peer interactions (5 items, e.g., *"Students in this school feel students are too mean to them."*), positive peer interactions (5 items, e.g., *"Students get to know each other well in classes."*), disciplinary harshness (5 items, e.g*, "The rules in this school are too strict."*), support for cultural pluralism (4 items, e.g., *"You work with students of different races and cultures in a school activity."*), student engagement (5 items, e.g., *"Students work hard for good grades in classes.")*, student input in decision making (5 items, e.g., *"Students in this school have a say in how things work."*), instructional innovation (4 items, e.g., *"New ideas are tried out here."*), and safety problems (6 items, e.g., *"Have you ever brought something to school to protect yourself?"*). Participants responded to each item on a 4-point, Likert scale indicating how

true each sentence was for them (1= *not at all true* or *almost never true*; 2= *hardly ever true*; 3= *often true*; 4= *almost always true* or *always true*). Composite scores were created for each dimension of school climate by averaging students' responses to relevant items. Composite scores of each of the subscales demonstrated adequate reliability in the original Brand et al. (2003) study (α=.63-.81), findings that were replicated in the present study (see Table 2). Specifically, internal consistency indices for each subscale in the present study were adequate for research purposes, with some demonstrating quite high internal consistency. Responses to items from the negative peer interactions, disciplinary harshness, and safety problems subscales were reverse coded so that in all cases, higher scores on each scale reflected more positive perceptions of school climate.

Table 2. Internal Consistency for each School Climate Variable

School Climate Variable	Cronbach's Alpha
Teacher Support	.77
Consistency and Clarity of Rules and Expectations	.72
Negative Peer Interactions	.82
Positive Peer Interactions	.77
Disciplinary Harshness	.78
Support for Cultural Pluralism	.69
Safety Problems	.73
Student Engagement	.80
Instructional Innovation	.67
Student Input in Decision Making	.74

Plan of Analyses

The purpose of the current study was to determine whether the General Theory of Crime could be applied to bullying behaviour; specifically whether perceptions of school climate moderated the relationship between self-control and bullying perpetration. This was examined through a number of steps. First, data cleaning procedures were implemented, as described below. Next, preliminary analyses were conducted to examine grade and sex differences in bullying perpetration, and to explore the relationships among the independent (self-control), dependent (bullying perpetration) and moderator variables (perceptions of school climate). The primary analysis included hierarchical regressions to explore the proposed moderation of school climate on the relationship between self-control and bullying.

Descriptive Information and Data Cleaning

Table 3 presents descriptive statistics (means and standard deviations) for the predictor, moderators, and outcome measures. Visual inspection of the distributions of the measures revealed several non-normal distributions. Furthermore, skewness values greater than .5 or less than -.5 were used as cut-offs to indicate whether variables required transformation. Specifically, measures of school bonding, teacher support, consistency and clarity of rules, cultural pluralism, safety problems, student engagement, and disciplinary harshness were found to be negatively skewed, the composite index of bullying perpetration was positively skewed. Logarithmic transformations were performed on the bullying perpetration measure (BullyLog=Log10(Bully) and the school climate measures (SchoolClimateLog=Log10(5-SchoolClimate). These transformations resulted in improvements in the distribution of the bullying perpetration measure (skewness reduced from 2.59 to 1.67), school bonding (skewness reduced from -1.03 to .29),

teacher support (skewness reduced from -.60 to -.0), consistency and clarity of rules (skewness reduced from -.99 to .19), disciplinary harshness (skewness reduced from -.80 to .06), cultural pluralism (skewness reduced from -.73 to .11), student engagement (skewness reduced from -.56 to -.10), and safety problems (skewness reduced from -1.34 to .71).

Table 3. Descriptive Statistics for Predictor, Moderator, and Outcome Variables

Variable	Mean	Standard Deviation
Self-Control	3.35	.54
Bullying Perpetration	1.17	.30
Teacher Support	3.20	.51
Consistency & Clarity of Rules	3.39	.46
Negative Peer Interactions	2.82	.64
Positive Peer Interactions	3.21	.49
Disciplinary Harshness	2.93	.63
Support for Cultural Pluralism	3.28	.57
Safety Problems	3.49	.55
School Bonding	3.35	.42
Student Engagement	3.28	.48
Student Input	2.43	.60
Instructional Innovation	2.80	.58

Note. Means and standard deviations presented here are based on untransformed scores.

It should be noted that the transformations applied to the school climate variables (school bonding, teacher support, consistency and clarity of rules, cultural pluralism, safety problems, student engagement and disciplinary harshness) reverse coded the variables, such that higher scores for these aspects of school climate reflected *poorer* perceptions of each of these variables

22

(e.g., less teacher support, more safety problems). All analyses were conducted using the transformed scores and the results presented below are based on transformed scores. However, means and standard deviations are presented using the untransformed scores, for ease of interpretation.

Preliminary Analyses

Sex and grade differences in bullying. A 2 (sex) x 4 (grade) univariate analysis of variance (ANOVA) was conducted to evaluate sex, grade, and sex x grade differences in self-reported bullying perpetration. For the bullying variable, the assumption of homogeneity of variance was violated, $F(3, 982) = 5.21, p > .05$. Thus, for the bullying variable, post hoc analyses were conducted using the Games-Howell procedure since the population variances and sample sizes were not equivalent.

Significant main effects of grade were revealed for bullying perpetration, $F(3, 540) = 6.62, p < .01$. Post-hoc, follow-up analyses (Games-Howell procedure) revealed that Grade 7 students reported engaging in bullying perpetration significantly more frequently ($M = 1.23, SD =.32$) than students in Grade 6 ($M = 1.16, SD = .29$), Grade 5 ($M = 1.16, SD = .32$), and Grade 4 ($M = 1.12, SD = .22$). No significant differences were observed between male and female students for bullying perpetration, $F(1, 930) = 3.53, p > .05$, indicating that both sexes reported engaging in similar levels of bullying. Additionally, the grade by sex interaction was nonsignificant, $F(3, 984) = 1.22, p > .05$, indicating that levels of reported bullying perpetration in each grade did not significantly differ by sex.

Correlational analyses. Bivariate correlations (Pearson Product Moment Correlations, one-tailed) were computed to examine the relationships among the predictor, moderator, and outcome variables. As shown in Table 4, all predictor and moderator variables were found to be

significantly related to bullying perpetration. Specifically, higher levels of bullying perpetration were associated with lower levels of self-control, less teacher support, less school bonding, less consistency and clarity of rules, less positive peer interactions, less support for cultural pluralism, less instructional innovation, less student input into decision making, higher levels of disciplinary harshness, more safety problems, more negative peer interactions, and less student engagement.

