AN EXAMINATION OF PREDICTORS OF PUNITIVE ATTITUDES ABOUT CRIME REDUCTION IN SASKATCHEWAN

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In the Department of Sociology
University of Saskatchewan
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by

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ABSTRACT

This thesis conducted a secondary quantitative analysis to test predictors of punitive attitudes about the best overall and youth crime reduction methods in Saskatchewan, and to examine an integrated perspective developed from Bourdieu’s concept of habitus. My research questions were twofold: 1) What are the valid predictors of punitive attitudes toward overall and youth crime respectively? 2) Is there a difference in punitive attitudes between overall crime and youth crime?

For my research methodology, I relied on a secondary quantitative analysis of data from *Taking the Pulse of Saskatchewan 2012*, a survey conducted by the Social Sciences Research Laboratories (SSRL) of the University of Saskatchewan. The data used in this thesis was taken from Section (F), Crime and Public Safety in Saskatchewan, and Section (H), demographics. I examined three types of predictors: demographics, fear of crime, and perception of crime trends. The demographic variables were gender, age, education, marital status, race, and total annual household income. The relationship between these predictors and the public’s punitive attitudes were first examined with a bivariate analysis. Then logistic regression analysis was used to determine the effect of a selected predictor of punitive attitudes when other predictors were controlled.

This thesis reported three major findings. First, the mutual predictors of punitive attitudes towards overall and youth crime are age, education, marital status, and perceived crime trends, while gender is significant only for overall crime, and race is significant only for youth crime when other variables are controlled. Secondly, with regard to the magnitude of influence, the variables perceived crime trends and education are the strongest predictors among all the
predictors considered in this study, but any single predictor only has small impact on punitive attitudes. Finally, respondents are generally less punitive towards youth crime than overall crime.

This thesis revealed that an integrated Bourdieusian perspective used in this study helped link the predictors in a more explanatory manner, and contributed to a more critical and contextual understanding of punitive attitudes. The empirical results reported in this thesis produced knowledge about punitive attitudes in Saskatchewan, and contributed to the literature on predictors of such attitudes.
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DEDICATION

To my dearest parents: Yiming Xing and Mingfeng Weng.
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Dependent Variables

The perceived best overall crime reduction methods
The perceived best youth crime reduction methods

Independent Variables

Age
Education
Fear of crime
Gender
Income
Marital status
Perceived crime trend
Race
CHAPTER 1
INTRODUCTION

In Canada, Prime Minister Stephen Harper’s Conservative government has devoted tremendous energy to promoting tough crime policies (“Harper reinforces conservative tough-on-crime approach,” 2011). For instance, Bill C-10, namely the Safe Streets and Communities Acts, was introduced in 2006, and demonstrated the government’s ambition to endorse severe punishment towards crime and criminals (J. V. Roberts, Crutcher, & Verbrugge, 2007). Harper claims that the public supports and demands his government’s law-and-order approach (Mertl, 2009): “We got elected because we know the people of Canada want us to take a tougher stand on crime, want us to deal toughly with those who perpetrate these crimes” (Mertl, 2009, para. 12).

On the other hand, many criminologists have argued that the public has insufficient knowledge with which to judge crime and the criminal justice system (e.g. F. T. Cullen, Fisher, & Applegate, 2000; Frost, 2010; J. V. Roberts, 1992). In most cases, polls and surveys have exaggerated the actual public punitive attitudes (J. V. Roberts, 1992). In fact, based on surveys of public punitive sentiments, it is questionable whether politicians and policy makers have solid grounds for believing tough-on-crime policies really appeal to the public (Frost, 2010; J. V. Roberts, 1992; J. V. Roberts, Stalans, Indermaur, & Hough, 2003). My thesis explores public attitudes in Saskatchewan about best methods for reducing overall and youth crime, and tests an integrated perspective. The integrated perspective was developed from Bourdieu’s concept of *habitus*; it is designed to help link various variables that play a role in shaping punitive attitudes.

Research on public punitive attitudes has been an essential component in criminology for decades, and numerous empirical studies have been undertaken to unravel the predictors that
account for such attitudes (see, for e.g. Adriaenssen & Aertsen, 2015; Applegate, F. T. Cullen, & Fisher, 2002; F. T. Cullen, Clark, J. B. Cullen, & Mathers, 1985; Dowler, 2003; Evans & Adams, 2003; Kury & Fernand, 1999; Kutateladze & Crossman, 2009; Langworthy & Whitehead, 1986). Such studies found that punitive attitudes are associated with such variables as gender, age, education level, race, income, marital status, religion, political conservatism, prior victimization experience, fear of crime, anger, knowledge about crime, and media exposure. Nonetheless, as Adriaenssen and Aertsen (2015) have noted, not only has research on public punitive attitudes remained undertheorized, but the definition of punitive attitudes has also stayed ambiguous. Thus, before starting my examination of punitive attitudes in Saskatchewan, it is first necessary to define such attitudes.

Adriaenssen and Aertsen (2015) defined a punitive attitude as “the micro level of punitivity,” portraying “an individual person in a particular society’s need for punishment, personal beliefs, perceptions, values, emotions, etc., about punishment” (p. 93). After reviewing conceptualizations of punitive attitudes in different studies, Adriaenssen and Aertsen (2015) further refined their multifaceted definition as “an attitude towards the goals of punishment, specified forms of penal sanctions, the intensity of penal sanctions, and specific sentencing policies” (p. 95). In this thesis, I examine the second dimension of public punitive attitudes, namely, public punitive attitudes towards specified forms of penal sanctions—in this case, preferences in Saskatchewan for the best crime reduction method for each of overall crime and youth crime.

1.1 The Current Study

The current study first examines the predictors of punitive attitudes towards each of overall crime and youth crime. To do so, I employed a secondary analysis of the quantitative data
collected from a Saskatchewan survey on public attitudes, *Taking the Pulse of Saskatchewan 2012*. For the survey, the Social Sciences Research Laboratories (SSRL) of the University of Saskatchewan hired students to conduct telephone interviews over two weeks starting on March 5, 2012. The participants were randomly selected Saskatchewan residents (18 years of age and older). A total of 1,750 surveys were completed. The survey contained 54 close-ended questions covering eight dimensions: Saskatchewan’s economy; sustainable resource development; Aboriginal issues; immigration and diversity; health, well-being, and Saskatchewan families; crime and public safety; moral issues; and demographics. The data that I drew upon were from the survey’s sections on crime and public safety, and on demographics.

In this thesis, I examined three types of predictors: demographics, fear of crime, and perception of crime trends. The demographic variables were gender, age, education, marital status, race, and total annual household income. The relationship between these predictors and the public’s punitive attitudes were first examined with a bivariate analysis. Then logistic regression analysis was used to determine the effect of a selected predictor of punitive attitudes when other predictors were controlled. A discussion of policy implications developed from this analysis is provided in the concluding chapter (Chapter 5).

In sum, the results show that age, education, marital status, and perceived crime trends are significant predictors of both overall and youth crime punitive attitudes when other variables are controlled. They also demonstrate that when other variables are controlled, gender is significant only for overall crime, whereas race is significant only for youth crime. Another important finding is that perceived crime trends and education are the most influential predictors of punitive attitudes. Policy recommendations in this study mainly focus on how to decrease public punitive attitudes by altering perceptions of crime trends.
1.2 Organization of the Thesis

My thesis consists of five chapters. The remainder of this chapter provides an outline of the thesis.

In Chapter 2, I first present an overview of empirical findings regarding such predictors of punitive attitudes as demographics, personal conservatism, prior victimization experiences, emotions, and knowledge about crime (Section 2.1), and then discuss the methodologies used to examine them (Section 2.2). This is followed by consideration of three perspectives in previous research that have been used to explain such attitudes (Section 2.3): the vulnerability perspective (Langworthy & Whitehead, 1986), the more-to-lose perspective (Dowler, 2003), and the race-based perspective (Jan, Ball, & Walsh, 2008; Johnson, 2008). These research perspectives were chosen because they offer explanations for the predictors of punitive attitudes, and were supported by empirical research. Finally in Section 2.4, I propose an integrated lens of these three perspectives as a means of examining public punitive attitudes through the angle of Bourdieu’s concept of habitus.

Chapter 3 provides an overview of my methodology. This includes further discussion of the research question, the research setting, the data used, the research hypotheses, the measures of variables, the treatment of missing data, and my analytical strategy.

Chapter 4 presents bivariate and multivariate results of the relationships between the dependent variables and the independent variables. The bivariate analysis demonstrates the preliminary relationships between various predictors and the dependent variables (Section 4.1); the multivariate analysis shows the effect of a single predictor on the dependent variable when other variables are controlled (Section 4.2). Section 4.3 summarizes results of this study.
Chapter 5 first examines the integrated perspective (Section 5.1) and the results of each predictor (Section 5.2). In this study, the strongest predictors of punitive attitudes have been found to be perceived crime trends and education. Section 5.3 reviews the policy implications of attempting to rectify public misconceptions about crime in order to alter public punitive attitudes. This is followed by a discussion of the study’s limitations (Section 5.4). Finally, I put forward some suggestions for future research (Section 5.5).
CHAPTER 2
LITERATURE REVIEW AND THEORETICAL LENS

Predictors of public punitive attitudes have been explored in a substantial body of empirical research (e.g., Applegate et al., 2002; Costelloe, Chiricos, & Gertz, 2009; Spiranovic, L. D. Roberts, & Indermaur, 2012). Numerous studies have examined and found associations between various types of predictors (e.g. demographics, personal beliefs, and emotions and knowledge about crime) and punitive attitudes (e.g., Applegate et al., 2002; Cochran & Sanders, 2009; Costelloe et al., 2009; Dowler, 2003; Evans & Adams, 2003; Hartnagel & Templeton, 2012; Jan et al., 2008; King & Maruna, 2009; Kutateladze & Crossman, 2009; L.D. Roberts & Indermaur, 2007; Pfeiffer, Windzio, & Kleimann, 2005; Spiranovic et al., 2012). In this chapter, I present an overview of empirical findings regarding such predictors, discuss the methodologies employed to examine them, and introduce three perspectives used to explain punitive attitudes in that research. It should be noted that empirical studies regarding predictors of punitive attitudes have reported inconsistent findings (Adriaenssen & Aertsen, 2015; Spiranovic et al., 2012). F. T. Cullen et al. (2000) argued that public punitive attitudes were ‘mushy’ since such attitudes would fluctuate according to the different research methods. Adriaenssen and Aertsen (2015) also pointed out that the different methodologies utilized to study punitive attitudes might result in the disparities in findings. Therefore, I include a section focusing on the methodologies used to study predictors of punitive attitudes in this chapter. Finally, I provide an introduction of Bourdieu’s concept of habitus. I suggest that habitus provides a lens to integrate the predictors of punitive attitudes in a more integrative perspective, and offers a useful theoretical lens to help explain the nuances of such attitudes. A brief summary of this chapter is provided in Section 2.5.
In summary, the literature reviewed provides an overview of relevant studies that have focused on predictors of punitive attitudes. The Bourdieuan perspective contributes a lens to link such predictors into a more explanatory manner. This literature then provides a useful foundation for my current study; as I use a Saskatchewan study to test similar predictors and the application of Bourdieu’s theory.

2.1 Empirical Findings Regarding Predictors of Punitive Attitudes

In this section, I discuss the empirical research findings of predictors of punitive attitudes, including five categories of predictors: demographics, personal conservatism, prior victimization experiences, emotions, and knowledge about crime. In section 2.1.1, I examine such demographic predictors as gender, age, education, race, income, and marital status. In section 2.1.2, I discuss the effect of personal conservatism on punitive attitudes, including religious and political conservatism. In section 2.1.3, I focus on the impact of prior victimization experiences. Emotions, such as fear of crime and anger, are discussed in section 2.1.4. The last predictor to be reviewed, knowledge about crime, involves perceptions of crime trends and media consumption (section 2.1.5).

In general, the literature review has shown that the above variables are related to punitive attitudes, yet findings regarding the degree and directions of the relationship are mixed for such variables as gender, age, race, and income. This is important here because it shows that there is a need to further examine the predictors of punitive attitudes to participate in the heated discussion in the literature. I have chosen studies that focused on testing various predictors of punitive attitudes using quantitative analysis given that it is the research methodology utilized in my current study, and most of the research reviewed took place in the North America.
2.1.1 Demographic Variables and Punitive Attitudes

Several demographic variables are often connected with punitive attitudes. However, research findings regarding the relationships between demographic variables and punitive attitudes are inconsistent. It should be noted that demographic variables are often shown to have small impact on punitive attitudes (L. D. Roberts & Indermaur, 2007; Spiranovic et al., 2012). Six demographic variables are considered below.

2.1.1.1 Gender. Some researchers noticed that there was a gender gap in punitive attitudes (e.g., Applegate et al., 2002; Cochran & Sanders, 2009; Kutateladze & Crossman, 2009). However, the findings concerning the relationship between gender and punitive attitudes have varied.

Generally speaking, researchers have reported that men hold more punitive attitudes than women (e.g., Applegate et al., 2002; Cochran & Sanders, 2009; Evans & Adams, 2003; Haghighi & Lopez, 1998; Hurwitz & Smitley, 1998; Jan et al., 2008; Kury & Ferdinand, 1999; Pfeiffer et al., 2005; L. D. Roberts & Indermaur, 2007; Spiranovic et al., 2012). Pfeiffer et al. (2005) found that men hold significantly more punitive attitudes towards various types of crime including theft, break-in, bodily injury, and towards crime generally. Similarly, other researchers have reported that compared to women, men are more likely to advocate death penalty (Applegate et al., 2002; Cochran & Sanders, 2009), and to be more punitive than women toward young offenders (Evans & Adams, 2003; Jan et al., 2008). For example, Evans and Adams (2003) found no evidence of gender differences in general punitiveness and support for rehabilitation, but did find that male respondents were more supportive of death penalty for younger offenders, and of transferring younger offenders to adult court. Jan et al. (2008) also reported that men were more likely to endorse transferring youth offenders to adult court for violent crimes.
Some researchers applied Carol Gilligan’s (1982) theory of different moral reasoning between men and women to explain why males are more punitive than females (Applegate et al., 2002; Cochran & Sanders, 2009; Hurwitz & Smither, 1998; Kutateladze & Crossman, 2009). Gilligan (1982) argued that men follow “the ethic of justice” and make decisions built upon their sense of right and wrong, whereas women adopt “the ethic of care” to guide their actions (p. 74). Therefore, women are reluctant to support violent punishment, and more likely to advocate rehabilitation.

However, two studies reported that women held more punitive attitudes than men in some cases. J. L. Miller, Rossi, and Simpson (1986) found that Black women preferred tougher punishment than Black men. They attributed this to Black women’s “subjective proximity to crime,” arguing that Black women might consider themselves more likely to be victimized, leading them to demand tougher punishment for crime (J. L. Miller et al., 1986, p. 317). Moreover, Payne, Gainey, Triplett, and Danner (2004) reported that women were more punitive than men toward crime involving victims. This finding is consistent with the argument, proposed by Langworthy and Whitehead (1986), that women would be more punitive because they are more afraid of victimization.

Other researchers determined that the relationship between gender and punitive attitudes is more complex than who is more punitive. For instance, one study (Kutateladze & Crossman, 2009) found that men and women possessed a comparable level of punitiveness, but were punitive in different ways. This accords with previous research findings that gender is a significant predictor of punitive attitudes but that the answer to which gender is more punitive depended on how the question was presented (Payne et al., 2004; Sprott, 1999). Sprott (1999) reported that men and women had no significant difference in punitive attitudes when asked
general attitudinal questions, but that women were more lenient than men when it came to sentencing, particularly when it came to cases of youth crime.

Applegate et al. (2002) asserted that the mixed results of the effect of gender on punitive attitudes might be due to gender having limited influence on punitive attitudes. Similarly, Spiranovic et al. (2012) also found that gender was a poor predictor of punitive attitudes. Considering gender’s small impact on punitive attitudes, it is possible that where differences have been found, they have been a function of the survey questions. As shown in Sprott’s (1999) study, the same group of men and women held analogous punitive attitudes when asked general questions, but their attitudes appeared to diverge when more detailed questions were mentioned.

2.1.1.2 Age. Existing research suggests there are age differences in punitive attitudes. However, research findings regarding such a relationship are mixed. Some studies have reported older people to be more punitive (F. T. Cullen et al., 1985; Evans & Adams, 2003; Jan et al., 2008; Pfeiffer et al., 2005). F. T. Cullen et al. (1985) reported that senior respondents prefer more punitive punishment. In particular, Pfeiffer et al. (2005) found that age correlated positively to punitive attitudes in sentencing for theft or break-in, bodily injury, and towards crime generally. In the same vein, Evans and Adams (2003) found that support for rehabilitation decreased with age. Hartnagel and Templeton (2012) argued that older people might be more fearful of crime, and, consequently, more punitive towards it. Similarly, Langworthy and Whitehead (1986) claimed that older people would be more punitive because they are more vulnerable than younger people. Another possible explanation offered for why older people were more punitive was that they are more conservative (Langworthy & Whitehead, 1986).