Testing Assumptions

The following assumptions for regression were tested: multicollinearity, normality, homoscedasticity, and independence. Results for each are described below.

Multicollinearity. In order to satisfy this assumption, predictors must not be highly correlated. Through examination of the Tolerance Index and Variance Inflation Factor (VIF), it was revealed that multicollinerity among variables was reasonable. Mean centering methods were employed as a further precaution against multicollinearity, with the centered terms entered into the regression equation.

Independence of errors. In order to satisfy this assumption, the residuals needed to be independent of one another. Results from the Durban-Watson statistic indicated that this assumption was met and therefore there was no serial correlation.

Normality. The assumption of normality indicates that residuals must be normally distributed. This assumption was first tested using visual analyses. Both the Normal P-P plot and histogram suggested that this assumption was violated, which was confirmed using an objective test for normality: the Shapiro-Wilks test. Results were significant, $D(987) = .69, p < .05$, indicating that the residuals were not normally distributed. However, given the large sample size, it was determined that this violation was not problematic for subsequent analyses.

Table 4. Bivariate Correlations Among Predictor, Moderator, and Outcome Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1: Bullying												
2: Self-control	-.26**											
3: Teacher Support[1]	.19**	-.12**										
4: School Bonding[1]	.19**	-.32**	.60**									
5: Consistency/Clarity of Rules[1]	.20**	-.13**	.60**	.49**								
6: Safety Problems[1]	.19**	-.26**	.21**	.30**	.19**							
7: Disciplinary Harshness[1]	.18**	-.28**	.36**	.39**	.20**	.36**						
8: Negative Peer Interactions	-.25**	.27**	-.31**	-.37**	-.30**	-.52**	-.48**					
9: Positive Peer Interactions	-.19**	.11**	-.48**	-.54**	-.44**	-.18**	-.22**	.31**				
10: Student Engagement[1]	.20**	-.06*	.42**	.41**	.47**	.03	.15**	-.21**	-.48**			
11: Cultural Pluralism[1]	.09**	-.13**	.37**	.34**	.36**	.12**	.18**	-.22**	-.37**	.24**		
12: Instructional Innovation	-.14**	.02	-.43**	-.36**	-.32**	-.06*	-.14**	.14**	.39**	-.30**	-.39**	
13: Student Input In Decisions	-.14**	.07*	-.47	-.38**	-.31**	-.09**	-.21**	.17**	.35**	-.30**	-.33**	.57**

*p < .05 **p < .01 (one-tailed).

[1]Transformed variables. Transformations resulted in reverse coding (e.g., teacher support is actually low teacher support) and correlations

therefore need to be interpreted accordingly.

Homoscedasticity. In order to satisfy this assumption, the residuals must have a constant variance. Examination of the scatter plot of the predicted residuals and the standardized residuals indicated that this assumption was violated. Despite transforming data, the violation persisted and therefore generalizability of the results is compromised and results should be interpreted with caution.

Primary Analyses

School climate and bullying perpetration. An initial hierarchical regression was run to investigate which climate variables significantly predicted bullying perpetration and would therefore be used as measures of opportunity in the primary analysis. For this analysis, bullying perpetration served as the outcome measure and grade and sex were entered in Step 1 of the regression in order to control for their effects. Each of the 11 school climate variables (perceptions of school bonding, teacher support, consistency and clarity of rules, disciplinary harshness, student engagement, negative peer interactions, positive peer interactions, student input in decision making, instructional innovation, support for cultural pluralism, and safety problems) were entered in Step 2 of the model.

As demonstrated in Table 5, grade and sex accounted for 2% of the variance in bullying perpetration, $F(2, 970) = 9.82$, $p < .01$. The addition of the school climate variables in the second step of the model was significant, $F(11, 959) = 9.58$, $p < .01$, and accounted for an additional 10% of the variance. The specific climate variables that were found to significantly predict bullying perpetration were: safety problems, $b = .07$, $t(959) = 2.72$, $p < .01$, student engagement, $b = .03$, $t(959) = 2.51$, $p < .05$, and negative peer interactions $b = -.02$, $t(959) = -3.42$, $p < .01$. Therefore, these three climate variables were used as moderators for the primary analysis.

Table 5. Results of the Preliminary Hierarchical Linear Regression

	R^2	ΔR^2	Beta	b	SE b
Step 1:	.02	.02**			
Constant				.01	.02
Grade			.13	.01**	.00
Sex			-.05	-.01	.01
Step 2:	.12	.10**			
Constant				.02	.02
Grade			.12	.01**	.00
Sex			-.04	-.01	.01
School Bonding[1]			-.02	-.02	.04
Teacher Support[1]			.03	.02	.03
Consistency and Clarity of Rules[1]			.04	.03	.03
Disciplinary Harshness[1]			.03	.02	.03
Safety Problems[1]			.10	.07**	.02
Support for Cultural Pluralism[1]			-.02	-.01	.02
Student Engagement[1]			.10	.07**	.03
Negative Peer Interactions			-.14	-.02**	.01
Positive Peer Interactions			-.03	-.01	.01
Student Input			-.03	.00	.01
Instructional Innovation			-.04	-.01	.01

*p<.05; **p<.01
[1]Transformed variables. Transformations resulted in reverse coding (e.g., teacher support is

actually low teacher support) and therefore results need to be interpreted accordingly.

Self-control, school climate, and bullying perpetration. Hierarchical regression analyses were conducted to determine whether safety problems, student engagement and negative peer interactions buffered the relationship between self-control and bullying perpetration (see Figure 1).