However, other studies found that age was inversely correlated to punitive attitudes (Hartnagel & Templeton, 2012; Langworthy & Whitehead, 1986). Hartnagel and Templeton
(2012) found a negative relationship between age and punitive attitudes, and claimed it was the result of the lower level of anger among older respondents. Langworthy and Whitehead (1986) originally hypothesized a positive relationship between age and punitive attitudes, but their results showed the opposite. They ascribed this to the possibility that the relationship between age and punitiveness was too complex to be linear (Langworthy & Whitehead, 1986).

Other researchers reported that there was no significant association between age and punitive attitudes (King & Maruna, 2009; Payne et al., 2004; L. D. Roberts & Indermaur, 2007). Therefore, age differences in punitive attitudes might need to be examined jointly with other relevant variables. Costelloe et al. (2009) studied the differences in punitive attitudes between White, Black, and Hispanic participants. According to their study, age was negatively related to punitiveness for White respondents (Costelloe et al., 2009). Their findings indicate that the variables of age and race might have an interactive effect on punitive attitudes.

2.1.1.3 Education. The studies reviewed consistently reported that those with less education were more likely to hold punitive attitudes (Dowler, 2003; Evans & Adams, 2003; Hartnagel & Templeton, 2012; Hogan, Chiricos, & Gertz, 2005; King & Maruna, 2009; Payne et al., 2004; L. D. Roberts & Indermaur, 2007; Rosenberger & Callanan, 2011; Spiranovic et al., 2012). Dowler (2003) argued that those with more education are better informed about crime and the system of justice, and therefore hold more reasonable attitudes toward crime and criminals. Researchers also noted that among demographic predictors, education level has the decisive effect on punitive attitudes (L. D. Roberts & Indermaur, 2007; Spiranovic et al., 2012).

However, one study revealed a bell-shaped relationship between education and punitive attitudes (Useem, Liedka, & Piehl, 2003). According to the authors’ research, people with a high school degree were found to be more punitive than those who had a college degree and more
punitive than those who had less than a high school degree (Useem et al., 2003). Their measurement of punitive attitudes might be the reason they discovered an unusual positive relationship between education and punitive attitudes for those with a high school degree or lower. They organized respondents’ answers to a series of attitudinal statements into Yes or No, thus dichotomizing them. Among others, the attitudinal statements included: Courts in this region are not harsh enough toward criminals; Our spending is too low to reduce crime (Useem et al., 2003). This practice would exaggerate punitive attitudes of the two extremes and eliminate moderate attitudes in the middle.

Two researchers examined the effects of postsecondary students having majored in criminal justice regarding punitive attitudes (Mackey & Courtright, 2000; Tsoudis, 2000), but they reported contradictory findings. Tsoudis (2000) found that these criminal justice majors were more lenient because they were more likely to have a solid understanding of crime and the system of justice. By contrast, Mackey and Courtright (2000) reported that such students possessed more punitive attitudes than students in other majors. However, they also mentioned that this surprising finding might be due to the overrepresentation of White males in the sample (Mackey & Courtright, 2000). Additionally, Mackey and Courtright (2000) discovered that punitive attitudes decreased with grade levels for all majors, and argued that this was the result of maturation that took place while at university.

2.1.1.4 Race. Some American studies included the variable race as a predictor of punitive attitudes. Previous researchers hypothesized that White people are more punitive than Blacks in the United States, and some findings supported this argument (Dowler, 2003; Evans & Adams, 2003). As well, some researchers found that Whites are more supportive of the death penalty than non-Whites (Cochran & Chamlin, 2006; Miller et al., 1986). Jan et al. (2008) claimed that
Whites’ punitive attitudes result partially from their racial prejudice against Black people. Another study conducted by Unnever, F. T. Cullen, and J. V. Roberts (2005) supported Jan et al.’s argument, showing that nonracist Whites held a level of punitive attitudes similar to those of non-Whites.

However, as with other investigations attempting to link punitive attitudes with selected variables, the findings concerning the association between race and punitive attitudes are inconsistent. Two studies found that Blacks and Whites possessed a comparable degree of punitive attitudes (Jan et al., 2008; Payne et al., 2004). According to Jan et al. (2008), Black people’s punitive attitudes arose from a higher fear of crime on the grounds that Black people are more likely to be victimized. This argument also partly explains why Payne et al. (2004) found that Black people were more punitive than Whites with respect to gun crime. Possibly Blacks consider themselves more likely to be victimized by gun crime and thus support tougher punishment than Whites. In another study, Johnson (2008) wished to determine the sources of punitive attitudes for Whites and Blacks. She reported that on the one hand, Whites’ punitive attitudes derived from their racial prejudice (Johnson, 2008), which was consistent with Jan et al.’s (2008) argument. On the other hand, Johnson claimed that Blacks’ punitive attitudes originated from their sense of perceived injustice rather than fear of crime. Johnson further argued that the racial gap in punitive attitudes exhibited different social statuses of Whites and Blacks in the criminal justice system.

2.1.1.5 Income. Research findings demonstrate a complex association between income and punitive attitudes. Some studies found that income had a positive relationship with punitive attitudes (Johnson, 2008, 2009; King & Maruna, 2009; Rosenberger & Callanan, 2011). For example, Rosenberger and Callanan (2011) reported that increasing income lowered support for
rehabilitation. Two studies also found that those with the least income held least punitive attitudes (Dowler, 2003; Kury & Ferdinand, 1999). Langworthy and Whitehead (1986) claimed that income was negatively related to conservatism, and conservatism was positively related to punitive attitudes. Therefore, higher income might be predictive of more punitive attitudes as a consequence of the influence of a higher level of conservatism (Langworthy & Whitehead, 1986).

But two other studies revealed a nonlinear relationship between income and punitive attitudes (Kury & Ferdinand, 1999; Spiranovic et al., 2012). Spiranovic et al. (2012) discovered a bell-shaped relationship between income and punitive attitudes: those with middle incomes were more punitive than those with either lower or upper incomes. Similarly, Kury and Ferdinand (1999) found a bell-shaped curve between income and punitive attitudes towards the death penalty. One possible explanation of why those with a higher income were less punitive than those with middle incomes could be that income was inversely related to fear of crime (Langworthy & Whitehead, 1986), and those with less fear of crime held less punitive attitudes.

Some research found no significant relationship between income and punitive attitudes (Hartnagel & Templeton, 2012; Johnson, 2001). These findings coincided with an argument made by Costelloe et al. (2009), that the predictive relationship between income and punitive attitudes would disappear when other variables were controlled. As well, previous research has indicated that income was predictive of punitive attitudes only among specific racial and gender groups, which means that there might be an interactive effect on punitive attitudes from the variables of race, gender, and income. For example, Costelloe et al. (2009) found that the effect of income was significant only among White males, whereas Hogan et al. (2005) reported that
such an effect existed only among non-White men. Nevertheless, these two findings signal that the variables of race, gender, and income have a joint influence on punitive attitudes.

2.1.1.6 Marital status. A few studies examined the variable marital status and reported that married people were more punitive than those who were unmarried (Costelloe et al., 2009; Dowler, 2003; Evans & Adams, 2003; Jan et al., 2008; L. D. Roberts & Indermaur, 2007). Dowler (2003) attributed this phenomenon to the possibility that married participants feel that they have more to lose than those who were unmarried (i.e., family and partners) and thus are more afraid of being victimized.

2.1.2 Personal Conservatism

Some researchers investigated the association between personal conservatism and punitive attitudes. Two types of personal conservativism—religious and political—are examined below.

2.1.2.1 Religion. A number of researchers have found that those affiliated with a more conservative religion (e.g., fundamentalists) held more punitive attitudes (Applegate, F. T. Cullen, Fisher, & Vander Ven, 2000; Grasmick & McGill, 1994; Kutateladze & Crossman, 2009). For instance, Applegate et al. (2000) maintained that those with a literal understanding of the Bible and those who considered God as a punitive figure were more punitive. In addition, Kutateladze and Crossman (2009) reported that those who were Christian were more punitive than who held no religious beliefs. As for the reason why those who were religiously conservative were found to be more punitive, Grasmick and McGill (1994) argued that those who were religiously conservative might overlook the social reasons for crime and solely blame the criminal—believing, therefore, that criminals deserve punishment.

2.1.2.2 Political conservatism. Researchers have also found that those who were politically conservative possessed greater punitive attitudes (Applegate et al., 2000; Cochran &
Sanders, 2009; Hartnagel & Templeton, 2012; Langworthy & Whitehead, 1986; R. N. Miller & Applegate, 2014; Rosenberger & Callanan, 2011; Unnever, F. T. Cullen, & Jones, 2008). For instance, Langworthy and Whitehead (1986) reported that liberals were less likely than conservatives to support punishment such as long prison sentences. In addition, Hartnagel and Templeton (2012) revealed that those who described themselves as more politically conservative possessed more punitive attitudes. Moreover, R. N. Miller and Applegate (2014) found that those who had more politically conservatism were more supportive of punishing young offenders who commit adult crime as adults. According to Langworthy and Whitehead (1986), conservatives hold more punitive attitudes because they suppose criminals break the law voluntarily and, thus, rightly deserve to be punished. They also believe that the cost of crime needs to be raised to deter further crime.

2.1.3 Prior Victimization Experiences

Even though it is understandable to expect that those who have been victims would be more punitive (Costelloe et al., 2009), research findings generally show that prior victimization is irrelevant to punitive attitudes (Applegate et al., 2000; Costelloe et al., 2009; Hartnagel & Templeton, 2012; King & Maruna, 2009; Kutateladze & Crossman, 2009; Payne et al., 2004; Rosenberger & Callanan, 2011). King and Maruna (2009) offered two explanations for the failure to detect a significant association between prior victimization and punitive attitudes. Firstly, they argued it is possible that the victimization experience happened far in the past and that the victims were no longer influenced by the crime (King & Maruna, 2009). Secondly, it is possible that the major sources of punitive attitudes derive from abstract anxieties other than those associated with victimization experiences (King & Maruna, 2009). Rosenberger and Callanan (2011) also noted that the lack of detailed measurement of prior victimization
experiences (e.g., severity and frequency) might also be a possible reason for the lack of association between punitive attitudes and victimization.

2.1.4 Emotions

Researchers also have attempted to explore the function of emotions in generating punitive attitudes. Two types of emotion—fear of crime and anger—are discussed below.

2.1.4.1 Fear of crime. Many studies have reported that those who fear crime hold more punitive attitudes (Costelloe et al., 2009; Dowler, 2003; Hogan et al., 2005; King & Maruna, 2009; Spiranovic et al., 2012). The explanation for this phenomenon is straightforward: those who are more afraid of crime consider themselves more prone to be victimized, and consequently see tougher punishment for criminals as an immediate solution to crime control (Costelloe et al., 2009).

Moreover, fear of crime is an important predictor, because other relevant predictors may be indirectly associated with punitive attitudes through fear of crime. For instance, Langworthy and Whitehead (1986) claimed that women might be more punitive because they were more concerned about crime. They also argued that those who were White, better educated, and more highly paid—but without victimization experiences—would be less punitive because they had less fear of crime (Langworthy & Whitehead, 1986).

2.1.4.2 Anger about crime. The association between punitive attitudes and emotions other than fear of crime has seldom been examined. However, two studies that did focus on anger about crime found that such anger is a positive predictor of punitive attitudes (Hartnagel & Templeton, 2012; Johnson, 2009). Hartnagel and Templeton (2012) revealed that anger about crime had an even greater impact on punitive attitudes than did fear of crime. These two studies suggest that in addition to the traditional variables (i.e., demographics, victimization experiences,
and personal values), more investigation exploring emotions as sources of punitive attitudes is needed.

2.1.5 Knowledge about Crime

Some researchers have explored public knowledge about crime as an additional source of punitive attitudes (e.g., Hogan et al., 2005; Pfeiffer et al., 2005; L. D. Roberts & Indermaur, 2007; Spiranovic et al., 2012). The following sections review research findings regarding the impact of perceived crime trends and media consumption on punitive attitudes.

2.1.5.1 Perceived crime trends. Research has reported that those who felt that crime was increasing held more punitive attitudes than those who did not (Hogan et al., 2005; Pfeiffer et al., 2005; L. D. Roberts & Indermaur, 2007; Spiranovic et al., 2012). Pfeiffer et al. (2005) further reported that the variable of perceived crime increase was the most significant predictor in their study. Similarly, a more recent study confirmed that perceived crime increase was the predominant predictor (Spiranovic et al., 2012). One possible explanation for the strong link between a perceived increase in crime and the demand for tougher punishment might be developed from an instrumental angle: those who believe crime has increased urge an immediate remedy, and being “tough on crime” appears to be a quick fix. However, why some people believe that crime is increasing, and why holding this belief increases punitive attitudes require further study.

2.1.5.2 Media consumption. The media are important sources of information regarding crime and criminal justice (Dowler, 2003). Research findings suggest that the length of television exposure per week is positively associated with punitive attitudes (Rosenberger & Callanan, 2011; Spiranovic et al., 2012). Dowler (2003) reported that a greater level of fear was found among those who routinely watched crime shows, which might increase their punitive attitudes by increasing their levels of fear. In other words, research showed that media might have both
direct and indirect influences on punitive attitudes. However, more study regarding how media influence punitive attitudes is needed.

2.2 Methodologies in Punitive Attitude Research

In section 2.1, I reviewed empirical findings of various predictors. However, the research findings varied regarding the degree and directions of the relationships for some variables, including gender, age, income, and race. Adriaenssen and Aertsen (2015) suggested that the disparity of research findings with regard to the relationships between predictors and punitive attitudes might be due to differences in how punitive attitudes were defined and variations in research design in the different studies. Adriaenssen and Aertsen (2015) identified four possible methodological explanations: “(1) the different conceptualizations of punitivity, (2) the different research designs that were set up, (3) the cultural and policy differences between the countries and regions in which the research has taken place, (4) the inclusion or exclusion of other important variables” (p. 101). These four methodological issues are discussed in the remainder of this section.

2.2.1 Conceptualizations of Punitive Attitudes

Adriaenssen and Aertsen (2015) argued that how the concept of punitive attitudes is measured might influence the level of punitive attitudes. Sprott (1999) maintained that concept of punitive attitudes was complex, and the single measure of such attitudes would overshadow its complexity. Studies that adopted multi-item questions to measure punitive attitudes enabled researchers to study the punitive attitudes of the respondents comprehensively rather than from only one dimension (e.g., Applegate et al., 2002; Evans & Adams, 2003; Ramirez, 2013; Useem et al., 2003). Such studies laid better foundations for comparing the effects of predictors of punitive attitudes between studies.
2.2.2 **Research Design**

The most common method for studying public punitive attitudes is to conduct a quantitative analysis of surveys conducted among a representative sample (Adriaenssen & Aertsen, 2015). Respondents answer survey questions designed to gauge their punitive attitudes on various matters; the survey also collects other information from respondents relevant to the predictors of punitive attitudes (e.g., Kutateladze & Crossman, 2009; Spiranovic et al., 2012). After collecting survey data, the researchers usually undertake multiple regression analyses to determine the relationship between predictors and punitive attitudes (e.g., Applegate et al., 2002; Evans & Adams, 2003; Kutateladze & Crossman, 2009).

Among the studies reviewed, all used quantitative data for their analyses. Three utilized case vignette surveys that provided the respondents with information about the characteristics of the criminals or the intensity of the crime described (Applegate et al., 2002; R. N. Miller & Applegate, 2014; Payne et al., 2004). Tufts and J. V. Roberts (2002) argued that using general survey questions would elicit the most punitive attitudes because respondents might imagine a worst-case crime scenario while completing the survey. Therefore, a case vignette survey would provide a more accurate measurement of punitive attitudes because it regulates the circumstances of a crime and the characteristics of the criminals that respondents have in mind when they answer the survey questions (Adriaenssen & Aertsen, 2015). For example, Applegate et al.'s (2002) study provided each respondent with a randomly selected description of specific criminals, including age, race, gender, criminal history, and lifestyle.

Most studies adopted random sampling at the data collection stage (e.g., Costelloe et al., 2009; Evans & Adams, 2003; Hogan et al., 2005; L. D. Roberts & Indermaur, 2007; Spiranovic et al., 2012). However, some researchers acknowledged in their articles that their sample was not representative (e.g., Applegate et al., 2002; Evans & Adams, 2003; Kutateladze & Crossman,
Thus, the over- or underrepresentation of certain demographic groups in the sample might have led to the inconsistency of findings on punitive attitudes.