Figure 1. Moderation Model of Primary Analysis
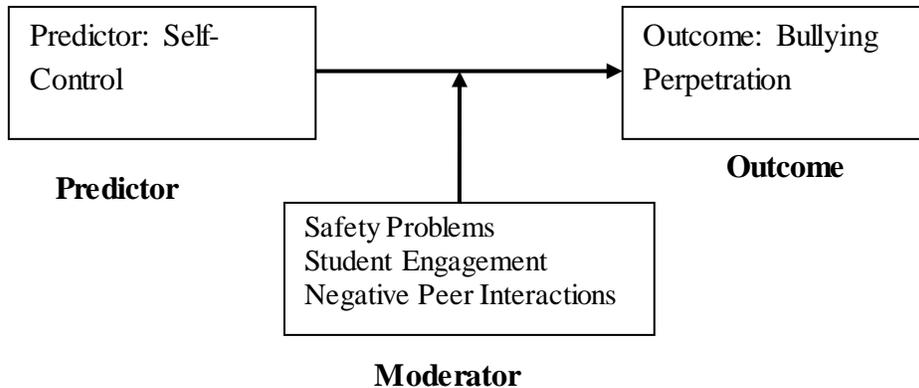
As demonstrated in Table 6, the inclusion of control variables, grade and sex, in Step 1 significantly improved the model, $F(2, 977) = 9.64$, $p < .01$, accounting for 2% of the variance. The regression coefficients and semi-partial correlations demonstrated that only grade was a significant predictor of bullying perpetration. Consistent with results of the preliminary analyses of variance, older students reported more bullying than did students in earlier grades. The addition of self-control in Step 2, significantly improved the model, $F(1, 976) = 75.02$, $p < .01$, accounting for an additional 7% of the variance. As expected, students with low self-control were more likely to engage in bullying perpetration.

School climate variables (safety problems, student engagement, and negative peer interactions) were included in Step 3 of the model, and significantly improved the model $F(3, 973) = 21.01$, $p < .01$, accounting for an additional 6% of the variance. Inspection of the regression coefficients and semi-partial correlations revealed that each school climate variable significantly predicted bullying perpetration. Specifically, students with higher perceptions of

28

safety problems and/or negative peer interactions, and/or with perceptions of less student engagement were more likely to engage in bullying perpetration.

Inclusion of the interaction terms (self-control by safety problems, self-control by student engagement, and self-control by negative peer interactions) in Step 4, however, did not significantly improve the model, $F(3, 970) = 2.43$, $p = .06$, indicating that safety problems, student engagement, and negative peer interactions did not moderate the relationship between self-control and bullying perpetration.

Table 6. Results of Regression Analysis Predicting Bullying from Self-Control, Safety Problems, Student Engagement, and Negative Peer Interactions

	R^2	ΔR^2	Beta	b	SE b
Step 1:	.02	.02**			
Constant				.01	.02
Grade			.13	.01**	.00
Sex			-.05	-.01	.01
Step 2:	.09	.07**			
Constant				.14**	.02
Grade			.15	.01**	.00
Sex			.00	.00	.01
Self-Control			-.27	-.05**	.01
Step 3:	.15	.06**			
Constant				.12**	.02
Grade			.13	.01**	.00
Sex			-.01	.00	.01
Self-Control			-.21	-.03**	.01
Safety Problems[1]			.08	.05*	.02
Student Engagement[1]			.14	.10**	.02
Negative Peer Interactions			-.13	-.02**	.01

Table 6. Results of Regression Analysis Predicting Bullying Perpetration from Self-Control, Safety Problems, Student Engagement, and Negative Peer Interactions

Step 4:		.15	.01		
Constant				.11**	.02
Grade			.13	.01**	.00
Sex			-.01	.00	.01
Self-Control			-.20	-.03**	.01
Safety Problems[1]			.07	.05*	.02
Student Engagement[1]			.13	.10**	.02
Negative Peer Interactions[1]			-.13	-.02**	.01
Self-Control X Safety Problems			-.03	-.03	.04
Self-Control X Student Engagement			-.07	-.09*	.04
Self-Control X Negative Peer Interactions			.01	.00	.01

*$p<.05$; **$p<.01$

[1]Transformed variables. Transformations resulted in reverse coding and therefore regression statistics need to be interpreted accordingly.

Discussion

The primary purpose of the current study was to determine whether the General Theory of Crime could be applied to bullying perpetration for pre-adolescent youth. Specifically, the present study investigated whether perceptions of school climate moderated the relationship between low self-control and bullying perpetration. A second purpose of the current study was to replicate previous findings that have found that low self-control and opportunity each uniquely contribute to predicting bullying perpetration, and expand upon them by using a diverse sample, school climate variables as measures of opportunity, and bullying measures that include a definition. The following sections aim to summarize and interpret the findings of the current study, including results from the preliminary and primary analyses.

Bullying Experiences

Sex and grade differences in bullying perpetration. No significant differences were found between the frequency in which boys and girls reported engaging in bullying behaviours. This finding is somewhat surprising given previous research that has found that, overall, boys engage in more bullying than girls (e.g., Currie et al., 2012; Perlus, Brooks-Russell, Wang, & Iannotti, 2014). A closer look at the literature, however, revealed that this sex difference usually appears when examining physical bullying (e.g., Pepler et al., 2006), and boys and girls tend to engage in similar rates of verbal and social bullying (Scheithauer, Hayer, Petermann, & Jugert, 2006; Woods & White, 2005). In the current study, sex differences were examined for the bullying perpetration composite, which was comprised of general, physical, verbal, social, and cyber bullying items. Few participants indicated that they engaged in physical bullying (8%), as compared to verbal (23%) and social (20%). As such, the majority of the bullying perpetration was in the form of social and verbal bullying, for which sex differences were not expected.

Grade differences in reported bullying were also demonstrated in the current study. Specifically, rates of bullying were found to be highest in Grade 7 when compared to Grades 4, 5, and 6. This is consistent with previous research demonstrating that rates of bullying perpetration increase with age into adolescence (e.g., Currie et al., 2012), peaking around Grade 9 (e.g., Brown, Birch, & Kancherla, 2005). Thus, the sex and grade differences observed in the present study were consistent with results of previous research, indicating that diverse samples, like the present sample, demonstrate similar sex and grade patterns in reports of bullying perpetration engagement.

Self-Control and Bullying Perpetration

Self-control was found to predict bullying perpetration; decreases in self-control predicted increases in bullying perpetration. This finding is consistent with previous research (e.g., Unnever & Cornell, 2003), and supports the current study's first hypothesis that increases in self-control would predict decreases in reported bullying perpetration. Furthermore, this relationship continued to be significant even after perceptions of school climate were added into the equation. The strength of the relationship between self-control and bullying perpetration, however, became weaker with the addition of perceptions of school climate into the model, which is consistent with findings from Moon and Alarid (2015), and demonstrates the need to consider both self-control *and* "opportunity" in applications of the General Theory of Crime.

School Climate and Bullying Perpetration

With respect to the role of school climate in predicting bullying perpetration, perceptions of negative peer interactions, student engagement, and safety problems each accounted for a unique proportion of variance in bullying perpetration. Specifically, perceptions of more negative peer interactions and more safety problems as well as less school engagement predicted

more bullying perpetration, which is consistent with results of previous studies (e.g., Elsaesser et al., 2013; Hymel et al., 2014; Turner et al., 2014).

Given previous research, it was not expected, however, that the remaining school climate variables (perceptions of teacher support, positive peer interactions, support for cultural pluralism, disciplinary harshness, school bonding and consistency and clarity of rules) would not account for unique proportions of variance in bullying perpetration. One explanation for this difference might be the particular climate variables that have been considered when investigating the role of school climate in bullying perpetration. In the present study, 11 indicators of perceived school climate were simultaneously entered into a regression analysis in order to ensure that all aspects of school climate were considered when determining which accounted for unique variance when predicting bullying perpetration. In contrast, much of the research looking at the role of school climate in bullying perpetration only explored a few aspects of school climate (e.g., Elsaesser et al., 2013). As such, common variance might have been overlooked since certain proponents of school climate were not included in the model.

Interaction between Self-Control and School Climate on Bullying Perpetration

Contrary to expectations, perceptions of school climate were not found to moderate the relationship between self-control and bullying perpetration. Previous studies have demonstrated that self-control and opportunity interact to predict other imprudent behaviours such as engaging in anti-social behaviours for students in Grades 5-7 (Kuhn & Laird, 2013) and alcohol and substance use for adolescents in Grades 7-12 (Desmond et al., 2012). However, these findings were not found to be applicable to bullying perpetration. Rather, low self-control and opportunity appeared to be additive influences on the likelihood of bullying.

Given that this was the first study to look directly at whether self-control and opportunity interacted to predict bullying perpetration, one explanation for these differences is that bullying perpetration does not share the same characteristics as crime and analogous behaviours, and therefore opportunity does not act in the same way for bullying perpetration as it does for other deviant behaviours. In recent years, it has been documented that there are different profiles of individuals that engage in bullying perpetration (Farmer et al., 2010; Hymel & Swearer, 2015). Typically, the reactive, socially incompetent students comes to mind as the prototype or stereotype for bullies. However, many students who are socially competent also engage in bullying (e.g., Sutton, Smith, & Swettenham, 1999). Although the former profile of bullying clearly shares similar characteristics with how Gottfredson and Hirschi (1990) described crime and analogous behaviours, the latter does not. It is possible that because the present study did not differentiate between the different subtypes, significant results were masked. Future studies are needed to determine if the General Theory of Crime can be applied to different profiles of individuals who perpetrate bullying.

An alternative explanation for the present results is that, in accordance with the General Theory of Crime, opportunity *does* act similarly in bullying perpetration as it does in other deviant behaviours, but because absolute levels of self-control were not fully developed in the present participants, an interaction with opportunity was unable to be detected. Gottfredson and Hirschi (1990) proposed that self-control crystallizes between ages 8 and 10, after which relative levels of self-control are stable and parenting no longer influences them. Subsequent authors, however, have challenged this proposition, stating that self-control continues to evolve and be influenced by different socializing agents after the age of 10 (e.g., Burt et al., 2014), results that are in line with studies of the development of the pre-frontal cortex, an area of the brain

implicated in several aspects of self-control, that does not fully develop until early adulthood (e.g., Diamond, 2002; Figner et al., 2010; Gibb & Kolb, 2015). As such, it is possible that, while a student might be considered to have high self-control when compared to peers his/her age, his/her self-control is still developing, and has not reached a high enough level to be immune to the lure to engage in bullying perpetration that is provided by "opportunity" (perceptions of poor school climate). While the General Theory of Crime would predict that individuals with high self-control can avoid crime and analogous behaviours even in the presence of opportunity (Gottfredson & Hirschi, 1990), results from the present study would suggest that this might only occur after self-control has fully developed. Longitudinal research investigating whether there is an age at which the interaction between self-control and opportunity in predicting bullying perpetration becomes significant would be beneficial.

Similarly, although it is possible that the General Theory of Crime can be applied to bullying perpetration in its entirety, the expected interaction between low self-control and opportunity was not found in the present study potentially because school climate indicators did not reflect a meaningful operationalization of opportunity. In Gottfredson and Hirschi's (1990) original work, opportunity was noted as being important for crime to occur, but no specifications were given as to what constituted as an opportunity. Later, they (2003) noted that opportunities were abundant and limitless, but that each specific crime had its own unique, necessary set of conditions in order for it to occur, and that these conditions were what was considered to be an opportunity. Again, however, no details were given as to how to measure, define, or operationalize the concept of opportunity. Subsequent studies, therefore, took it upon themselves to conceptualize opportunity, with researchers suggesting that opportunities exist when immediate benefits can be provided, when it is easy to commit the crime, and when there is less

worry of detection (Desmond et al., 2012). Specifically, opportunity for adults has been operationalized in a variety of ways, with the most common conceptualizations including asking directly about opportunities to commit crimes (e.g., Bolin, 2004) and using the amount of risky lifestyle behaviours that participants engage in as a proxy for opportunity (Longshore & Turner, 1998). For adolescents, parental supervision (e.g., Kuhn & Laird, 2013) and whether the participants' friends engage in deviant behaviours (e.g., Desmond et al., 2012) are most frequently used as conceptualizations of opportunity.

In the present study, perceptions of negative peer interactions, safety problems, and poor student engagement were used to represent opportunities to engage in crime. Although conceptually these make sense as proxies for opportunity since they provide immediate benefits for engaging in bullying, and allow for bullying to be easily committed with less worry of detection, they deviate from the way opportunity has been defined in the past. It is possible that had opportunity been defined similarly to how it was operationalized in previous studies an interaction with low self-control would have been found in the present study.

Moreover, in the present study, control variables, low self-control, and perceptions of school climate only accounted for a total of 15% of the variance in bullying perpetration, leaving 85% of the variance still unknown. This suggests that further consideration is needed as to what constitutes as an opportunity for bullying perpetration. Future studies should consider expanding upon the present study by also including conceptualizations of opportunity that have been found to interact with low self-control to predict other deviant behaviours (e.g., parental supervision and friends' deviant behaviours), as well as expanding on what other social contexts could serve as opportunities for bullying behaviours (e.g., teachers' bullying management strategies).