2.2.3 Research Setting

Empirical studies examining punitive attitudes originated in the United States (Sharp & Otto 1909, as cited in Adriaenssen & Aertsen, 2015) and have spread to many parts of the world. Most of the studies I reviewed also took place in the United States (e.g., Applegate et al., 2002; Cochran & Chamlin, 2006; Cochran & Sanders, 2009; Costelloe et al., 2009; Dowler, 2003; Evans & Adams, 2003; Hogan et al., 2005; Jan et al., 2008; Payne et al., 2004; Useem et al., 2003). However, researchers from other countries also have explored predictors of punitive attitudes using local data. Those reviewed included three Canadian studies (Hartnagel & Templeton, 2012; Sprott, 1999; Tufts & J. V. Roberts, 2002), two German studies (Kury & Ferdinand, 1999; Pfeiffer et al., 2005), one British study (King & Maruna, 2009), three Australian studies (Indermaur et al., 2012; L. D. Roberts & Indermaur, 2007; Spiranovic et al., 2012), and a comparison study between the United States and Georgia (the country; Kutateladze & Crossman, 2009). It is possible that the different cultural backgrounds of different countries generated some of the disparity in respondents’ punitive attitudes. Nevertheless, these studies produced insightful findings regarding predictors, and thus are included in my review. However, the potential effects of cultural differences must be considered when comparing results from different countries.

2.2.4 Inclusion or Exclusion of Variables

The inclusion or exclusion of variables makes a difference for some predictors of punitive attitudes. Spiranovic et al. (2012) reported that the association between demographic variables and punitive attitudes was weakened when other variables (e.g., perceived crime trends) were included in their study, concluding therefore that demographic variables alone had a
limited influence on punitive attitudes. The inclusion or exclusion of selected variables depends on where the research was conducted. For example, the race variable was included in all the American studies and the British study, but was omitted in the others. The inclusion and exclusion of race as a variable may have depended on the characteristics of the population studied. In addition, the inclusion and exclusion of variables is also research question–based.

Even though some research included income as a demographic control variable (e.g., Applegate et al., 2000; Applegate et al., 2002; Dowler, 2003; Evans & Adams, 2003; Spiranovic et al., 2012), researchers were more likely to include income as a variable when they were studying the association between economic insecurity and punitive attitudes (Costelloe et al., 2009; Hogan et al., 2005; King & Maruna, 2009).

The above discussion of the studies’ methodologies shows that even though there were similarities among these studies, each had its own distinctive features. Therefore, the findings should be interpreted and compared with caution. The next section reviews three perspectives developed to explain punitive attitudes.

2.3 Perspectives in Explaining Public Punitive Attitudes

Criminologists and criminal justice experts have put forward a number of hypotheses to explain public punitive attitudes. Langworthy and Whitehead (1986) developed a vulnerability perspective, suggesting that a person’s punitive attitude originated from his or her perceived vulnerability to crime and criminals (Langworthy & Whitehead, 1986). Dowler (2003) proposed a more-to-lose perspective in which those who believed they had more to lose would be more punitive. Some researchers examined public punitive attitudes from race-based perspectives to explore the racial difference in punitive attitudes. The following three sections review these three perspectives.
2.3.1 *The Vulnerability Perspective*

To understand why some people are more punitive than others, Langworthy and Whitehead (1986) proposed a vulnerability perspective, which maintains that those who perceive themselves as more vulnerable than others hold more punitive attitudes (Langworthy & Whitehead, 1986). They hypothesized that older people and women would be more punitive because these groups are usually considered more vulnerable (Langworthy & Whitehead, 1986). Even though their research failed to support their hypotheses, other research findings concerning punitive attitudes have partially confirmed them. For example, several studies reported that punitive attitudes increased with age (Evans & Adams, 2003; Pfeiffer et al., 2005; Spiranovic et al., 2012). Specifically, Spiranovic et al. (2012) confirmed that age correlated positively with punitive attitudes. Evans and Adams (2003) found that age was a negative predictor for supporting rehabilitation of offenders. While Pfeiffer et al. (2005) reported that age was positively related to sentencing attitudes toward property crime, violent crime, and toward crime generally.

From the vulnerability perspective, those who are at a disadvantage in other facets of life may also be more punitive. Jan et al. (2008) asserted that non-Whites might be more punitive because they would be more fearful of crime. Other research found a higher level of punitive attitudes among those who earned less income (Dowler, 2003), and those who were less educated (e.g., Dowler, 2003; Evans & Adams, 2003; Hogan et al., 2005; King & Maruna, 2009; Spiranovic et al., 2012).

Following the same logic, it is understandable that a higher level of punitive attitudes was found among those with a greater fear of crime (e.g., Costelloe et al., 2009; Dowler, 2003; Hogan et al., 2005; King & Maruna, 2009; Spiranovic et al., 2012), and those who believe that crime trends have worsened (Hogan et al., 2005; Pfeiffer et al., 2005; L. D. Roberts &
Indermaur, 2007; Spiranovic et al., 2012). These people may believe they are living in a more
dangerous environment and therefore feel more vulnerable to crime and criminals.

Analogous to the vulnerability hypothesis, Johnson (2001) suggested an economic
insecurity perspective to explain punitive attitudes. She maintained that those who feel
economically insecure would also feel vulnerable to crime and thus possess more punitive
attitudes toward criminals (Johnson, 2001). Focusing on Whites, Johnson (2001) found that
economic insecurity had no effect on punitive attitudes, a result that failed to support her
economic insecurity perspective. However, a more recent study reported that economic
insecurity was positively predictive of punitive attitudes, but only for White male respondents
(Costelloe et al., 2009). It is worth noting that Costelloe et al. (2009) indicated that income was
an inaccurate measure for economic insecurity, because income alone was not a precise indicator
of a person’s financial condition.

In sum, the vulnerability perspective claims that those who are older, female, non-White,
less educated, economically insecure, more fearful of crime, and believe that crime is increasing
would be more punitive.

2.3.2 The More-to-Lose Perspective

Dowler (2003) proposed a more-to-lose perspective to interpret why married people were
more punitive than nonmarried people. He argued that married people advocated a tougher
criminal system because they fear losing family and spouse if they are victimized whereas the
unmarried have no such concerns (Dowler, 2003).

Dowler (2003) further applied the more-to-lose perspective to explain the nuance of
punitive attitudes between low income earners ($15,000 to 30,000) and even lower income
earners (less than $15,000). Dowler (2003) found that those who earned between $15,000 and
30,000 were more punitive than those who earned an average income ($30,000 to $60,000),
which is consistent with the vulnerability hypothesis that lower income increases punitive attitudes. Dowler (2003) attributed this phenomenon to the greater likelihood of victimization among low-income earners. However, he also found that those who earned the lowest income (less than $15,000) turned out to hold the lowest punitive attitudes. Dowler (2003) claimed that those earning between $15,000 and 30,000 felt they had more to lose than those who earned the least income, leading the former to hold more punitive attitudes.

In sum, the more-to-lose perspective asserts that those who are married would be more punitive than those who are not, and that income’s effect on punitive attitudes may be highly nuanced.

2.3.3 The Race-Based Perspective

A number of studies found that race was an important factor influencing punitive attitudes, and that Whites hold more punitive attitudes than non-Whites (Dowler, 2003; Evans & Adams, 2003; Johnson, 2008). Further research showed that the sources of punitive attitudes appear to differ between Whites and non-Whites (Jan et al., 2008; Johnson, 2008). Whites’ attitudes seem to derive from their racial prejudice (Jan et al., 2008; Johnson, 2008), whereas Blacks’ punitive attitudes may result from greater fear of crime (Jan et al., 2008)—or their sense that the criminal justice system is not just (Johnson, 2008). Johnson (2008) argued that the racial division between Whites’ and non-Whites’ punitive attitudes reflects their different status in society legally and socially.

Costelloe et al. (2009) reported that less-educated, low-income White males were more punitive than other people, and argued that the “angry White male” phenomenon—described as linking the economic insecurity of low status White men to anger towards various groups including women, minorities, and immigrants—also applies to punitive attitudes towards crime and criminals.
In summary, the race-based perspective adds a racial dimension to explain punitive attitudes, and claims that Whites are more punitive, especially less-educated, lower-income White males.

2.4 An Integrated Perspective—Through the Lens of Bourdieu’s Habitus

The three perspectives discussed above explain punitive attitudes from different angles with some disagreement over the effects of gender, race, and income on punitive attitudes. The vulnerability perspective provides explanations for the greatest number of predictors. According to this perspective, people who are older, female, non-White, less educated, economically insecure, more fearful of crime, and believe that crime is increasing would be more punitive. The more-to-lose perspective introduced marital status as another predictor of punitive attitudes, and claimed that the married, with more to lose socially and financially, would be more punitive than the unmarried. The more-to-lose perspective also showed that there are subtle nuances of punitive attitudes linked to income. The race-based perspective introduced race as a predictor of punitive attitudes, and suggested that Whites are more punitive, which counters the hypothesis based on the vulnerability perspective that those who are non-White are more punitive.

In sum, the more-to-lose perspective and race-based perspective supplement the vulnerability perspective by introducing two more variables (marital status and race) to explain punitive attitudes. They also present some findings that contradict those shown with the vulnerability perspective.

My thesis examines a more critically integrated perspective of these three perspectives. The necessity of integrating three perspectives can be explained from Bourdieu’s concept of *habitus*. Bourdieu (1979) defined *habitus* as “a system of durable, transposable dispositions which functions as the generative basis of structured, objectively unified practices” (p. vii).
Swartz (1997) further explained *habitus* as being a result of internalizing external structures through the early socialization process and, at the same time, as limiting structural boundaries for action. Punitive attitudes can be understood as a set of perceptions structured by one’s *habitus*; which is itself is a result of respondents’ past histories, including demographic characteristics, past victimization experiences, emotions, knowledge about crime, etc. These factors jointly shape a person’s attitudes toward crime and criminals. Johnson (2008) argued that the racial gap in punitive attitudes indicates different social statuses of Whites and non-Whites, which implicitly suggests that there may be structural reasons behind the formation of punitive attitudes.

As mentioned earlier, the inclusion or exclusion of variables makes a huge difference to the relationship between and among predictors and punitive attitudes. Following Bourdieu’s idea of *habitus*, hypotheses that were developed from some of the variables are doomed to failure in explaining punitive attitudes because these hypotheses capture only a partial picture. Therefore, in an integrated perspective, predictors that are found to be relevant to punitive attitudes, including the demographics, personal conservatism, prior victimization experiences, emotions towards, and knowledge about crime, would all be included simultaneously, because these predictors might all contribute to the formation of a person’s *habitus*.

Also, Bourdieu (1990) noted *habitus* not only produce personal practices, but also generate “collective practices” (p. 54). *Habitus* can shape practices of those who share similar histories. This shaping feature of *habitus* may be applied to make sense why prior studies found that people who share certain characteristics are more punitive than others.

There is another reason why it is suitable to introduce Bourdieu’s *habitus* into punitive attitude research. Besides the structuring function of *habitus*, Bourdieu (1990) also maintained that “[habitus] gives practices their relative autonomy with respect to external determinations of
the immediate present” (p. 56). This feature of *habitus* may be able to explain why F. T. Cullen et al. (2000) have found that punitive attitudes are fluid. Some researchers also reported that punitive attitudes measured depend on the survey questions asked (Payne et al., 2004; Sprott, 1999), or are highly sensitive to the research methodologies (Adriaenssen & Aertsen, 2015; Tufts & J. V. Roberts, 2002). Such findings became accountable when *habitus* is applied to explain punitive attitudes. *Habitus*, structured by past personal histories, sets the limits of punitive attitudes, but such attitudes may fluctuate freely within these boundaries. Therefore, the inconsistency between research findings could be understood as the demonstration of the autonomy granted by *habitus* with respect to punitive attitudes.

In summary, *habitus* help link various predictors in a more explanatory perspective, and create a better understanding of the nuances in punitive attitudes.

### 2.5 Summary

The studies referred to in this chapter raise many interesting questions regarding the directions and degree of predictors’ influence on punitive attitudes. The explanatory perspectives, and many of the findings of these scholars are informative and instructive. The review demonstrates that punitive attitudes are associated with various predictors (e.g. gender, age, education, income, race, marital status, religion, political conservatism, fear of crime, anger, knowledge about crime, and media consumption), and that more empirical studies are needed that examine the predictors of punitive attitudes.

My study aims to contribute to the knowledge of punitive attitudes in Canada. The *Taking the Pulse of Saskatchewan 2012* survey to provides viable data to conduct quantitative analysis of public punitive attitudes. The following chapter discusses the methodology employed in this thesis.
CHAPTER 3

METHODOLOGY:

A QUANTITATIVE ANALYSIS OF PREDICTORS OF PUNITIVE ATTITUDES

The central purpose of my investigation was to examine the predictors of the public punitive attitudes. As predictors, Following from the literature, I chose age, gender, education, marital status, race, income, fear of crime, and perceived crime trends. My research questions were:

1. What are the valid predictors of punitive attitudes toward overall and youth crime respectively?
2. Is there a difference in punitive attitudes between overall crime and youth crime?

For my research methodology, I relied on a secondary quantitative analysis of data from Taking the Pulse of Saskatchewan 2012, a survey conducted by the Social Sciences Research Laboratories (SSRL) of the University of Saskatchewan.\(^1\) Quantitative analysis of representative survey data has been the most commonly used method of studying punitive attitudes (Adriaenssen & Aertsen, 2015). The advantage of the quantitative method is that it produces findings that can be generalized to the larger population (Gelb, 2009).

This chapter provides a review and discussion of the following: research setting, data used, research hypotheses, measures of variables, treatment of missing data, and my analytical strategy.

3.1 The Research Setting

According to the Saskatchewan Bureau of Statistics (2011a, 2011b), Saskatchewan’s population in 2011 was 1,033,381, of which 50.5% were female, 49.5% male. The province is

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\(^1\) In the remainder of this thesis, I refer to this survey as Taking the Pulse.
home to a higher proportion of people under 14 (19.15%) than Canada as a whole (15.75%); a lower proportion of those between 15 and 65 (65.98% compared to Canada’s 68.48%); and a slightly higher proportion of people 65 and older (14.87% compared to Canada’s 14.77%) (Saskatchewan Bureau of Statistics, 2011a). The median age was 38.2 (Saskatchewan Bureau of Statistics, 2011b). The urban to rural population ratio was 67% to 33% (Statistics Canada, 2011). According to Saskatchewan Bureau of Statistics (2011c, 2011d), 612,075 Saskatchewan residents had achieved at least a high school diploma; 15.6% of residents self-identified as Aboriginal.

Police-reported crime statistics from 2013 show that the rate and intensity of crime in Saskatchewan had decreased for the nine previous years (Ministry of Justice, 2014). However, the crime rate in Saskatchewan was twice as high as the national average in 2013, and the Crime Severity Index in Saskatchewan was over 1.8 times higher than the Canadian index (Ministry of Justice, 2014).

3.2 Overview of Data

My thesis uses data from Taking the Pulse (2012), which the University of Saskatchewan conducted to obtain residents’ opinions on a range of topics. The survey contained 54 close-ended questions that addressed eight subject areas. These were:

A. Saskatchewan’s economy

B. sustainable resource development

C. Aboriginal issues in Saskatchewan

D. immigration and diversity in Saskatchewan

E. health, wellbeing, and Saskatchewan families

F. crime and public safety in Saskatchewan
The data used in this thesis was taken from Section (F), Crime and Public Safety in Saskatchewan, and Section (H), demographics. A secondary data analysis of the Crime and Public Safety material is provided in Chapter 4.

The questions in Section (F) were composed by researchers from the University of Saskatchewan—Carolyn Brooks, Hongming Cheng, Mark Olver, and Steve Wormith. Loleen Berdahl was the principle investigator for *Taking the Pulse*. The project was funded by the Social Sciences and Humanities Research Council of Canada (SSHRC). The University of Saskatchewan’s Social Sciences Research Laboratories (SSRL) hired students to complete 15-minute telephone interviews over the period March 5, 2012 to March 19, 2012. The 1,750 respondents (18 years of age and older) were randomly selected by the SSRL. The response rate was 34.3%. To compensate for over- and under-representation, the SSRL weighted for sex and age to generate a generalizable sample of Saskatchewan’s population.

The benefits of using data from *Taking the Pulse* were threefold. First, the survey provided recent data for questions directly related to public attitudes towards crime control. Secondly, it included demographic variables, and addressed fear of crime and perceived crime trends, which offered me the opportunity to conduct a multivariate analysis of these predictors of public punitive attitudes towards crime reduction. Finally, the survey was a representative data set of Saskatchewan’s population, meaning that the results produced in this thesis were generalizable to the broader Saskatchewan population.

### 3.3 Sample Characteristics

Table 3-1 presents the demographic characteristics of the respondents.
Table 3-1
*Demographic Characteristics*

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Gender</td>
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</tr>
<tr>
<td>Male</td>
<td>856</td>
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</tr>
<tr>
<td>Female</td>
<td>894</td>
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<tr>
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<td></td>
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<tr>
<td>Age</td>
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<td></td>
</tr>
<tr>
<td>18 to 34</td>
<td>518</td>
<td>29.6</td>
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<tr>
<td>25 to 54</td>
<td>600</td>
<td>34.3</td>
</tr>
<tr>
<td>55 and older</td>
<td>613</td>
<td>35</td>
</tr>
<tr>
<td>Missing</td>
<td>19</td>
<td>1.1</td>
</tr>
<tr>
<td>Highest level of education obtained</td>
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<td></td>
</tr>
<tr>
<td>Below secondary/high school</td>
<td>197</td>
<td>11.3</td>
</tr>
<tr>
<td>High school diploma</td>
<td>676</td>
<td>38.7</td>
</tr>
<tr>
<td>Completed technical/community college</td>
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</tr>
<tr>
<td>Bachelor’s degree</td>
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<td>Above bachelor’s degree</td>
<td>119</td>
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</tr>
<tr>
<td>Marital status</td>
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<td></td>
</tr>
<tr>
<td>Married/common-law</td>
<td>1097</td>
<td>62.7</td>
</tr>
<tr>
<td>Separated/divorced/widowed</td>
<td>298</td>
<td>17</td>
</tr>
<tr>
<td>Never legally married</td>
<td>334</td>
<td>19.1</td>
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<tr>
<td>Missing</td>
<td>22</td>
<td>1.2</td>
</tr>
<tr>
<td>Nonvisible minority</td>
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<tr>
<td>Yes</td>
<td>1632</td>
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</tr>
<tr>
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</tr>
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<td>Missing</td>
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<td>Non-Aboriginal</td>
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<td>Yes</td>
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<td>0.4</td>
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<td>Annual household income</td>
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<td>Less than $40,000</td>
<td>274</td>
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</tr>
<tr>
<td>$80,000 to less than $100,000</td>
<td>162</td>
<td>9.3</td>
</tr>
<tr>
<td>$100,000 or more</td>
<td>476</td>
<td>27.2</td>
</tr>
<tr>
<td>Missing</td>
<td>410</td>
<td>23.4</td>
</tr>
</tbody>
</table>

Source: Compiled from *Taking the Pulse 2012*.
3.4 Research Hypotheses

Three perspectives have been used by other authors to explain public punitive attitudes, and discuss research findings related to the effects of various predictors of punitive attitudes (see also Chapter 2). My thesis tests an integrated perspective of three perspectives mentioned in the literature—the vulnerability perspective, the more-to-lose perspective, and the race-based perspective. The predictors developed from the vulnerability perspective are age, gender, race, education, income, fear of crime, and perceived crime trends. The more-to-lose perspective introduced marital status as an additional predictor. The race-based perspective proposed an additional argument concerning the effect of race on punitive attitudes. Based on these three perspectives and the variables available in the data, the predictors examined in this thesis therefore were age, gender, race, education, marital status, income, fear of crime, and perceived crime trends.

My research hypotheses are as follows:

H₁: Women are more punitive than men.
H₂: Punitive attitudes increase with age.
H₃: Punitive attitudes decrease with education.
H₄: Married people are more punitive than those who are not married.
H₅: Non-Whites are more punitive than Whites.
H₆: Punitive attitudes decrease with income.
H₇: Punitive attitudes increase with fear of crime.
H₈: Punitive attitudes increase with perceived crime trends.
3.5 Measures

A secondary analysis was conducted using data from Taking the Pulse. The following section provides a discussion of the measures of the dependent and independent variables used. For the statistical analysis, IBM SPSS Statistics 21 (2012) software was used.

3.5.1 Dependent Variables

The dependent variables for my thesis were the perceived best crime reduction methods for overall crime, and the perceived best crime reduction methods for youth crime. In Taking the Pulse, respondents were asked: “Which of the following do you think would be the most effective way to reduce overall crime in Saskatchewan?” The same question was asked about youth crime. The options available for each question were:

1. increase policing
2. increase punishment, such as prison sentences
3. increase treatment and rehabilitation
4. increase restorative justice, such as sentencing circles
5. increase prevention programs
6. increase social equality
7. don’t know
8. refused.

Tables 3-2 and 3-3 illustrate the responses to the questions on these two dependent variables. As shown in Table 3-2, most respondents believed that the most effective method to reduce overall crime is to increase punishment, such as prison sentences. Increasing prevention programs was the second favourite method of reducing overall crime. Increasing social equality was third. About an equal number of respondents chose increasing policing and increasing treatment and rehabilitation. The least popular option was increasing restorative justice, such as
sentencing circles; only about 4% of respondents selected it as the most effective method to reduce overall crime. One possible explanation for this low figure may be that people did not understand what restorative justice is.

Table 3-2

*Most Effective Way to Reduce Overall Crime in Saskatchewan*

<table>
<thead>
<tr>
<th>Method</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase punishment, such as prison sentences</td>
<td>500</td>
<td>28.6</td>
</tr>
<tr>
<td>Increase prevention programs</td>
<td>315</td>
<td>18</td>
</tr>
<tr>
<td>Increase social equality</td>
<td>297</td>
<td>17</td>
</tr>
<tr>
<td>Increase policing</td>
<td>244</td>
<td>14</td>
</tr>
<tr>
<td>Increase treatment and rehabilitation</td>
<td>243</td>
<td>13.9</td>
</tr>
<tr>
<td>Increase restorative justice, such as sentencing circles</td>
<td>72</td>
<td>4.1</td>
</tr>
<tr>
<td>Don’t know</td>
<td>72</td>
<td>4.1</td>
</tr>
<tr>
<td>Refused</td>
<td>6</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,749</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from *Taking the Pulse 2012*.

Table 3-3

*Most Effective Way to Reduce Youth Crime in Saskatchewan*

<table>
<thead>
<tr>
<th>Method</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase prevention programs</td>
<td>524</td>
<td>30</td>
</tr>
<tr>
<td>Increase punishment, such as prison sentences</td>
<td>463</td>
<td>26.5</td>
</tr>
<tr>
<td>Increase treatment and rehabilitation</td>
<td>230</td>
<td>13.2</td>
</tr>
<tr>
<td>Increase social equality</td>
<td>229</td>
<td>13.1</td>
</tr>
<tr>
<td>Increase policing</td>
<td>120</td>
<td>6.9</td>
</tr>
<tr>
<td>Increase restorative justice, such as sentencing circles</td>
<td>108</td>
<td>6.2</td>
</tr>
<tr>
<td>Don’t know</td>
<td>66</td>
<td>3.8</td>
</tr>
<tr>
<td>Refused</td>
<td>9</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,749</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from *Taking the Pulse 2012*.

As shown in Table 3-3, most respondents believed that the most effective method to reduce youth crime in Saskatchewan is to increase prevention programs. For youth crime, increased punishment—such as prison sentences—ranked second, but was still relatively high,
with over a quarter of respondents believing it the most effective. Again, increasing restorative justice, such as sentencing circles, was the least popular option.

People who prefer to increase punishment can be considered more punitive than those who do not. In my thesis, I created two dummy variables to compare those who preferred increasing punishment as the most effective method to reduce overall crime and youth crime respectively, and those who preferred other methods. These were: Increase punishment, such as prison sentence = 1; All other responses = 0.

In sum, in my thesis two dichotomous variables made up my dependent variables. They show public attitudes toward supporting increasing punishment or not doing so as the most effective method of reducing each of overall crime and youth crime.

3.5.2 Independent Variables

Three types of independent variables were used in this thesis: demographics, fear of crime, and perceived crime trends for each of overall crime and youth crime. The demographic variables were gender, age, education, marital status, race, and total household income. The measure used for each variable is discussed below.

3.5.2.1 Gender. In Taking the Pulse, the interviewers recorded the variable gender judging from the respondents’ voices. The variable was measured as male = 1, female = 2; the same measure was used in this thesis.

3.5.2.2 Age. Survey respondents were asked what year they were born in. In my thesis, I categorized this variable into three groups: (15–34 = 1; 35–54 = 2; older than 55 = 3) corresponding to young, middle-aged, and elderly people. Age was treated as a categorical variable.

3.5.2.3 Education. To establish the basis for this variable, survey respondents were asked to indicate which of the following levels of education they had completed:
1. no schooling
2. some elementary school
3. completed elementary school
4. some secondary/high school
5. completed secondary/high school
6. some technical or community college
7. completed technical or community college
8. some university
9. bachelor’s degree
10. master’s degree
11. professional degree (e.g., law degree, medical degree)
12. doctorate.

For this thesis, the options are combined into five categories:

1. below secondary/high school
2. completed secondary/high school
3. completed technical or community college
4. bachelor’s degree
5. above bachelor’s degree

This thesis treats education as a categorical variable.

3.5.2.4 Marital status. To obtain the variable marital status, survey respondents were asked to select one of the following options:

1. never legally married
2. legally married (and not separated)
3. separated, but still legally married
4. living with a common-law partner
5. divorced
6. widowed

In this thesis, marital status was further grouped into three categories: (1) married/common-law; (2) separated/divorced/widowed; (3) never legally married.

3.5.2.5 Race. In Taking the Pulse, Section (H), Demographics, contained two questions concerning race. Respondents were asked to indicate Yes or No to the question (H8): Are you a member of a visible minority community (that is, a person, other than an Aboriginal person, who is non-Caucasian in race or non-White in colour)? In question H9, respondents were asked another Yes/No question: Are you a member of a First Nation, Metis or Inuit? About 6% of respondents identified themselves as visible minorities; about 7% identified themselves as Aboriginals.

For my thesis, I hypothesized that Whites are less punitive than either visible minorities or Aboriginals. Thus, a two-step variable transformation was needed. First, the original variables in the survey—visible minority and Aboriginal—were recoded as nonvisible minority and non-Aboriginal. Second, a new variable—White—was computed by multiplying the two recoded variables—nonvisible minority and non-Aboriginal.

Table 3-4 shows the frequency of the new variable, White. As shown in the table, 87.3% of the respondents were White, and 11.9% of the respondents identified themselves either as visible minorities or as Aboriginals.
Table 3-4
White or Not (either Visible Minority or Aboriginal)

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1,527</td>
<td>87.3</td>
</tr>
<tr>
<td>No</td>
<td>209</td>
<td>11.9</td>
</tr>
<tr>
<td>Missing</td>
<td>14</td>
<td>0.8</td>
</tr>
<tr>
<td>Total</td>
<td>1,750</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from Taking the Pulse 2012.

3.5.2.6 Income. To establish income ranges for use as a variable, survey respondents were asked to select one of 10 categories to describe their 2011 total household income from all sources. The first category was “less than $20,000” with each succeeding category increasing by $10,000 to the last category, “over $100,000.”

In this thesis, the original 10 categories were combined, creating five categories: less than $40,000 = 1; $40,000 to less than $60,000 = 2; $60,000 to less than $80,000 = 3; $80,000 to less than $100,000 = 4; $100,000 or more = 5. Income was treated as a categorical variable.

3.5.2.7 Fear of crime. Respondents were asked to select one the four following options as to how safe they felt in their neighbourhood:

1. very safe
2. reasonably safe
3. somewhat unsafe
4. very unsafe.

Table 3-5 presents the survey results for this variable. As can be seen, over 90% felt very safe or reasonably safe, making it reasonable to establish the dummy variable: unsafe = 1, safe = 0.
Table 3-5

_Fear of Crime_

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very safe</td>
<td>790</td>
<td>45.1</td>
</tr>
<tr>
<td>Reasonably safe</td>
<td>819</td>
<td>46.8</td>
</tr>
<tr>
<td>Somewhat unsafe</td>
<td>109</td>
<td>6.2</td>
</tr>
<tr>
<td>Very unsafe</td>
<td>21</td>
<td>1.8</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,750</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from Taking the Pulse 2012.

3.5.2.8 **Perceived crime trends.** Two survey questions pertained to perceptions of crime trends. The first (F1) asked whether respondents thought there was more or less crime in their neighbourhood over the previous three years. The second (F2) asked a similar question but specified youth crime. For both questions, the five possible responses were the same, ranging from having increased substantially to having decreased substantially. The responses are shown in Table 3-6. For both questions, about one-third of respondent believed crime had increased. In this thesis, this variable was combined into three categories: increased = 1, remained the same = 2, decreased = 3.

Table 3-6

_Perceived Overall and Youth Crime Trends_

<table>
<thead>
<tr>
<th></th>
<th>Overall crime</th>
<th>Youth crime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Increased substantially</td>
<td>181</td>
<td>10.3</td>
</tr>
<tr>
<td>Increased somewhat</td>
<td>426</td>
<td>24.3</td>
</tr>
<tr>
<td>Remained the same</td>
<td>829</td>
<td>47.4</td>
</tr>
<tr>
<td>Decreased somewhat</td>
<td>221</td>
<td>12.7</td>
</tr>
<tr>
<td>Decreased substantially</td>
<td>38</td>
<td>2.2</td>
</tr>
<tr>
<td>Missing</td>
<td>54</td>
<td>3.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,750</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from Taking the Pulse 2012.
3.6 Analysis and Treatment of Missing Data

It is evident in Table 3-1 that in relation to income, there was a large proportion of missing values in the sample (23.4%). Therefore, a missing values analysis (MVA) was performed, using the SPSS software, to examine the missingness in the data set. Table 3-7 presents the percentage of missing values for each variable, in descending order.

Table 3-7
**Missing Data (Weighted)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
<th>Valid n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total household income</td>
<td>491</td>
<td>24.4</td>
<td>1,525</td>
</tr>
<tr>
<td>Perceived youth crime trend</td>
<td>100</td>
<td>5</td>
<td>1,916</td>
</tr>
<tr>
<td>Perceived best way to reduce crime</td>
<td>98</td>
<td>4.9</td>
<td>1,918</td>
</tr>
<tr>
<td>Perceived best way to reduce youth crime</td>
<td>95</td>
<td>4.7</td>
<td>1,921</td>
</tr>
<tr>
<td>Perceived overall crime trend</td>
<td>61</td>
<td>3</td>
<td>1,955</td>
</tr>
<tr>
<td>Marital status</td>
<td>24</td>
<td>1.2</td>
<td>1,992</td>
</tr>
<tr>
<td>Age</td>
<td>19</td>
<td>0.9</td>
<td>1,997</td>
</tr>
<tr>
<td>Visible minority</td>
<td>16</td>
<td>0.8</td>
<td>2,000</td>
</tr>
<tr>
<td>Aboriginal</td>
<td>8</td>
<td>0.4</td>
<td>2,008</td>
</tr>
<tr>
<td>Highest level of education obtained</td>
<td>4</td>
<td>0.2</td>
<td>2,012</td>
</tr>
<tr>
<td>Fear of crime</td>
<td>2</td>
<td>0.1</td>
<td>2,014</td>
</tr>
</tbody>
</table>

Source: Compiled from *Taking the Pulse 2012*.

Little’s test, missing completely at random (MCAR), was then performed to ascertain whether the missing data were completely random. The test result \[ p = .065 > 0.05 \] was not significant, which suggested that the missingness was completely random.

To retain the statistical power of the study, multiple imputation was used to treat the missingness of the variable income. In using the SPSS software, multiple imputation replaced the missing value with imputed estimates and produced five complete data sets. SPSS used the original data sets and the five imputed data sets to perform analysis and also provided pooled results in the output.
Table 3-8 compares the original and missing data treated (pooled) frequency of the variable income.

Table 3-8  
Frequencies of Original and Treated Variable Income

<table>
<thead>
<tr>
<th>Annual household income</th>
<th>Original n</th>
<th>Percentage</th>
<th>Missing Data Treated n (pooled)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $40,000</td>
<td>274</td>
<td>15.7</td>
<td>395</td>
</tr>
<tr>
<td>$40,000 to less than $60,000</td>
<td>226</td>
<td>12.9</td>
<td>313.7</td>
</tr>
<tr>
<td>$60,000 to less than $80,000</td>
<td>201</td>
<td>11.5</td>
<td>252.8</td>
</tr>
<tr>
<td>$80,000 to less than $100,000</td>
<td>162</td>
<td>9.3</td>
<td>207.1</td>
</tr>
<tr>
<td>$100,000 or more</td>
<td>476</td>
<td>27.2</td>
<td>581.4</td>
</tr>
<tr>
<td>Missing</td>
<td>410</td>
<td>23.4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,750</td>
<td>100</td>
<td>1,750</td>
</tr>
</tbody>
</table>

Source: Compiled from Taking the Pulse 2012.