Strengths and Limitations

Using a large, ethnically diverse sample, and carefully chosen, psychometrically valid measures, the present study found that both self-control and perceptions of school climate, specifically safety problems, negative peer interactions, and student engagement, each explained unique amounts of the variance in reported bullying perpetration among pre-adolescents, and that there was no significant interaction between self-control and perceptions of school climate. These findings must be interpreted in consideration of the methodological limitations of the study. One such limitation was that schools were not recruited randomly; rather they were schools that requested to participate in the present study, likely because these topics were of interest to them. As such, lower rates of bullying and more positive perceptions of school climate were reported than would be expected in the general population, and little variance is evident in responses to these measures. Small variances make it difficult to obtain significant findings, and also may contribute to differences in findings from this study compared to previous studies that found that opportunity moderated the relationship between low self-control and various deviant behaviours.

Another methodological limitation in the present study was the use of self-report for both self-control and bullying perpetration. Not only might findings reflect shared method variance, but also responses are subject to social desirability bias. Furthermore, individuals with low self-control might not be as aware of their deficits, and therefore might not be the best informants on the matter. Future studies would benefit from triangulating sources of information.

Finally, the present study examined perceptions of aspects of climate at the individual level. It has been proposed that climate should be examined at the classroom or school level using multi-level analytical approaches (Marsh et al., 2012). Future studies would benefit from

exploring the interaction between climate (at the classroom or school level) and self-control on bullying perpetration using hierarchical linear modeling.

Despite these limitations, the present study's results were consistent with findings from previous studies that low self-control and opportunity have additive effects on bullying perpetration (Moon & Alarid, 2015; Nofziger, 2001). Furthermore, several strengths of the present study are worth noting. The General Theory of Crime (Gottfredson & Hirschi, 1990) implies that low self-control and opportunity should interact to predict crime and analogous behaviours; findings that were verified by subsequent studies (e.g., Kuhn & Laird, 2013). The present study was the first thus far to directly examine this relationship in bullying perpetration through moderation analyses and therefore be able to highlight the similarities and restraints of the applicability of the General Theory of Crime to bullying perpetration. Furthermore, the present study was strengthened by including definitions of bullying perpetration to participants in order to ensure that perceptions of engaging in bullying was truly being measured.

Implications and Conclusion

The present study demonstrated that self-control, and perceptions of student engagement, safety problems, and negative peer interactions are each important in predicting bullying perpetration, exerting their effects in an additive, rather than interactive manner. These findings have implications for the applicability of the General Theory of Crime to bullying perpetration as well as for bullying intervention and prevention efforts.

With regard to applying the General Theory of Crime to bullying perpetration, results from the present study highlight the need for future studies to consider different profiles of individuals who engage in bullying perpetration, the need to consider the longitudinal development of self-control when examining whether opportunity moderates the relationship

between low self-control and bullying perpetration, as well as the need to expand upon the conceptualization of opportunity.

Given the additive influence of self-control (individual factor) and perceptions of aspects of school climate (contextual factors) on bullying perpetration, the results from the present study continue to underscore the importance of adopting a social-ecological framework when examining bullying. This suggests that it is imperative to incorporate strategies that target both individual factors as well as improving social contexts into bullying prevention and intervention strategies. Specifically, programs aimed at improving self-control and fostering a positive school climate would be particularly important given the results of the present study.

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Appendix A: Passive Consent Letters

T H E U N I V E R S I T Y   O F   B R I T I S H   C O L U M B I A

Department of Educational & Counseling Psychology & Special Education

Faculty of Education, 2125 Main Mall, Vancouver, B. C. Canada V6T 1Z4

Tel: (604) 822-6022 | Fax: (604) 822-3302

March/April 2015
Dear Parent(s),
We are writing to inform you about a research project on "School Climate and Bullying" conducted by Dr. Shelley Hymel in the Faculty of Education at UBC that is taking place at your child's school. As you may know, the BC Ministry of Education supports school efforts to foster social responsibility in students, and schools throughout the province have undertaken a variety of strategies to create safe and caring learning environments. In this project we are working with the Burnaby School District (SD 41) to find out just how successful these efforts have been. To do this, we will ask students and teachers to report on their social experiences at school and how they view the social climate of their school.

Who Participates: All students in grades 4, 5, 6 and 7 are invited to take part in this project. Participation is voluntary and students can stop at any time if they wish without penalty. All answers provided by students are treated as confidential and will only be seen by the researchers. Names and other personal information will not be included on the survey and individual answers will not be reported.

What is Involved: Students will be asked to fill out a questionnaire about their social experiences at school, including how engaged they are in school and how much they feel that they belong, about their relationships with teachers and classmates, and their perceptions of their school as a caring community. Students are also asked about their experiences with bullying. The survey takes about 1 hour and will be completed at school, at a time arranged with the teacher between April and June 2015. All students in grades 4-7 will be taking part in the survey, but only if they want to do so (participation is voluntary).

Why is this Project Important: This study gives students a voice to help educators understand their social experiences at school. The information will be used to guide efforts to improve the educational experiences of elementary school students and will help schools to track how successful their efforts are to create safe and caring schools and address problems of bullying.

To withdraw your child from the project: If you do *not* want your child to take part in this project, please contact principal Anthony Yam at your child's school (604-664-8727)

Concerns or questions? If you have any questions about the project, feel free to call Dr. Shelley Hymel (604-822-6022). If you have any concerns about your child's rights as a research participant and/or their experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Services at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

Sincerely,

Shelley Hymel, Professor

T H E U N I V E R S I T Y O F B R I T I S H C O L U M B I A

Department of Educational & Counseling Psychology & Special Education

Faculty of Education

2125 Main Mall

Vancouver, B. C. Canada V6T 1Z4

Tel: (604) 822-6022 | Fax: (604) 822-3302

March 2015

Dear Parent(s),

We are writing to ask your permission for your son or daughter to take part in a research project on "School Climate and Bullying" at your child's school conducted by Dr. Shelley Hymel in the Faculty of Education at UBC. As you may know, the BC Ministry of Education supports school efforts to foster social responsibility in students, and schools throughout the province have undertaken a variety of strategies to create safe and caring learning environments. In this project we are working with schools to find out just how successful these efforts have been. To do this, we will ask students and teachers to report on their social experiences at school and how they view the social climate of their school.

Who Participates: All students in grades 4, 5, 6 and 7 are invited to take part in this project, but only students who receive parent/guardian permission and who indicate that they are willing to participate can take part in the project. Participation is voluntary and students can stop at any time if they wish. To help you decide whether your child can participate, we provide a short description below.