3.7 Analytic strategy

Two levels of analysis were used in this study: bivariate and multivariate. First, to test my hypotheses, a bivariate analysis was conducted between the dependent variables and the independent variables. Since the variables in my thesis were all categorical, contingency tables and chi-square are used for the bivariate analysis. Throughout, phi ($\phi$) is the value of effect sizes for the contingency table and the chi-square test (Vaske, 2002), and thus is included in the bivariate analysis to show the magnitude of impact each independent variable had on the dependent variables.

Next, a multivariate analysis was performed, to ascertain whether the relationships between independent variables and dependent variables remained significant when other independent variables were controlled. Since the dependent variables in this study were categorical and had been dummy-coded into a dichotomous variable (supporting increased
punishment or not), the binary logistic regression was suitable for the multivariate analysis. Two binary logistic regression analyses were adopted for each of overall crime and youth crime.

3.8 Summary

This chapter has provided an overview of my methodology. In sum, my thesis conducted a secondary quantitative analysis of the data from the survey, Taking the Pulse of Saskatchewan 2012. I used a bivariate analysis of predictors and the dependent variables, and a multivariate analysis using a binary logistic regression. The bivariate analysis showed the preliminary relationship between various predictors and punitive attitudes, while the multivariate analysis allowed examination of the effect of any single predictor when other relevant variables were controlled. Findings of the bivariate and multivariate analysis are presented in the next chapter.
CHAPTER 4

RESULTS:

PREDICTORS OF PUNITIVE ATTITUDES IN SASKATCHEWAN

This chapter presents the bivariate and multivariate results of the relationships between the dependent variables (the best way to reduce each of overall crime and youth crime) and the independent variables (gender, age, education, marital status, race, income, fear of crime, and perceived crime trends). The bivariate analysis (Section 4.1) demonstrates the preliminary relationships between various predictors and the dependent variable, and concludes that while the variables of age, education, marital status, race, and perceived crime trends are significant predictors of punitive attitudes, the effect size results show that they have only a small impact on punitive attitudes. It also shows that respondents were generally more lenient towards youth crime than overall crime.

Section 4.2 describes the logistic regression analysis results for support for increased punishment (or not) for each of overall crime and youth crime, with various levels of independent variables. When other variables are controlled, it demonstrates that the variables of age, education, marital status, and perceived crime trends remain significant predictors for both overall and youth crime punitive attitudes. However, gender turns out to be significant only for overall crime, while race is significant only for youth crime when other variables are controlled. Among the most important findings, perceived crime trends and education are found to be the strongest predictive variables of punitive attitudes. A summary of these results is provided at the end (Section 4.3).
4.1 Bivariate Analysis

Tables 4-1 and 4-2 present the bivariate analysis results of the two dependent variables (preferred way to reduce each of overall crime and youth crime) and include contingency tables showing the distribution of the dichotomous dependent variable in relation to each independent variable (the percentage and actual count are both provided), chi-square results ($p$ value) showing the significance of the relationship, and effect size values ($\phi$) showing the magnitude of impact each independent variable has on the dependent variable.

Table 4-1
Bivariate Relationships Between Perceived Best Overall Crime Reduction Method and Independent Variables

<table>
<thead>
<tr>
<th></th>
<th>Increase punishment</th>
<th></th>
<th>Chi-square</th>
<th>$p$ value</th>
<th>Effect size phi ($\phi$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>32.1% (261)</td>
<td>67.9% (553)</td>
<td>3.529</td>
<td>0.06</td>
<td>-0.046</td>
</tr>
<tr>
<td></td>
<td>27.9% (239)</td>
<td>72.1% (619)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>28.9% (148)</td>
<td>71.1% (364)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34.1% (197)</td>
<td>65.9% (381)</td>
<td>7.283</td>
<td>0.026*</td>
<td>0.066</td>
</tr>
<tr>
<td></td>
<td>27.0% (152)</td>
<td>73.0% (411)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18-34</td>
<td>35-54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34.1% (197)</td>
<td>65.9% (381)</td>
<td>7.283</td>
<td>0.026*</td>
<td>0.066</td>
</tr>
<tr>
<td></td>
<td>27.0% (152)</td>
<td>73.0% (411)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>55 and older</td>
<td>Below Secondary/High School Completed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>35.4% (64)</td>
<td>64.6% (117)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technical/Community College</td>
<td>Completed</td>
<td>34.2% (122)</td>
<td>65.8% (235)</td>
<td>50.385</td>
</tr>
<tr>
<td></td>
<td>Bachelor's Degree</td>
<td>Above Bachelor's Degree</td>
<td>20.2% (74)</td>
<td>79.8% (292)</td>
<td>10.4% (12)</td>
</tr>
<tr>
<td></td>
<td>Married/Common-law</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>33.2% (349)</td>
<td>66.8% (701)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Separated/Divorced/Widowed</td>
<td>Never legally married</td>
<td>28.2% (78)</td>
<td>71.8% (199)</td>
<td>17.362</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>Non-White</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30.7% (449)</td>
<td>69.3% (1013)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>23.7% (47)</td>
<td>75.3% (151)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*(table continues)*
### Table 4-1 (continued)

<table>
<thead>
<tr>
<th>Income</th>
<th>Increase punishment</th>
<th>Yes</th>
<th>No</th>
<th>Chi-square</th>
<th>p value</th>
<th>Effect size phi (φ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below $40,000</td>
<td>Yes</td>
<td>30.8% (78)</td>
<td>69.2% (175)</td>
<td>9.122</td>
<td>0.058</td>
<td>0.084</td>
</tr>
<tr>
<td>$40,000 to less than $60,000</td>
<td>No</td>
<td>22.2% (49)</td>
<td>77.8% (172)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$60,000 to less than $80,000</td>
<td></td>
<td>32.1% (63)</td>
<td>67.9% (133)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$80,000 to less than $100,000</td>
<td></td>
<td>28.7% (45)</td>
<td>71.3% (112)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than $100,000</td>
<td></td>
<td>33.0% (153)</td>
<td>67.0% (310)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived crime trends</td>
<td>Increased</td>
<td>35.2% (208)</td>
<td>64.8% (383)</td>
<td>9.122</td>
<td>0.058</td>
<td>0.084</td>
</tr>
<tr>
<td>Remained the same</td>
<td>Yes</td>
<td>31.2% (244)</td>
<td>68.8% (539)</td>
<td>32.597</td>
<td>0.000*</td>
<td>0.142</td>
</tr>
<tr>
<td></td>
<td>Decreased</td>
<td>15.6% (39)</td>
<td>84.4% (211)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of crime</td>
<td>Safe</td>
<td>29.8% (459)</td>
<td>70.2% (1082)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unsafe</td>
<td>31.8% (42)</td>
<td>68.2% (90)</td>
<td>0.239</td>
<td>0.625</td>
<td>-0.012</td>
</tr>
</tbody>
</table>

**Notes:**
1. Numbers in parentheses are the observed count.
2. For the variable Income, the crosstab shows the original data because analysis found that the trend is similar between the original and treated data. The value of Person chi-square was significant 3 out of 5 times for 5 estimated data sets.

### Table 4-2

**Bivariate Relationships Between Perceived Best Youth Crime Reduction Method and Independent Variables**

<table>
<thead>
<tr>
<th>Increase punishment</th>
<th>Yes</th>
<th>No</th>
<th>Chi-square</th>
<th>p value</th>
<th>Effect size phi (φ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Male</td>
<td>Yes</td>
<td>29.0% (238)</td>
<td>71.0% (583)</td>
<td>1.333</td>
<td>0.248</td>
</tr>
<tr>
<td>Female</td>
<td>No</td>
<td>26.5% (226)</td>
<td>73.5% (628)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td></td>
<td>23.9% (123)</td>
<td>76.1% (392)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-54</td>
<td></td>
<td>33.0% (192)</td>
<td>67.0% (389)</td>
<td>12.885</td>
<td>0.002*</td>
</tr>
<tr>
<td>55 and older</td>
<td></td>
<td>25.9% (146)</td>
<td>74.1% (417)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below Secondary/High School Completed</td>
<td>Male</td>
<td>34.6% (63)</td>
<td>65.4% (119)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Technical/Community College Bachelor's Degree</td>
<td>Male</td>
<td>33.1% (119)</td>
<td>66.9% (240)</td>
<td>39.956</td>
<td>0.000*</td>
</tr>
<tr>
<td>Above Bachelor's Degree</td>
<td>No</td>
<td>18.9% (70)</td>
<td>81.1% (301)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/Common-law</td>
<td></td>
<td>12.3% (14)</td>
<td>87.7% (100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>31.7% (333)</td>
<td>68.3% (717)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* (table continues)
Table 4-2 (continued)

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Increase punishment</th>
<th>Chi-square</th>
<th>p value</th>
<th>Effect size phi (φ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separated/Divorced/Widowed</td>
<td>Yes 24.7% (68)</td>
<td>No 75.3% (207)</td>
<td>28.189</td>
<td>0.000*</td>
</tr>
<tr>
<td>Never legally married</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>Yes 28.6% (417)</td>
<td>No 71.4% (1042)</td>
<td>6.454</td>
<td>0.011*</td>
</tr>
<tr>
<td>Non-White</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below $40,000</td>
<td>Yes 20.1% (41)</td>
<td>No 79.9% (163)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$40,000 to less than $60,000</td>
<td>Yes 27.0% (70)</td>
<td>No 73.0% (189)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$60,000 to less than $80,000</td>
<td>Yes 23.6% (52)</td>
<td>No 76.4% (168)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$80,000 to less than $100,000</td>
<td>Yes 24.7% (39)</td>
<td>No 75.3% (119)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than $100,000</td>
<td>Yes 30.0% (140)</td>
<td>No 70.0% (326)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased</td>
<td>Yes 32.7% (211)</td>
<td>No 67.3% (435)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived crime trends</td>
<td>Remained the same</td>
<td>Yes 27.6% (207)</td>
<td>No 72.4% (543)</td>
<td>22.729</td>
</tr>
<tr>
<td>Decreased</td>
<td>Yes 15.4% (31)</td>
<td>No 84.6% (170)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of crime</td>
<td>Safe Yes 27.7% (427)</td>
<td>No 72.3% (1117)</td>
<td>0.009</td>
<td>0.926</td>
</tr>
<tr>
<td></td>
<td>Unsafe Yes 28.0% (37)</td>
<td>No 72.0% (95)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Numbers in parentheses are the observed count.
2. For the variable Income, the crosstab shows the original data because analysis found that the trend is similar between the original and treated data. The value of Person chi-square was significant 3 out of 5 times for 5 estimated data sets.

4.1.1 Gender

As shown in Table 4-1, males are more likely to support increased punishment as the best overall crime reduction method (32.1%) than females (27.9%). However, the relationship is not statistically significant ($p = 0.06 > 0.05$). This means that although men appear to be more punitive than women in relation to overall crime, the gender difference is negligible.

Males (29.0%) are again more likely to support increased punishment than females (26.5%) as the most effective youth crime reduction method (see Table 4-2). However, the chi-square results show that as with overall crime, the relationship is not statistically significant ($p = 0.248 > 0.05$) for youth crime, and so the gender difference is inconsequential.
As suggested above, comparing Tables 4-1 and 4-2 reveals that while more likely to support increasing punishment, male respondents show greater support for its use for dealing with overall crime (32.1%) than youth crime (29.0%)—meaning that male respondents are more lenient towards youth crime. Females, too, are more likely to support increased punishment for dealing with overall crime (27.9%) than youth crime (26.5)—meaning female respondents are also more lenient toward youth crime.

In sum, the bivariate analysis shows that males hold more punitive attitudes than females, but the gender gap is not statistically significant. Nevertheless, the Hypothesis H1—that female respondents are more punitive than males—is rejected. In addition, a comparison of the tables shows that respondents of both sexes are more lenient toward youth offenders than overall offenders.

4.1.2 Age

Table 4-1 shows that middle-aged respondents are more likely to support increased punishment (34.1%) as the most effective method to reduce overall crime compared to those who are younger (28.9%) or older (27.0%). The chi-square test result does demonstrate that the variable age is a significant predictor for supporting increased punishment ($p = 0.026 < 0.05$), but its effect size is small ($\phi = 0.066 < 0.1$). This means that when dealing with overall crime, middle-aged people are significantly more punitive than those who are older or younger, but that nonetheless, age has a very small effect on punitive attitudes.

In terms of youth crime, Table 4-2 illustrates that middle-aged respondents are also more likely to support increased punishment (33.0%) as the most effective method compared to those who are younger (23.9%) or older (25.9%). Again, the chi-square test shows that although the age difference in punitive attitudes is significant ($p = 0.002 < 0.05$), its effect size is small ($\phi = 0.088 < 0.1$). This means middle-aged respondents are significantly more punitive than those who
are older or younger with respect to youth crime, but that age has a very small effect on punitive attitudes.

Comparing Tables 4-1 and 4-2 shows that respondents of different age groups are all more likely to support increased punishment as the preferred method for dealing with overall crime than youth crime—meaning that respondents of different age groups are all more lenient toward youth crime.

To sum up, the results of bivariate analysis for the variable age and the dependent variables show that there is a bell-shaped relationship between age and punitive attitudes: those who are middle-aged are significantly more punitive than those who are older or younger for dealing with both overall crime and youth crime. Therefore, the bivariate analysis results reject the Hypothesis H2—that punitive attitudes grow with age. However, while age generally has a small impact on punitive attitudes, the bivariate analysis results show that respondents of different age groups are all more lenient towards youth offenders than overall offenders.

4.1.3 Education

As shown in Table 4-1, people with more education are less likely to support increased punishment as the best overall crime reduction method. This is especially conspicuous when comparing those who have completed technical/community college or less with who hold a bachelor’s degree or above. The latter are significantly less likely to support increased punishment than the former. The chi-square test, too, shows that education is a significant predictor of support for increased punishment ($p = 0.000 < 0.05$), but its effect size is relatively small ($0.1 < \phi = 0.174 < 0.3$). This means that education is a negative predictor of punitive attitudes towards overall crime, but its impact is rather small.

With respect to youth crime, Table 4-2 shows that those with more education also are generally less likely to support increased punishment as the most effective method to reduce
youth crime. There is an exception, however, in that those who completed technical/community college are more likely to support increased punishment (33.1%) than those who only finished secondary/high school (30.3%). Notably, there is a wide gap in punitive attitudes between those who hold a bachelor’s degree or above and those who do not. Those without a bachelor’s degree are more likely to support increased punishment as the most effective method to reduce youth crime than those who have a bachelor’s degree or more. The chi-square test result indicates that the variable education is a significant predictor of supporting increased punishment for youth crime ($p = 0.000 < 0.05$), but its effect size is small ($0.1 < \varphi = 0.155 < 0.3$). Regarding youth crime, this means that more education generally decreases punitive attitudes except for those who completed technical/community college or high school, but that education has a limited influence on punitive attitudes.

By comparing Table 4-1 and Table 4-2, it is evident that respondents of different education background are generally more lenient toward youth crime, except for those who had more than bachelor’s degree. The latter are slightly more likely to support increased punishment for youth crime (12.3%) than they are for overall crime (10.4%).

To sum up, the bivariate analysis suggests that there is an overall negative relationship between education and punitive attitudes. Those who have more education are significantly less punitive than those who have less education for both overall crime and youth crime. The only outliers to this relationship are those who completed technical/community college, with respect to youth crime. Therefore, the bivariate analysis results generally accept the Hypothesis H$_3$—that punitive attitudes decrease with education level. However, the effect size results show that on the whole, education has a rather small impact on punitive attitudes. The bivariate analysis results show that respondents of different educational background are all more lenient towards youth
offenders than overall offenders, except for those who have more education than a bachelor’s degree. In addition, the bivariate analysis shows that there is a wide gap in punitive attitudes between those who hold a bachelor’s degree with respect to both overall crime and youth crime. In both cases, those who do not have a bachelor’s degree are more likely to support increased punishment as the most effective method than those who have a bachelor’s degree or more.

4.1.4 Marital Status
As shown in Table 4-1, those who are married or living with a common-law partner are the most punitive with respect to overall crime (33.2%), while those who never married are the least punitive (21.3%). The chi-square test results show that the variable marital status is a significant predictor of supporting increased punishment ($p = 0.000 < 0.05$), but its effect size is small ($0.1 < \phi = 0.103 < 0.3$). In terms of overall crime, therefore, the difference in punitive attitudes due to different marital status is significant, but marital status has a small effect on punitive attitudes.

As shown in Table 4-2, those who are married or living with a common-law partner are also the most punitive with respect to youth crime (31.7%), while those who never married are the least punitive (17.1%). The Chi-square results show that the variable marital status is a significant predictor of supporting increased punishment for youth crime ($p = 0.000 < 0.05$), but its effect size is small ($0.1 < \phi = 0.131 < 0.3$). In terms of youth crime, therefore, the difference in punitive attitudes due to different marital status is significant, but marital status has a rather small impact on punitive attitudes.

To sum up, the bivariate analysis shows that those who are married or living with a common-law partner are the most punitive for both overall and youth crime, followed by those who are separated, divorced, or widowed, while those who never married are the least punitive. These findings are in accord with Hypothesis H$_4$—that those who are married are more punitive.
than those who are not. In addition, comparing Tables 4-1 and 4-2, shows that whatever their marital status, respondents were consistently more lenient towards youth crime.

4.1.5 Race

Table 4-1 shows that Whites are more likely to support increased punishment, such as prison sentences (30.7%), than non-Whites (23.7%). The chi-square test result shows that the variable race is a significant predictor of supporting increased punishment ($p = 0.044 < 0.05$), but its effect size is small ($\phi = 0.049 < 0.1$). This means that when dealing with overall crime, Whites are significantly more punitive than non-Whites, but the variable race has a very small effect on punitive attitudes.

Table 4-2 shows that in terms of deterring youth crime, Whites are more likely to support increased punishment (28.6%) than non-Whites (20.1%). The chi-square test finds that the variable race is a significant predictor of supporting increased punishment for youth crime ($p = 0.011 < 0.05$), but its effect size is small ($\phi = 0.062 < 0.1$). This means Whites are significantly more punitive with respect to youth crime than non-Whites, but the variable race has a very small effect on punitive attitudes.

For race, the bivariate analysis shows that White respondents are more punitive than non-Whites for both overall crime and youth crime. This finding contradicts Hypothesis $H_5$—that Whites are less punitive than non-Whites. However, the effect size results show that race has a very small effect on punitive attitudes. Additionally, when comparing Tables 4-1 and 4-2, it is noticeable that Whites and non-Whites are both more lenient towards youth crime.

4.1.6 Income

As shown in Table 4-1, those earning $40,000 to $60,000 are the least likely to support increased punishment as the best overall crime reduction method (22.2%), while those earning more than $100,000 (33.0%) are the most punitive. However, the chi-square test shows that this
relationship is not statistically significant \((p = 0.058 > 0.05)\). This means that regarding overall crime, there are variances of punitive attitudes among people with different income levels, but the differences are not significant.

Table 4-2 shows that those earning $40,000 to $60,000 also are the least likely to support increased punishment as the best way to reduce youth crime (23.6%), while those earning over $100,000 are the most punitive (30.0%). However, the chi-square test result shows that the relationship between income and preferred best youth crime reduction method is not statistically significant \((p = 0.373 > 0.05)\). This means although there are some differences of punitive attitudes among people with different income levels, the differences are negligible.

Comparing Tables 4-1 and 4-2 shows that respondents with different income levels are generally more lenient towards youth crime, except for those earning $40,000 to $60,000. This group is slightly more likely to support increased punishment, such as prison sentences for youth crime (23.6%) than for overall crime (22.2%). However, the bivariate analysis shows that this is the least punitive group.

To sum up, the bivariate analyses show that income is not a significant predictor of punitive attitudes. This result rejects Hypothesis \(H_6\) that those at lower income levels are more punitive than those at higher levels.

4.1.7 Perceived Crime Trends

As shown in Table 4-1, those who believed that crime in their neighbourhood had increased (35.2%) or remained the same (31.2%) are more punitive than those who thought that it had decreased (15.6%). The chi-square test shows that the variable perceived crime increase is a significant predictor of support for increased punishment \((p = 0.000 < 0.05)\) but its effect size is relatively small \((0.1 < \varphi = 0.142 < 0.3)\). This means perceived crime increase is a positive
predictor of punitive attitudes in terms of overall crime, but its effect on punitive attitudes is rather small.

Table 4-2 shows that people who believed that youth crime in their neighbourhood had increased (32.7%) or remained the same (27.6%) are more punitive than those who thought it had decreased (15.4%). The chi-square test result shows that the variable perceived youth crime trends is a significant predictor of support for increased punishment ($p = 0.000 < 0.05$) for youth crime, but its effect size is small ($0.1 < \varphi = 0.119 < 0.3$). This means perceived youth crime increase is positively associated with punitive attitudes, but its impact is relatively limited.

To sum up, the bivariate analysis results support Hypothesis $H_8$—that those who believe that crime has increased are more punitive than those who think that crime has decreased or remained the same. It also shows that those who think crime has remained the same are more punitive than those who believe it has decreased. However, the effect size results show that perceived crime increase has a relatively small impact on punitive attitudes for both overall and youth crime. In addition, comparing Tables 4-1 and 4-2 shows that respondents are all more lenient towards youth crime whatever their perception of crime trends.

4.1.8 Fear of Crime

As shown in Table 4-1, those with greater fear of crime are slightly more likely (31.8%) than those who were less afraid (29.8%) to support increased punishment as the best overall crime reduction method. However, the chi-square test shows that the relationship is not statistically significant ($p = 0.625 > 0.05$). This means those who are more frightened appear to be more punitive than those who are less so, but the difference between the two groups is trivial.

Regarding youth crime, Table 4-2 shows that those with more fear of crime are also slightly more likely (28.0%) than those who were less afraid (27.7%) to support increased punishment as the most effective way of deterring crime. As with overall crime, however, the
chi-square test shows that the relationship is not statistically significant ($p = 0.926 > 0.05$). This means although those with more fear of youth crime appear to be more punitive than those with less fear, the difference between the two groups is inconsequential.

In sum, the bivariate analysis results suggest that those who are more fearful of crime are not statistically more likely to support increased punishment than those who feel safer. This finding rejects Hypothesis H7—that those who are more fearful of crime will be more punitive. Comparing tables 4-1 and 4-2 shows that on the whole, respondents are more lenient towards youth crime despite their fear.

4.1.9 Summary of the Bivariate Analyses

The bivariate analyses find that of the variables considered, age, education, marital status, race, and perceived crime trends are all significant predictors of punitive attitudes. Those who are middle-aged, less educated, married, White, and convinced that crime has increased in their neighbourhood may be more punitive. However, the effect size results show that these variables have at most only a small impact on punitive attitudes. In addition, the bivariate analyses corroborate the research hypotheses for education, marital status, and perceived crime trends. They also demonstrate that respondents are generally more lenient towards youth crime than overall crime.

4.2 Multivariate Analysis

In this section, multivariate analysis is conducted to examine whether the relationships between each independent variable and the dependent variables remain when other independent variables are controlled. Tables 4-3 and 4-4 present results from the binary logistic regression predicting support for increased punishment as the most effective way to reduce both overall and youth crime.
4.2.1 Logistic Regression Findings: Overall Crime

Table 4-3 indicates that with respect to gender, male respondents are 1.391 times ($p = 0.007 < 0.05$) more likely than females to support increased punishment as the best crime reduction method when other independent variables are controlled. This finding contradicts Hypothesis $H_1$—that women are more punitive than men—and partially contradicts the previous bivariate analysis result which suggests that males are not significantly more punitive than females. The logistic regression result shows that male respondents are significantly more likely to support increased punishment as the most effective way to reduce overall crime.

With respect to age, Table 4-3 shows that middle-aged respondents are 1.614 times ($p = 0.001 < 0.05$) more likely to support increased punishment for overall crime than those who are older when other independent variables are controlled. At the same time, younger respondents are 1.494 times ($p = 0.014 < 0.05$) more likely than the oldest group to support increased punishment when other independent variables are controlled. In other words, the most punitive respondents are middle-aged, followed by those who are younger, while the least punitive group is the oldest. This finding contradicts Hypothesis $H_2$—that punitive attitudes grow with age—but is consistent with the bivariate analysis results shown earlier.

For education, Table 4-3 indicates that in general, those with more education are less punitive towards overall crime. When other independent variables are controlled, those without a bachelor’s degree are over four times more likely to support increased punishment than those who have more than a bachelor’s degree, and those who have only a bachelor’s degree are 2.315 times ($p = 0.002 < 0.05$) more likely than those with additional education to do so. The multivariate analysis results are consistent with Hypothesis $H_3$—that punitive attitudes decrease with education—and with the previous bivariate analysis.
Table 4-3
Logistic Regression Showing Odds Ratios of Supporting Increase Punishment (1) Versus Increase Other Methods (0) with Various Levels of Independent Variables for Overall Crime

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>Exp (B)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.330</td>
<td>1.391</td>
<td>0.007*</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td>0.401</td>
<td>1.494</td>
<td>0.014*</td>
</tr>
<tr>
<td>35-54</td>
<td>0.479</td>
<td>1.614</td>
<td>0.001*</td>
</tr>
<tr>
<td>55 and older</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below secondary/high school</td>
<td>1.603</td>
<td>4.968</td>
<td>0.005*</td>
</tr>
<tr>
<td>Completed secondary/high school</td>
<td>1.555</td>
<td>4.734</td>
<td>0.001*</td>
</tr>
<tr>
<td>Completed technical/community college</td>
<td>1.471</td>
<td>4.355</td>
<td>0.001*</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>0.839</td>
<td>2.315</td>
<td>0.002*</td>
</tr>
<tr>
<td>Above bachelor’s degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/common-law</td>
<td>0.803</td>
<td>2.233</td>
<td>0.000*</td>
</tr>
<tr>
<td>Separated/divorced/widowed</td>
<td>0.677</td>
<td>1.967</td>
<td>0.002*</td>
</tr>
<tr>
<td>Never legally married</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>-0.286</td>
<td>0.751</td>
<td>0.141</td>
</tr>
<tr>
<td>Non-White</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total household income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below $40,000</td>
<td>0.054</td>
<td>1.056</td>
<td>0.792</td>
</tr>
<tr>
<td>$40,000 to less than $60,000</td>
<td>-0.245</td>
<td>0.783</td>
<td>0.201</td>
</tr>
<tr>
<td>$60,000 to less than $80,000</td>
<td>0.006</td>
<td>1.006</td>
<td>0.976</td>
</tr>
<tr>
<td>$80,000 to less than $100,000</td>
<td>-0.244</td>
<td>0.783</td>
<td>0.277</td>
</tr>
<tr>
<td>More than $100,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived crime trends</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased</td>
<td>1.103</td>
<td>3.015</td>
<td>0.000*</td>
</tr>
<tr>
<td>Remained the same</td>
<td>0.982</td>
<td>2.669</td>
<td>0.000*</td>
</tr>
<tr>
<td>Decreased</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of crime</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsafe</td>
<td>-0.025</td>
<td>0.976</td>
<td>0.910</td>
</tr>
<tr>
<td>Safe</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Calculated from Taking the Pulse 2012.

Notes:
1. Significant level < 0.05.
2. Weights are applied to represent provincial population.
3. The missing value of the variable income is replaced using multiple imputation and the logistic regression shows the pooled result.

For marital status, Table 4-3 indicates that those who are married or living with a common-law partner are 2.233 times ($p = 0.000 < 0.05$) more likely than those who never married to support increased punishment for overall crime when other independent variables are controlled. Those who are separated, divorced, or widowed are 1.967 times ($p = 0.002 < 0.05$)
more likely than those who never married to choose increased punishment as the best method of reducing overall crime when other independent variables are controlled.

In brief, those who never married are the least punitive and those who are married or living with a common-law partner are the most punitive. This finding is consistent with Hypothesis H₄—that those who are married are more punitive than those who are unmarried—and with the bivariate analysis results.

Regarding race, Table 4-3 shows that Whites are less likely to support increased punishment than non-Whites when other independent variables are controlled. However, this relationship is not statistically significant \((p = 0.141 > 0.05)\); being White is not a significant predictor of punitive attitudes when other independent variables are controlled. The finding fails to support Hypothesis H₅—that non-Whites are more punitive than Whites—because in this study, the relationship is not statistically significant. Moreover, this multivariate analysis result contradicts the previous bivariate analysis which suggested that with respect to overall crime, Whites are significantly more punitive than non-Whites. This means even though there appears to be a racial gap in punitive attitudes in Saskatchewan between Whites and non-Whites, the cause for this gap is not race.

Table 4-3 indicates the relationship between various income groups and punitive attitudes towards overall crime is somewhat erratic. The more punitive groups are those for which total annual household income is below $40,000, between $60,000 and $80,000, and over $100,000. The less punitive groups are those for which total annual household income is between $40,000 and $60,000, and between $80,000 and $100,000. However, the relationships are not statistically significant. This finding rejects Hypothesis H₆—that those with lower incomes are more punitive.
than those with higher incomes—but is consistent with the bivariate analysis which showed that income is not a significant predictor of punitive attitudes toward overall crime.

For the variable perceived crime trends, Table 4-3 indicates that those who believed that overall crime had increased over the last three years are 3.015 times ($p = 0.000 < 0.05$) more likely to support increased punishment than those who thought it had decreased, while those who believed that crime had remained the same are 2.669 times ($p = 0.000 < 0.05$) more likely to select increased punishment than those who thought it had decreased. That is, the logistic regression analysis shows that perceptions of crime are positively related to punitive attitudes when other independent variables are controlled. This finding is consistent with Hypothesis $H_8$—that punitive attitudes increase with perceived crime trends—and with the bivariate analysis results.

With respect to fear of crime, Table 4-3 indicates that there is little difference in punitive attitudes between those who feel safe and those who do not when other variables are controlled. The relationship is statistically insignificant ($p = 0.910 > 0.05$). This finding is consistent with the bivariate analysis but contradicts Hypothesis $H_7$—that punitive attitudes increase with fear of crime.

In summary, the multivariate analysis results show that the variables of gender, age, education, marital status, and perceived crime trends remain significant predictors of supporting increased punishment as the best method to reduce overall crime when other independent variable are controlled. This means more punitive attitudes towards overall crime are found among respondents who are male, middle-aged, married, less educated, and believe that crime has increased or remained the same. The multivariate analysis corroborates the research hypotheses for the variables education, marital status, and perceived crime trends. Moreover,
among the five predictors found to have significant impact on punitive attitudes toward overall crime, the variables perceived overall crime trends and education are the strongest.

4.2.2 Logistic Regression Findings: Youth Crime

With respect to the variable gender, Table 4-4 shows that male respondents are slightly more likely than females to support increased punishment as the best youth crime reduction method when other independent variables are controlled. However, this relationship is not statistically significant ($p = 0.233 < 0.05$). This finding contradicts Hypothesis H₁—that females are more punitive than males—but is in accord with the bivariate analysis that shows that gender is not a significant predictor of punitive attitudes for youth crime.

Looking at the variable age, Table 4-4 indicates that those between 35 and 54 are 1.536 times ($p = 0.004 < 0.05$) more likely to support increased punishment than older respondents when other independent variables are controlled. Younger respondents (18-34) are only slightly more likely to chose increased punishment than those who are 55 years and older when other independent variables are controlled. In other words, with respect to youth crime, the middle-aged are more punitive than those who are younger or older. The difference in punitive attitudes towards youth crime between young and elderly people is statically insignificant. This finding contradicts Hypothesis H₂—that punitive attitudes increase with age—but is consistent with the bivariate analysis that shows that middle-aged respondents are the most punitive group.

For the variable education, Table 4-4 indicates that on the whole, those with more education are less punitive toward youth crime. The odds of supporting increased punishment more than double for those who have less than a bachelor’s degree compared to those who have more education than a bachelor’s degree. However, the difference between those who have a bachelor’s degree and those who do not is insignificant when youth crime is specified. These
results are consistent with Hypothesis H₃—that punitive attitudes decrease with education—and with the bivariate analysis.