Description: For this project, students will be asked to fill out a questionnaire about their social experiences at school, including how engaged they feel with school, how much they feel that they belong, about their relationships with teachers and classmates, and their perceptions of their school as a caring community. Students are also asked about bullying (whether they take part in bullying others, are bullied, or witness bullying), how they feel at school, and the ways they manage how they feel and act at school. The survey takes about an hour and will be completed at school, at a time arranged with the teacher between April and June 2015.

Confidentiality and anonymity: All answers provided by students are treated as confidential and will only be seen by the researchers. Names and other personal information will not be included on the survey and individual answers will not be reported; we are only interested in group results. If desired, a written report of results can also be provided for interested parents.

Benefits: This study gives students a voice in helping educators to understand their social experiences at school. This valuable information can guide efforts to improve the educational experiences of elementary school students. The information from this study will help schools to track how successful their efforts are to create safe and caring schools, and address problems of bullying.

Consent: Please complete the consent form on the next page indicating whether or not you give permission for your child to participate, and have your child return the form to the teacher by Friday of this week. ***Please return the form even if you do not want your child to participate so that we know you received our request.*** You may keep this letter and one copy of the consent form for your records.

Contact: We would be grateful if your child takes part in this project and hope that you will give permission for them to do so. If you have any questions about the project, feel free to call Dr. Shelley

Hymel (604-822-6022). If you have any concerns about your child's rights as a research participant and/or their experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Services at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

Sincerely,   Shelley Hymel, Professor

*** PLEASE KEEP THIS COPY FOR YOUR RECORDS ***

<u>PARENT/GUARDIAN CONSENT FORM</u>

Project Title: School Climate and Bullying

Principal Investigator: Shelley Hymel, Professor, University of British Columbia

Consent: I have read and understood the information about the project called "School Climate and Bullying". I understand that my son/daughter's participation in the project is voluntary and he/she may stop at any time without any penalty. I have a copy of this form for my records.

I give my permission for my son/daughter to participate in the confidential questionnaire. *Please check one:*

☐ YES, I consent to my son/daughter's participation in this project.

☐ NO, I do not consent to my son/daughter's participation in this project.

_____   _____

Son/Daughter's Name (please print)   Teacher Name or Division #

_____   _____

Parent/Guardian Signature   Date

*** PLEASE COMPLETE AND RETURN THIS CONSENT FORM TO THE SCHOOL ***

PARENT/GUARDIAN CONSENT FORM

Project Title: School Climate and Bullying

Principal Investigator: Shelley Hymel, Professor, University of British Columbia

Consent: I have read and understood the information given about the project called "School Climate and Bullying". I understand that my son/daughter's participation in the project is voluntary and he/she may stop at any time without any penalty. I have a copy of this form for my records.

I give my permission for my son/daughter to participate in the confidential questionnaire. *Please check one:*

☐ YES, I consent to my son/daughter's participation in this project.

☐ NO, I do not consent to my son/daughter's participation in this project.

_____ _____

Son/Daughter's Name (please print)   Teacher Name or Division #

_____ _____

Parent/Guardian Signature   Date

Appendix C: Assent Forms

THE UNIVERSITY OF BRITISH COLUMBIA

Department of Educational & Counseling Psychology & Special Education
Faculty of Education
2125 Main Mall
Vancouver, B. C. Canada V6T 1Z4
Tel: (604) 822-6022 | Fax: (604) 822-3302

Dear Student(s),

We are researchers from the University of British Columbia who are interested in what makes a good school. To do this, we are working with your school district on a project called, "School Climate and Bullying" to find out how students feel about their social experiences at school and whether they see schools as safe and caring places to learn. We invite you to be part of this project.

What's it about? We are asking students to tell us about their experiences in school by filling out a survey that takes about 60 minutes to complete. The survey asks about your school environment, your experiences with bullying, whether you feel that the school is a safe place for you, how you feel at school and how you manage your feelings and actions at school.

Who takes part? All students in grade 4-7 at your school are invited to be part of this project, but only students who *want* to take the survey will be included. We hope that you will take this opportunity to give your feedback to your school, but your participation is voluntary and you can stop at any time without penalty.

Confidentiality? All of your answers on the survey are confidential or private. That means that no one other than the researchers will know your answers. When we talk about the results of this project, it will be about students your age in general, not about individual students.

Contact: We would really appreciate your participation in this project. Your input can really help teachers and researchers to better understand the experiences of students in school. Please indicate below if you wish to participate or not. If you have questions or concerns about the project, feel free to call Dr. Shelley Hymel (604-822-6022).

Concerns about your rights? If you have any questions about your rights as a research participant or concerns about your experiences on this project, you can contact the Research Participant Complaint Line at the University of British Columbia's Office of Research Services at 604-822-8598 (1-877-822-8598, toll free) or email them at RSIL@ors.ubc.ca.

We thank you for your help with this project.

Sincerely,
Shelley Hymel, UBC Professor

━ ━

I am willing to participate in this questionnaire project (please check one box):

☐ YES, I consent to participate in this survey project.

☐ NO, I do not consent to participate in this survey project.

Print your name (first and last): _____

Signature:_____   Date:_____

Survey of School Experiences

Instructions

All responses on this survey are confidential (private)— do not put your name on it.

Make sure to read every question. <u>This is not a test and there are no right or wrong answers,</u> but it is important to answer honestly. If you are not comfortable answering a question or you don't know what it means, you can ask for help or leave it blank.

Please do not look at other students' answers.

If there is anything you need help with or you have any questions, please raise your hand and we will come over to help you.

It is important to colour the circles completely,

like this: ●

Please DO NOT use ✓, Please DO NOT use X.

Tell us about yourself...

1. What is your ID number? (This number is written on the top of your consent form.)

   _____

2. What is the name of your school? _____

3. What grade are you in? (Choose one)   O 4   O 6
                                          O 5   O 7

4. Are you a boy or a girl? (Choose one)   O Boy   O Girl

5. How long have you lived in Canada? (Choose one) O less than 2 years
                                                   O 2-4 years
                                                   O more than 4 years

6. Is English the main language spoken in your home?   O Yes   O No

7. How old are you (in years)?   O 8   O 10   O 12
                                  O 9   O 11   O 13 or older

8. Although we all live in Canada, people sometimes identify themselves by the racial, ethnic, or cultural group to which their parents, grandparents, or ancestors belong. How do you identify your racial or ethnic background? (Please choose one.)	YES
A) Aboriginal/ Native People (North American Indian, Metis, Inuit, etc.)	O
B) African / Caribbean (Black)	O
C) Asian (Chinese, Korean, Japanese, Taiwanese, etc)	O
D) Caucasian (White, European)	O
E) Latin American (Mexican, South American)	O
F) Middle Eastern (Arabic, Iranian, Kuwaiti, Persian, Israeli, etc)	O
G) South Asian (Indian, Indonesian, Pakistani, Filipino, etc)	O
H) Mixed (more than one of the above)	O

I) Other (tell us) : _____		O
J) I don't know		O

How do you feel about your school?