Table 4-4
*Logistic Regression Showing Odds Ratios of Supporting Increased Punishment (1) Versus Increasing Other Methods (0) with Various Levels of Independent Variables for Youth Crime*

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>Exp (B)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.149</td>
<td>1.160</td>
<td>0.233</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td>0.165</td>
<td>1.179</td>
<td>0.330</td>
</tr>
<tr>
<td>35-54</td>
<td>0.429</td>
<td>1.536</td>
<td>0.004*</td>
</tr>
<tr>
<td>55 and older</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below secondary/high school</td>
<td>1.259</td>
<td>3.522</td>
<td>0.000*</td>
</tr>
<tr>
<td>Completed secondary/high school</td>
<td>1.018</td>
<td>2.768</td>
<td>0.001*</td>
</tr>
<tr>
<td>Completed technical/community college</td>
<td>1.096</td>
<td>2.992</td>
<td>0.001*</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>0.31</td>
<td>1.363</td>
<td>0.353</td>
</tr>
<tr>
<td>Above bachelor’s degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/common-law</td>
<td>0.963</td>
<td>2.619</td>
<td>0.000*</td>
</tr>
<tr>
<td>Separated/divorced/widowed</td>
<td>0.567</td>
<td>1.763</td>
<td>0.017*</td>
</tr>
<tr>
<td>Never legally married</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>-0.482</td>
<td>0.618</td>
<td>0.018*</td>
</tr>
<tr>
<td>Non-White</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total household income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below $40,000</td>
<td>1.116</td>
<td>1.123</td>
<td>0.577</td>
</tr>
<tr>
<td>$40,000 to less than $60,000</td>
<td>-0.035</td>
<td>0.966</td>
<td>0.875</td>
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<tr>
<td>$60,000 to less than $80,000</td>
<td>0.147</td>
<td>1.158</td>
<td>0.474</td>
</tr>
<tr>
<td>$80,000 to less than $100,000</td>
<td>-0.273</td>
<td>0.761</td>
<td>0.252</td>
</tr>
<tr>
<td>More than $100,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived youth crime trend</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased</td>
<td>1.046</td>
<td>2.845</td>
<td>0.000*</td>
</tr>
<tr>
<td>Remained the same</td>
<td>0.821</td>
<td>2.272</td>
<td>0.000*</td>
</tr>
<tr>
<td>Decreased</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of crime</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsafe</td>
<td>-0.044</td>
<td>0.957</td>
<td>0.843</td>
</tr>
<tr>
<td>Safe</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Calculated from Taking the Pulse 2012.*

*Notes:*
1. Significant level < 0.05.
2. Weights are applied to represent provincial population.
3. The missing value of the variable income is replaced using multiple imputation and the logistic regression shows the pooled result.
For the variable marital status, Table 4-4 indicates that those who are married or living with a common-law partner are 2.619 times \((p = 0.000 < 0.05)\) more likely than the unmarried to support increased punishment as the solution to youth crime when other independent variables are controlled. Those who are separated, divorced, or widowed are 1.763 times \((p = 0.017 < 0.05)\) more likely than the unmarried to select increased punishment as the best method of reducing youth crime when other independent variables are controlled. In other words, those who have never married are the least punitive, while those who or married or living common-law are the most punitive. This finding is consistent with Hypothesis \(H_4\)—that those who are married are more punitive than those who are unmarried—and with the bivariate analysis.

Table 4-4 shows that for the variable race, Whites are significantly less likely than non-Whites to support increased punishment for youth crime when other independent variables are controlled \((p = 0.018 < 0.05)\). This finding is consistent with Hypothesis \(H_5\)—that non-Whites are more punitive than Whites—but contradicts the bivariate analysis that shows White people to be significantly more punitive than non-Whites in the case of youth crime. The disparity between the bivariate and multivariate analyses results suggests that being White or non-White may not be the real reason for the differences in punitive attitudes between Whites and non-Whites.

For the variable income, Table 4-4 indicates that as in for overall crime, attitudes towards youth crime among different income groups are erratic. When other independent variables are controlled, the slightly more punitive groups are those with total household incomes less than $40,000, $60,000 to $80,000, and over $100,000. However, the relationships are not statistically significant. This finding rejects Hypothesis \(H_6\)—that those with lower incomes are more punitive than those with higher incomes—but consistent with the bivariate analysis that income is not a significant predictor of punitive attitudes towards youth crime.
For the variable perceived youth crime trends, Table 4-4 shows that those who believe that youth crime has increased over the previous three years are 2.845 times ($p = 0.000 < 0.05$) more likely than those who think it has declined to support increased punishment as the best youth crime reduction method when other independent variables are controlled. Those who believe that crime has remained constant are 2.272 times ($p = 0.000 < 0.05$) more likely than those who think it has decreased to select increased punishment when other independent variables are controlled. That is to say, the logistic regression analysis shows that perceived trends in youth crime trend are positively related to punitive attitudes. This finding is consistent with Hypothesis H₈—that punitive attitudes increase with perceived crime trends—and with the bivariate analysis.

Finally, for the variable fear of crime, Table 4-4 shows that there is little difference in punitive attitudes between those who feel safe and those who feel unsafe, meaning that when other independent variables are controlled, the relationship is insignificant ($p = 0.843 > 0.05$). This finding is consistent with the bivariate analysis but contradicts Hypothesis H₇—that punitive attitudes increase with fear of crime.

In summary, the multivariate analysis results show that the variables of age, education, marital status, race and perceived crime trends are significant predictors of support for increased punishment as the best youth crime reduction method when other independent variables are controlled. This means respondents who are middle-aged, married, non-White, less educated, and believe that crime has increased or remained the same are more likely to chose increased punishment as the most effective method to reduce youth crime. Thus, the multivariate analysis is in accord with the research hypotheses with regard to the variables education, marital status, race, and perceived youth crime trends. In addition, similar with findings of punitive attitudes
towards overall crime, perceptions of youth crime trends and education are also the strongest predictor of supporting increased punishment as the most effective youth crime reduction method.

4.2.3 Summary of Multivariate Analysis

To recap, the multivariate analysis finds that the variables age, education, marital status, and perceived crime trends are significant predictors for supporting increased punishment as the best overall crime and youth crime reduction method when other variables are controlled. In addition, the variable gender is significant only for overall crime while the variable race is significant only for youth crime.

This means that those who are middle-aged, married, have less education, and believe crime and youth crime have increased or remained the same are more punitive in relation both to overall and youth crime. In addition, male respondents are more punitive than females towards overall crime, and non-Whites are more punitive than Whites towards youth crime. The common finding in the two logistic regression analyses is that the variable perceived crime trends and education are the most influential predictors of support for increased punishment both for overall and youth crime.

4.3 Summary of Results

To address the research question of this thesis (see Chapter 3), at the same time to conclude the findings of the above bivariate and multivariate analysis, this thesis reports three major findings. First, the mutual predictors of punitive attitudes towards overall and youth crime are age, education, marital status, and perceived crime trends, while gender is significant only for overall crime, and race is significant only for youth crime when other variables are controlled. Secondly, with regard to the magnitude of influence, the variables perceived crime trends and education are the strongest predictors among all the predictors considered in this study, but any
single predictor only has small impact on punitive attitudes. Finally, respondents are generally less punitive towards youth crime than overall crime.

The next chapter examines the integrated perspective utilized in this study and then discuss the results of each predictor to link the empirical findings to the literature reviewed, followed by policy implications, limitations, and future research suggestions.
CHAPTER 5

DISCUSSION AND CONCLUSION

In this chapter, I first evaluate the critical integrated perspective (5.1) developed through the lens of *habitus*, connecting my empirical findings to the theoretical understanding, and then discuss analysis results regarding each predictor (Section 5.2), linking my findings to the prior literature reviewed in chapter 2. The discussion reveals that the integrated Bourdieuan perspective used in this study help link the predictors in a more explanatory manner, and contribute to the better understanding of punitive attitudes. The empirical results reported in this thesis produce a greater knowledge of punitive attitudes in Saskatchewan, and enrich the existing literature on predictors of such attitudes. In Section 5.3 I examine the policy implications of lowering punitive attitudes by rectifying public misconceptions about crime. Next, I discuss the study’s limitations (5.4). Finally, I offer suggestions for future research (5.5).

5.1 Discussion of the Integrated Perspective

This section first compares the three perspectives —the vulnerability, more-to-lose, and race-based perspectives—to the research hypotheses and results, suggesting the deficits in these perspectives, and then discusses how the integrated perspective developed through Bourdieu’s *habitus* helps make sense of the findings and provides a better framework to study predictors of punitive attitudes.

The vulnerability perspective claims that people who perceive themselves as more vulnerable hold more punitive attitudes (Langworthy & Whitehead, 1986). In line with this perspective, this study proposed the following hypotheses:

H₁: Women are more punitive than men.

H₂: Punitive attitudes increase with age.
H₃: Punitive attitudes decrease with education.

H₅: Non-Whites are more punitive than Whites².

H₆: Punitive attitudes decrease with income.

H₇: Punitive attitudes increase with fear of crime.

H₈: Punitive attitudes increase with perceived crime trends.

Of these seven hypotheses, only H₃ and H₈ were validated by this study. This finding is consistent with Langworthy and Whitehead’s (1986) argument that variables such as gender, age, race, income, and fear of crime are too complex to determine a linear relationship with punitive attitudes, and to be explained from one perspective (Langworthy & Whitehead, 1986).

The more-to-lose perspective maintains that those who believe they have more to lose are more punitive (Dowler, 2003). Based on this argument, this study hypothesized that married people would be more punitive than those who are unmarried. The logistic regression results proved consistent with this hypothesis. At the same time, this study found a chaotic relationship between income and punitive attitudes. This suggests that income is a complex variable, and that multiple explanations account for its influence on punitive attitudes. Therefore, it supports the argument, developed from the more-to-lose perspective, that there might be more subtleties to income’s effect on punitive attitudes.

The race-based perspective focused on the variable of race to account for punitive attitudes, arguing that Whites are more punitive than non-Whites, especially less-educated, lower-income White males. However, this study challenges this perspective by having shown that Whites and non-Whites hold comparable punitive attitudes towards overall crime, and that

² Unfortunately I was unable to further detail the variable race, and study the difference of punitive attitudes between Aboriginals versus non-Aboriginals, and visible minorities versus non-visible minorities separately.
Whites are less punitive than non-Whites in terms of youth crime. This contradiction may be due to the fact that earlier studies reporting that Whites are more punitive were conducted in the United States (e.g., Dowler, 2003; Evans & Adams, 2003; Johnson, 2008), where there is considerable racial conflict. This study, by contrast was conducted in Canada, where, according to Reitz (1988), there is less racial conflict. The difference in location and context may well influence the relationship between race and punitive attitudes. This study did find, however that less educated males were more punitive with respect to overall crime.

To sum up, the inconsistency between the findings and hypotheses developed from these three perspectives suggests that they are unable to account for the public punitive attitudes in this study when utilized individually.

My thesis examines punitive attitudes using an integrated perspective of the above three perspectives. The research results suggest that an integrated perspective is necessary. The study found that the variables age, education, and perceived crime trends (developed based on the vulnerability perspective, and gender was significant only for overall crime); the variable marital status (based on the more-to-lose perspective); and the variable race were significant predictors of punitive attitudes (race was significant only in relation to youth crime). This means these predictors altogether played a role in shaping punitive attitudes in this study, but not necessarily follow the relationships hypothesized by these three perspectives.

However, habitus helps understand these significant predictors’ effect on punitive attitudes. As reviewed in chapter 2, Bourdieu (1979) characterized habitus to be a “…system of … dispositions. …which functions as the generative basis of ….structured … practices” (p. vii). The variables that are found to be significant predictors of punitive attitudes in this study can be viewed as the components of such a system of inclinations: these predictors shape a person’s
*habitus*, and jointly generate greater punitive attitudes of the respondent. Through *habitus*, the predictors developed from three perspectives are able to unite into a more explanatory perspective. In addition, the Bourdieuian perspective of punitive attitudes can be further expanded to include other relevant variables (e.g. personal conservatism, prior victimization experiences, anger, and media consumption) in the future research. These variables are also important external factors that might play a part in the formation of *habitus*.

*Habitus* can also help explain the findings that those who are middle-aged, married, have less education, and believe crime and youth crime have increased or remained the same are more punitive regardless of crime types. Bourdieu (1990) noted one feature of *habitus* is its capability of generating “collective practices” (p.54). The above finding demonstrates that respondents who share a certain mutual history are uniformly more punitive than others, and this can be understood as a function of *habitus* in creating collective practices among particular groups of people.

*Habitus* can also assist in analyzing why respondents of different background are more lenient towards youth crime than overall crime. Bourdieu (1990) argued that *habitus* grants autonomy to practices so that practices could improvise within the boundaries. Respondents, regardless of their punitive attitudes toward overall crime, are generally less harsh on youth crime, suggesting that public punitive attitudes are adjustable. This coincides with F. T. Cullen et al.’s (2000) findings that punitive attitudes are fluid, not fixed. Other researchers also noticed this characteristic of punitive attitudes. Some researchers employed case vignettes to control the information that respondents refer to in the survey (Applegate et al., 2002; R. N. Miller & Applegate, 2014; Payne et al., 2004). Indermaur, L. D. Roberts, Spiranovic, Mackenzie, & Gelb (2012) designed experiment research to examine the influence of the context provided to
the respondents during the survey, and their findings show the impact is significant immediately but temporary. *Habitus* can be utilized to explain the limited function of the survey context on punitive attitudes. Punitive attitudes are structured by one’s *habitus*, and the context of the survey question only triggers the pendulum of punitive attitudes. If the information provided cannot be internalized as a component of *habitus*, it is understandable that its effect will wane.

In sum, this study employs Bourdieu’s concept of *habitus* as a theoretical lens to integrate the predictors developed from prior research perspectives. The research results show support for such integration. *Habitus* also help to make sense the nuances of predictors of punitive attitudes in this study. Nonetheless, this integration is merely a preliminary test for a theoretical hunch. Closer and deeper links between *habitus* and punitive attitudes need to be identified. As well, it is important to explore how *habitus*, an abstract concept, might be measured in a more accurate and appropriate way.

5.2 Discussion of Predictors

The following parts of this section discuss the results of each predictor as an attempt to link my empirical findings to the literature reviewed in this thesis.

5.2.1 Gender

The first key finding of the logistic regression analysis results is that men are significantly more punitive than women towards overall crime. This finding is consistent with previous studies that showed that men hold more punitive attitudes than women (Applegate et al., 2002; Cochran & Sanders, 2009; Evans & Adams, 2003; Haghighi & Lopez, 1998; Hurwitz & Smithey, 1998; Jan et al., 2008; Kury & Ferdinand, 1999; Pfeiffer et al., 2005; L. D. Roberts & Indermaur, 2007; Spiranovic et al., 2012). This finding may be explained through Gilligan’s (1982) theory of different moral reasoning between men and women. Women follow an “ethic of care” and thus are reluctant to support increased punishment, such as prison sentences as the
most effective method to reduce overall crime (Gilligan, 1982, p. 74). Jan et al. (2008) also claimed that women would show more mercy in recommending punitive policy. Importantly, the finding challenges the view that women will be more punitive because they are more afraid of victimization (Langworthy & Whitehead, 1986).

The second important result of the logistic regression analysis is that men and women hold comparable punitive attitudes towards youth crime. This finding challenges previous studies that concluded that men are more punitive than women towards young offenders (Evans & Adams, 2003; Jan et al., 2008). The finding here suggests that men do not universally follow the “ethic of justice” (Gilligan, 1982, p. 74). Rather, they may adjust their moral reasoning according to the context provided, and they may even follow the ethic of care towards young offenders. A comparison of gender difference in punitive attitudes toward overall and youth crime show that the gender gap in punitive attitudes is not fixed, but fluctuate according to the context provided. This finding shows detailed support for the autonomous ability of habitus.

A third result is that bivariate analysis shows that as they age, respondents of both genders become more lenient towards youth offenders than towards offenders generally. This finding may partially challenge Sprott’s (1999) earlier research finding that only women became more lenient towards youth crime. Sprott (1999) found men and women held comparative punitive attitudes toward adult offenders, but women became significantly less punitive towards young offenders.

Lastly, both the bivariate and logistic regression analyses show that gender has a relatively small impact on punitive attitudes. This finding is consistent with earlier research that found gender to be a weak predictor of punitive attitudes (Applegate et al., 2002; Spiranovic et al., 2012).
In sum, this study found that gender might be seen as a significant component of one’s *habitus* that plays a role in shaping and influencing a person’s punitive attitudes. Men are significantly more punitive than women toward overall crime, but gender difference in punitive attitudes disappeared when youth crime is specified. Also, respondents of both sexes are more lenient toward youth crime, but gender has limited impact on punitive attitudes.

### 5.2.2 Age

In terms of overall crime, the logistic regression analysis shows that middle-aged people (35 to 54) are the most punitive, followed by those who are younger (18 to 34), and then by those who are older (55 or older). When it comes to youth crime, those who are middle-aged are still the most punitive, but those who are younger and those who are older hold comparably punitive attitudes. Altogether, there is a bell-shaped relationship between age and punitive attitudes: middle-aged people are more punitive than those who are younger or older. This finding challenges earlier studies that reported either positive linear (F. T. Cullen et al., 1985; Evans & Adams, 2003; Jan et al., 2008; Pfeiffer et al., 2005) or negative linear relationships (Hartnagel & Templeton, 2012; Langworthy & Whitehead, 1986) between age and punitive attitudes.

Moreover, in this study, those in the older group are the least punitive. This challenges Langworthy and Whitehead’s (1986) arguments that older people will be more punitive because they are more vulnerable towards crime and criminals, or because they are more conservative. It is also noticeable that those in the younger cohort are more lenient towards youth crime.

In sum, like the variable gender, this study found that the variable age has a conspicuous influence on constructing one’s *habitus* with respect to punitive attitudes. Those who are middle-aged are more punitive than those who are either older or younger regardless of overall crime or youth crime.
5.2.3 Education

The logistic regression analysis results show that punitive attitudes decrease with education for both overall crime and youth crime. This finding is consistent with previous studies that found that those with more education were less punitive (Dowler, 2003; Evans & Adams, 2003; Hartnagel & Templeton, 2012; Hogan et al., 2005; King & Maruna, 2009; Payne et al., 2004; L. D. Roberts & Indermaur, 2007; Rosenberger & Callanan, 2011; Spiranovic et al., 2012). It is possible that those with more education may have more knowledge of crime and the system of justice and hold more reasonable attitudes towards crime and criminals (Dowler, 2003).

A second finding with respect to education is that there is a wide gap in punitive attitudes towards both overall crime and youth crime between those who hold a bachelor’s degree and those who do not. Those lacking a bachelor’s degree are much more likely to support increased punishment as the most effective method to reduce overall crime and youth crime than those who have more education. This finding suggests that university education may substantially lower a person’s punitive attitudes. Research has also shown that those who have spent longer in university have less punitive attitude (Mackey and Courtright, 2000).

A third finding is that those with the least education (below secondary or high school) are the most punitive group. This challenges Useem et al.’s (2003) earlier research that claimed that those with a high school degree were the most punitive. However, as discussed in chapter 2, their finding might be due to the way in which punitive attitudes were measured. They created a punitiveness index through a series of yes or no attitudinal statements, which might have exaggerated the respondents’ punitive altitudes (Useem et al., 2003).

Finally, as in previous studies (L. D. Roberts & Indermaur, 2007; Spiranovic et al., 2012), education was found to be a strong demographic predictor compared to other variables,
but the effect size results of bivariate analysis show that education alone has a rather small impact on punitive attitudes.

To sum up, the variable education is the third shaping element of a person’s *habitus* regarding punitive attitudes, and this thesis reported that education is negatively related to such attitudes.

5.2.4 Marital status

The logistic regression analysis shows that those who are married are more punitive than those who were never legally married or who are separated, divorced, or widowed. This finding is consistent with previous studies that found that married people were more punitive than those who were unmarried (Costelloe et al., 2009; Dowler, 2003; Evans & Adams, 2003; Jan et al., 2008; L. D. Roberts & Indermaur, 2007). In addition, the regression results expand the literature by showing that those who are separated, divorced, or widowed are more punitive than those who have never legally married.

In all, marital status plays an important part in shaping one’s *habitus* concerning punitive attitudes. This thesis revealed that those who are never married are the least punitive, and those who are in marriage or common-law are the most punitive.

5.2.5 Race

The logistic regression analysis results show that in terms of overall crime, Whites and non-Whites hold comparable punitive attitudes when other variables are controlled. This finding is consistent with previous studies (Jan et al., 2008; Payne et al., 2004), but challenges other research that found Whites to be more punitive than non-Whites (Cochran & Chamlin, 2006; Dowler, 2003; Evans & Adams, 2003; J. L. Miller et al., 1986). Reitz (1988) found less racial conflict in Canada than in Britain or the United States. This may be part of the reason that
Whites and non-Whites showed similar levels of punitive attitudes towards overall crime in this study.

With respect to youth crime, however, the logistic regression analysis shows that Whites are less likely to support increased punishment, such as prison sentences as the best youth crime reduction method than non-Whites when other variables are controlled. This study further challenges prior research that concluded that Whites were more punitive than non-Whites (Cochran & Chamlin, 2006; Dowler, 2003; Evans & Adams, 2003; J. L. Miller et al., 1986). However, this study was unable to determine the source of the racial divide in punitive attitudes. Johnson (2008) employed an index to measure racial bias and prejudice to examine the different origins of punitive attitudes between Whites and non-Whites. Future research may utilize similar scales to explore the formation of punitive attitudes between different racial groups as well.

Although prior research found that Aboriginal people were over-represented in Canada criminal justice system (La Prairie, 2002), and have lower confidence in the police compared non-Aboriginals (Cao, 2014), unfortunately my finding are not able to provide data which demonstrates Aboriginals’ punitive attitudes compared with non-Aboriginals. However, McDowell, Jones, Keatings, Brooks, Cheng, Olver, and Wormith (2012) composed a report also using the data from Taking the Pulse 2012 and found that Aboriginals are more likely to believe that crime has increased compared to non-Aboriginals regardless of crime types, and visible minorities have more fear of crime than non-whites.

In sum, this thesis found that the variable race plays an active part in forming one’s *habitus* regarding punitive attitudes, and respondents of different racial background have nuanced attitudes towards overall crime and youth crime.
5.2.6 Income

Generally speaking, the logistic regression results show that income is not a significant predictor of punitive attitudes when other variables are controlled. This challenges previous research that found that income was positively associated with punitive attitudes (Johnson, 2008, 2009; King & Maruna, 2009; Rosenberger & Callanan, 2011). However, it is consistent with the literature suggesting that income will not be a significant predictor when other independent variables are controlled (Costelloe et al., 2009). The chaotic relationship between income and dependent variables (i.e., perceived best overall and youth crime reduction methods) suggests that total household income may not be an accurate measure of economic insecurity. This accords with a similar argument made in the same article (Costelloe et al., 2009). It also may be due to the fact that there are sizeable missing values in the variable of income, and as a result, the estimates were calculated by multiple imputations to replace the what seemed to be missing. Even though multiple imputation is arguably the most accurate method of replacing missing values, there may be errors between real income and the estimates, resulting in the failure to find a significant relationship between income and punitive attitudes.

5.2.7 Perceived Crime Trends

Firstly, the logistic regression analyses report that punitive attitudes increase with perceived crime trends for both overall and youth crime. This finding is consistent with prior research that found that those who believed that crime was increasing were more punitive than those who did not (Hogan et al., 2005; Pfeiffer et al., 2005; L. D. Roberts & Indermaur, 2007; Spiranovic et al., 2012). This is an interesting finding: less than 15% of the respondents believed that overall crime and youth crime in their neighbourhood had decreased, but police-reported crime statistics in 2013 showed that the rate and intensity of crime in Saskatchewan had decreased for nine years (Ministry of Justice, 2014). Given the strong relationship between
perceived crime trends and punitive attitudes, there is an urgent need to further study the source of perceived crime trends. L. D. Roberts and Indermaur (2005) argued that media might have an exaggeration effect on people’s awareness of crime. This finding adds to the literature, by showing that those who believed crime had remained constant were also more punitive than those who thought it had decreased.

Secondly, like the variable education, the logistic regression analysis results show that perceived crime trends is a strong predictor of punitive attitudes, consistent with earlier studies showing that a perceived crime increase was the predominant predictor (Pfeiffer et al., 2005; Spiranovic et al., 2012). Also, among the predictors that are found to be significant in relation to punitive attitudes (i.e., gender, age, education, marital status, and race), perceived crime trends are more prone to change. Therefore, policy implications mainly focused on correcting public perceptions to lower punitive attitudes are discussed in section 5.3.

In sum, this thesis showed the variable perceived crime trends strongly influences the formation of a person’s *habitus* with respect to punitive attitudes, and is positively related to such attitudes.

### 5.2.8 Fear of Crime

The logistic regression analysis results suggest that fear of crime is not a significant predictor of punitive attitudes. This challenges previous literature that maintained that those more fearful of crime were more punitive (Costelloe et al., 2009; Dowler, 2003; Hogan et al., 2005; King & Maruna, 2009; Spiranovic et al., 2012). It is possible that the simple measure of fear of crime used in this study resulted in the failure to detect a significant association with punitive attitudes. In the *Taking the Pulse* survey, fear of crime was measured using a one-item multiple choice question: How safe do you feel from crime in your neighbourhood? Do you feel (a) very safe; (b) reasonably safe; (c) somewhat unsafe; (d) very unsafe. In my thesis, fear of
crime was further recoded into a dummy variable (unsafe = 1, safe = 0) because over 90% of the respondents reported feeling safe. In the studies that previously reported a significant association between fear of crime and punitive attitudes, an index calculated from multiple survey questions was used (Costelloe et al., 2009; Dowler, 2003; Hogan et al., 2005; King & Maruna, 2009; Spiranovic et al., 2012). Therefore, it is possible that a more refined measure of fear of crime would detect nuances that link this predictor and punitive attitudes.

5.3 Policy Implications

Using the data from Taking the Pulse, my thesis demonstrates that the public’s perceptions of crime trends and education are the strongest factors in shaping punitive attitudes compared to other variables examined. As discussed earlier, the significant predictors of punitive attitudes can be seen as elements of a person’s habitus, which shapes a person’s punitive attitudes. The perceptions of crime trends are more malleable than structural characteristics like gender, age, race, marital status, and education. Therefore, the policy implications mainly focus on how to lower public punitive attitudes through rectifying perceived crime trends.

Through the analysis of data from Taking the Pulse, those who believe that crime has increased, or remained the same, are more punitive than those who believe that crime has decreased. Results of the Taking the Pulse survey showed that most respondents believed that crime in their neighbourhood had remained the same for the past three years (47.4%), followed by those who thought crime had increased (34.6%). Only 14.9% believed that crime had decreased. Compared to the national statistics, Saskatchewan residents were less likely to believe that crime in their neighbourhood had remained the same (47.4% in Saskatchewan vs. 62% in Canada), but were more likely to believe that crime had increased (34.6% in Saskatchewan vs. 26% in Canada) or decreased (14.9% in Saskatchewan vs. 6% in Canada; Brennan, 2011). This
means that Saskatchewan residents held more diverging views about crime trends. Yet according to police-reported crime statistics in 2013, the rate and intensity of crime in Saskatchewan had decreased for nine years (Ministry of Justice, 2014). It appears that there is a gap between crime statistics and public perceptions of crime trends (Frost, 2010; J. V. Roberts, 1992).

One possible explanation for this gap is that while the statistics demonstrated a broad trend of declining crime, those who believed that crime had increased or remained the same in their neighbourhood for the past three years resided in areas where crime had indeed increased or remained the same. If this is the case, their perceptions of crime would be fact-based, and the policy implication is that tackling crime in these neighbourhoods should be a priority. A second possible explanation is that some respondents had misconceptions about crime trends. If this is the case, the problem would be one of determining the source(s) of the misconceptions and how they could be overcome or corrected. A third explanation is that some respondents simply were not aware of crime trends. If that is the case, the policy question would be how to effectively disseminate accurate crime trend information to the broader public. For example, the Australian government has distributed an information brochure to dispel public misunderstanding about crime and the criminal justice system (Indermaur et al., 2012). Finally, it is also possible that these respondents were aware of the statistical trend of decreasing crime, but somehow doubted the data provided by the authorities. In this case, the suggestion would be that the authorities need to find a way of gaining public credibility. Cao (2014) reported that Aboriginals have less confidence in the police, and even thought this study is not able to study punitive attitudes of Aboriginals separately, the results in this thesis report that non-White are more punitive than White. Therefore, another feasible method to reduce punitive attitudes in Saskatchewan,
especially among Aboriginals, might lie in raising the confidence in the police of Aboriginals to the same level as non-Aboriginals.

Another long-term suggestion of how to reduce public punitive attitudes is to invest in education. Consistent with prior research, my thesis shows that a strong demographic variable is the level of education (L. D. Roberts & Indermaur, 2007; Spiranovic et al., 2012). Therefore, raising education levels is another feasible way of reducing public punitive attitudes.

There is yet another policy implication for politicians and policy makers. Adriaenssen and Aertsen (2015) noticed that some politicians and policy makers use public will as an excuse for enacting tougher sentencing policy as a means of tackling crime. However, the frequencies of dependent variables in my thesis show that only less than one-third of respondents believed that increased punishment, such as longer prison sentences was the best method of reducing crime (overall crime: 28.6%; youth crime: 26.5%). Therefore, if politicians or policy makers promote a tougher sentencing regime in Saskatchewan and claim that they are representing public attitudes, their argument is untenable. J. V. Roberts (1992) also questioned whether politicians and policy makers had solid grounds for pushing for tough-on-crime policies based on public punitive sentiments. He argued that policy makers and politician misunderstand public attitudes (J. V. Roberts, 1992).

5.4 Limitations

One limitation of my thesis is that the dependent variables were measured in the single-item survey question that asked respondents to choose the most effective method to decrease overall (youth) crime. As well, the wording of the survey questions was too broad. Each respondent may have had a different type of crime in mind when they chose the response they believed offered the best method of reducing crime. J. V. Roberts (2004) found that respondents
usually had the worst case scenario in mind when they were asked a broad survey question. This means that the respondents might appear more punitive in the survey than they would be in real life. Many studies constructed a punitiveness index calculated from multiple survey questions (e.g., Applegate et al., 2002; Evans & Adams, 2003; Useem et al., 2003). This enabled researchers to show more nuances in punitive attitudes.

Another limitation lies in having used the variable of income as an indicator of economic insecurity. As Costelloe et al. (2009) noted, income is an inaccurate measure of economic (in)security because income alone is not a precise indicator of financial well-being. This may be why my study fails to establish a relationship between income and punitive attitudes. Costelloe et al. (2009) established a means of measuring respondents’ prospects of future economic well-being to use in conjunction with the objective measure of income, and having done so, reported that punitive attitudes did indeed increase with economic insecurity.

Also, as discussed earlier, the simple measure of fear of crime that was used in this study may have resulted in the failure to detect a significant association with punitive attitudes.

Previous studies adopted an index calculated from multiple survey questions regarding fear of crime (Costelloe et al., 2009; Dowler, 2003; Hogan et al., 2005; King & Maruna, 2009; Spiranovic et al., 2012). It is possible that a more refined measure of fear of crime would show a more nuanced relationship between the fear predictor and punitive attitudes.

Moreover, in this thesis, I was unable to further detail the variable race, and study the difference of punitive attitudes between Aboriginals versus non-Aboriginals, and visible minorities versus non-visible minorities separately given that only about 6% of respondents identified themselves as visible minorities, and about 7% identified themselves as Aboriginals. Therefore, I combined these two variables and compare Whites with non-Whites. However, as
La prairie (2002) argued that Aboriginal people were over-represented in Canada criminal justice system, and 15.6% of Saskatchewan residents self-identified as Aboriginals (Saskatchewan Bureau of Statistics, 2011c), it would be meaningful to study punitive attitudes of Aboriginals in Saskatchewan separately.

Furthermore, previous studies showed additional predictors that were relevant to punitive attitudes such as religion (Applegate et al., 2000; Grasmick & McGill, 1994; Kutateladze & Crossman, 2009), political orientations (Cochran & Sanders, 2009; Hartnagel & Templeton, 2012; Rosenberger & Callanan, 2011), prior victimization experiences (Applegate et al., 2000; Costelloe et al., 2009; King & Maruna, 2009), anger about crime (Hartnagel & Templeton, 2012; Johnson, 2009), and media consumption (Dowler, 2003; Rosenberger & Callanan, 2011; Spiranovic et al., 2012). The data I relied on for this study provided no information on these variables and therefore they could not be included.

Last but not least, this study used each individual respondent as a sample unit, and was therefore unable to study the interaction with regard to the formation of punitive attitudes among family and friends. It might be interesting to study to what extent family members and close friends share punitive attitudes, and to what extent they influence each other on such attitudes.

5.5 Suggestions for Future Research

Further research may find more relevant variables derived from comprehensive explanatory theoretical perspectives. The theoretical lens built from Bourdieu’s habitus shows that variables examined in this study jointly accounted for part of punitive attitudes. Future study may include other variables (for example, personal conservatism, anger, and media usage), along with the variables used in this study, to test if together they account for a greater proportion of punitive attitudes. Also, besides introducing more relevant variables into the theoretical
perspective, future study may find stronger links between theory and punitive attitudes. In this study, I use Bourdieu’s concept of *habitus* as a basis for integrating prior research perspectives. The results of my research support such integration. In the future, however, a more explanatory perspective could be developed using more accurate and comprehensive measures of *habitus*.

Secondly, additional studies could adopt a multifaceted measurement of punitive attitudes to capture respondents’ comprehensive attitudes. Survey questions designed to be more practical and closer to real life decisions might be helpful. For example, Cohen, Rust, Steen, and Tidd (2004) designed a set of questions to gauge respondents’ willingness to pay for different crime control methods as a means of determining their preferences and underlying attitudes.

Thirdly, there is an urgent need for more qualitative research in this area. The advantage of quantitative analysis is that it allows researchers to produce generalizable findings. However, the results are superficial as they simply present a phenomenon without adequate explanations of its causes or subtleties. Therefore, it is necessary to conduct more qualitative studies of public punitive attitudes to explore their sources. Some earlier researchers noted the intricacies of how some variables (e.g., gender, race, and income) jointly influenced a person’s punitive attitudes (Costelloe et al., 2009; Hogan et al., 2005). It is very difficult for a quantitative study to capture the subtleties of the relationships between these variables and punitive attitudes. However, qualitative research methods, such as in-depth interviews, could focus on participants with particular traits (e.g., non-White women who are economically challenged) to explore possible explanations for their punitive attitudes in a more in-depth fashion.
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