INSTRUCTIONS: Read each statement and choose the best answer for YOU. For the questions below, please select one of the following answers:

NO: means the sentence is "not at all true" or "almost never true" about you.

no: means that the sentence is "hardly ever" true about you

yes: means that the sentence is "often" true about you

YES: means that the sentence is "almost always true" or "always true" about you.

	NO	*no*	*yes*	**YES**
9. Most mornings I look forward to going to school.	①	②	③	④
10. I feel safe at my school.	①	②	③	④
11. My school is a nice place to be.	①	②	③	④
12. I like to take part in class discussions and activities.	①	②	③	④
13. I feel sure about how to do my work at school.	①	②	③	④
14. Doing well at school is important to me.	①	②	③	④
15. Kids at my school have a good chance to grow up and be successful.	①	②	③	④
16. I like my classes this year.	①	②	③	④

Bullying at your school....

The next few questions ask about bullying at your school. There are lots of different ways to bully someone. A bully might tease or make fun of other students, spread rumours about them, punch or hit them, or use the internet or texting to do this. Bullying is not an accident – a bully <u>wants</u> to hurt the other person, and does so <u>repeatedly and unfairly</u> (bullies have some advantage over the person they hurt). Sometimes a group of students will bully another student.

Think about <u>this school year</u> when you answer the following questions about bullying.

How often have you…	Never	Once or a few times	Every month	Every week	Several times a week
17. been bullied?	①	②	③	④	⑤
18. taken part in bullying others?	①	②	③	④	⑤
19. seen other students being bullied?	①	②	③	④	⑤

How often have you been…	Never	Once or a few times	Every month	Every week	Several times a week
20. <u>physically</u> bullied, when someone: - hit, kicked, punched, pushed you - physically hurt you - damaged or stole your property	①	②	③	④	⑤
21. <u>verbally</u> bullied, when someone: - said mean things to you - teased you or called you names - threatened you or tried to hurt your feelings	①	②	③	④	⑤
22. <u>socially</u> bullied, when someone: - said bad things behind your back - gossiped or spread rumours about you - got other students not to like you - ignored you or refused to play with you	①	②	③	④	⑤
23. <u>cyber</u>-bullied, when someone: - used the computer, websites, emails, text messages or pictures	①	②	③	④	⑤

online to threaten you, hurt you, make you look bad, or spread rumours about you					

How often have you seen *other students* being…	Never	Once or a few times	Every month	Every week	Several times a week
24. physically bullied?	①	②	③	④	⑤
25. verbally bullied?	①	②	③	④	⑤
26. socially bullied?	①	②	③	④	⑤
27. cyber bullied?	①	②	③	④	⑤

How often have *you* taken part in…	Never	Once or a few times	Every month	Every week	Several times a week
28. physically bullying others?	①	②	③	④	⑤
29. verbally bullying others?	①	②	③	④	⑤
30. socially bullying others?	①	②	③	④	⑤
31. cyber bullying others?	①	②	③	④	⑤

What's it like at your school?

For the next set of statements, choose the answer that you think is best.

NO: means the sentence is "not at all true" or "almost never true" about you.
no: means that the sentence is "hardly ever" true about you
yes: means that the sentence is "often" true about you
YES: means that the sentence is "almost always true" or "always true" about you.

What's it like at your school?	NO	*no*	*yes*	YES
32. Teachers go out of their way to help students.	①	②	③	④
33. If students want to talk about something teachers will find time to do it.	①	②	③	④
34. Teachers help students to organize their work.	①	②	③	④
35. Students really enjoy their classes.	①	②	③	④
36. Teachers help students catch up when they return from an absence.	①	②	③	④
37. Teachers take a personal interest in students (i.e., care about you personally).	①	②	③	④
38. If some students are misbehaving in class the teacher will do something about it.	①	②	③	④
39. When teachers make a rule, they mean it.	①	②	③	④
40. Students are given clear instructions about how to do their work in classes.	①	②	③	④
41. Students understand what will happen to them if they break a rule.	①	②	③	④
42. Teachers make a point of sticking to the rules in classes.	①	②	③	④
43. Students work hard for good grades in classes.	①	②	③	④

44. Students try hard to get the best grades they can.	①	②	③	④
45. Grades are very important to students.	①	②	③	④
46. Students work hard to complete their assignments.	①	②	③	④
47. Students put a lot of energy into what they do here.	①	②	③	④
48. Students in this school have trouble getting along with each other.	①	②	③	④
49. Students in this school are mean to each other.	①	②	③	④
50. In classes, students find it hard to get along with each other.	①	②	③	④
51. There are students in this school who pick on other students.	①	②	③	④
52. Students in this school feel students are too mean to them.	①	②	③	④
53. Students get to know each other well in classes.	①	②	③	④
54. Students in this school are very interested in getting to know other students.	①	②	③	④
55. Students enjoy doing things with each other in school activities.	①	②	③	④
56. Students in this school get to know each other really well.	①	②	③	④
57. Students enjoy working together on projects in classes.	①	②	③	④
58. The rules in this school are too strict.	①	②	③	④
59. It is easy for a student to get kicked out of class in this school.	①	②	③	④
60. Students get in trouble for breaking small rules.	①	②	③	④
61. Teachers are very strict here.	①	②	③	④
62. Students get in trouble for talking.	①	②	③	④

63. In our school, students are given the chance to help make decisions.	①	②	③	④
64. Students in this school have a say in how things work.	①	②	③	④
65. Students get to help decide some of the rules in this school.	①	②	③	④
66. Teachers ask students what they want to learn about.	①	②	③	④
67. Students help decide how class time is spent.	①	②	③	④
68. New and different ways of teaching are tried in classes.	①	②	③	④
69. New ideas are tried out here.	①	②	③	④
70. Teachers like students to try unusual projects.	①	②	③	④
71. In classes, we are given assignments to help us find out about things outside of school.	①	②	③	④
72. Your teachers show that they think it is important for students of different races and cultures at your school to get along with each other.	①	②	③	④
73. Students of many different races and cultures are chosen to participate in important school activities.	①	②	③	④
74. You get to do something which helps you learn about students of different races and cultures at your school.	①	②	③	④
75. You work with students of different races and cultures in a school activity.	①	②	③	④
76. Has anyone at school threatened to beat you up or hurt you if you didn't give them your money or something else that belonged to you?	①	②	③	④
77. Has anyone actually beaten you up or really hurt you when you were at school?	①	②	③	④
78. Have you ever brought something to school to protect yourself?	①	②	③	④
79. Have you ever been afraid that someone will hurt or bother you at school?	①	②	③	④

80. Has anything worth more than a dollar been stolen from your desk or locker at school when you weren't around?	①	②	③	④	
81. Has anyone offered or tried to sell you drugs at school?	①	②	③	④	

How Do You Feel?

The next set of questions asks about how you manage your feelings. Please choose one answer for each sentence that tells us if you agree or disagree that this is true for you.

REALLY DISAGREE: means that you "really disagree" with the sentence; it's not true at all
disagree: means that you "disagree" with the sentence; it's hardly ever true
neither: means that you neither agree nor disagree with the sentence
agree: means that you "agree" with the sentence; it's true a lot of the time
REALLY AGREE: means that you "really agree" with the sentence; it's always true

	REALLY DISAGREE	*disagree*	*neither agree nor disagree*	*agree*	REALLY AGREE
82. When I want to feel happier, I think about something different.	①	②	③	④	⑤
83. I keep my feelings to myself.	①	②	③	④	⑤
84. When I want to feel less bad (e.g., sad, angry or worried), I think about something different.	①	②	③	④	⑤
85. When I am feeling happy, I am careful not to show it.	①	②	③	④	⑤
86. When I'm worried about something, I make myself think about it in a way that helps me feel better.	①	②	③	④	⑤

87. I control my feelings by not showing them.	①	②	③	④	⑤
88. When I want to feel happier about something, I change the way I'm thinking about it.	①	②	③	④	⑤
89. I control my feelings about things by changing the way I think about them.	①	②	③	④	⑤
90. When I am feeling bad (e.g., sad, angry or worried), I'm careful not to show it.	①	②	③	④	⑤
91. When I want to feel less bad (e.g., sad, angry or worried) about something, I change the way I'm thinking about it.	①	②	③	④	⑤

What Are You Like?

For each sentence below, choose one answer to tell us how much you agree or disagree that the sentence is true.

REALLY DISAGREE: means that you "really disagree" with the sentence; it's not true at all
disagree: means that you "disagree" with the sentence; it's hardly ever true
neither: means that you neither agree nor disagree with the sentence
agree: means that you "agree" with the sentence; it's true a lot of the time
REALLY AGREE: means that you "really agree" with the sentence; it's always true

	REALLY DISAGREE	*disagree*	*neither agree nor disagree*	*agree*	REALLY AGREE
92. Sometimes I will take a risk just for the fun of it.	①	②	③	④	⑤
93. I sometimes find it exciting to do things for which I might get in trouble.	①	②	③	④	⑤
94. I seem to have more energy and a greater need for activity than most other people my age.	①	②	③	④	⑤

95.	The things in life that are easiest to do bring me the most pleasure.	①	②	③	④	⑤
96.	I don't devote much thought and effort to preparing for the future.	①	②	③	④	⑤
97.	I dislike really hard tasks that stretch my abilities to the limit.	①	②	③	④	⑤
98.	I'm not very sympathetic to other people when they are having problems.	①	②	③	④	⑤
99.	I try to look out for myself first, even if it means making things difficult for other people.	①	②	③	④	⑤
100.	I like to get out and do things more than I like to read or contemplate [think about] ideas.	①	②	③	④	⑤
101.	I often act on the spur of the moment without stopping to think.	①	②	③	④	⑤

What Are You Like?	REALLY DISAGREE	*disagree*	*neither agree nor disagree*	*agree*	REALLY AGREE
102. When I'm really angry, other people better stay away from me.	①	②	③	④	⑤
103. I like to test myself every now and then by doing something a little risky.	①	②	③	④	⑤
104. I lose my temper pretty easily.	①	②	③	④	⑤
105. I'm more concerned with what happens to me in the short run than in the long run.	①	②	③	④	⑤
106. I often do whatever brings me pleasure here and now, even at the cost of some future goal.	①	②	③	④	⑤

107. If I had a choice, I would almost always rather do something physical than something mental.	①	②	③	④	⑤
108. Excitement and adventure are more important to me than security.	①	②	③	④	⑤
109. If things I do upset people, it's their problem not mine.	①	②	③	④	⑤
110. I will try to get things I want even when I know it's causing problems for other people	①	②	③	④	⑤
111. When things get complicated, I tend to quit or withdraw.	①	②	③	④	⑤
112. I frequently try to avoid projects that I know will be difficult.	①	②	③	④	⑤
113. Often, when I am really angry at people I feel more like hurting them than talking to them about why I am angry.	①	②	③	④	⑤

Think about your school this year and decide how much you agree or disagree with each sentence in the boxes below. Choose the answer that best tells us what you think.

REALLY DISAGREE: means that you "really disagree" with the sentence; it's not true at all
disagree: means that you "disagree" with the sentence; it's hardly ever true
agree: means that you "agree" with the sentence; it's true a lot of the time
REALLY AGREE: means that you "really agree" with the sentence; it's always true

	REALLY DISAGREE	*disagree*	*agree*	REALLY AGREE
114. It is important for kids to help other students who are being bullied or harassed.	①	②	③	④
115. People at my school are working hard to make it a good place for everyone.	①	②	③	④

Thank You!

If you are having problems with other students at school,
please know that you do not have to face it alone; you can get help.

You can talk to your parents or others family members;
they may have some ideas that you have not yet thought about.
You can talk to any adult that you trust at the school –
a counsellor, a teacher or coach, a custodian, a youth worker, a bus driver, etc.

We want to help…….contact us.

If you would like help from someone outside of the school you could call one of the following help lines.

Help Line for Children (24 Hours)   604-310-1234
Kids Help Phone   1-800-668-6868

(*1-800 numbers can be called FREE from payphones, no money needed).

THANK YOU FOR COMPLETING THIS SURVEY!

Your feedback will help us to make this school safe for all students.