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Public Opinion and Prison Conditions in Canada:
The Relationship between Attitudes and Knowledge

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2002

Submitted to the Department of Criminology, University of Ottawa, in partial fulfillment of the requirements for the degree of Master of Arts

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Acknowledgements

I would like to especially thank Professor Ronald Melchers and Professor Julian Roberts, of the Department of Criminology, University of Ottawa, for their continued guidance, support, and advice throughout this research endeavour. I would also like to acknowledge Professor Julian Roberts, Professor Tom Gabor, and Professor Sam Alvaro, of the Department of Criminology, University of Ottawa, for allowing me access to their students in order to carry out this research. Further, I would like to thank all of the students who voluntarily gave their time to participate in this research. Finally, a special thank you goes out to my parents, Tom and Rosie Gringler, and my partner, Ryan Kelly, for their unconditional support, love, and encouragement throughout this research.
Abstract

This thesis explores the relationship between attitudes and knowledge, and assesses the impact of factual information on attitudes on the topic of prison conditions in Canada. A questionnaire, distributed to a non-representative sample of volunteer first year criminology students, forms the basis of this research. The questionnaire incorporated an attitude scale, measuring respondent “punitiveness”, and a knowledge scale, measuring the accuracy of factual information concerning prison conditions at the disposal of respondents. The questionnaire was comprised of both global and specific questions and included an experimental manipulation (i.e., case scenarios).

Respondents were supportive of both punitive and progressive penal policies and practices. Study participants were familiar with the general facets of prison life, but lacked information on penal policies, prisoner health issues, prisoners’ rights, and release from prison.

The results of this research do not support a relationship between attitudes and knowledge. Respondents held particular attitudes concerning prison conditions regardless of the amount or accuracy of factual information at their disposal.

Participant assessments of penal severity were positively associated with their perceptions of sentencing severity. However, this research indicates that this relationship is spurious. An underlying individual trait, “punitiveness”, influenced both attitudes towards sentencing and attitudes towards prison conditions. Respondents favouring punitive penal practices were more likely to appraise prison conditions and sentencing practices as lax.

This research also indicates that providing participants with factual information via case scenarios does not alter their opinions. Respondents receiving global questions and those
receiving case scenarios expressed statistically similar perceptions of prison conditions. Further, manipulating offence severity within the case scenarios did not alter participant perceptions of prison conditions. However, factual information, in the form of case scenarios, strengthens the relationship between “punitive ness” and perceptions of criminal justice leniency.
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Chapter One: Introduction

Survey research is an established method of gauging public attitudes towards important social and political issues. Through opinion polls, members of the public are able to express their opinions on, and levels of satisfaction with, the criminal justice system and its various components. Researchers, such as Roberts (1994), have argued that in order to understand and interpret public opinion, it is also necessary to assess the extent of public knowledge concerning issues of criminal justice. If members of the public are to provide useful input into criminal justice policy-making, it is essential that they possess accurate factual information upon which to base their opinions.

This implies that there may be a relationship between public attitudes and the knowledge base underlying these attitudes. However, researchers have yet to determine whether attitudes are in fact influenced by knowledge. Although public attitudes, and to a much lesser extent public knowledge, on issues of criminal justice have been researched by academics and pollsters, few studies have examined the association between attitudes and knowledge. Are public attitudes shaped by the amount of factual information at their disposal? Further, can public attitudes be altered by providing them with factual information? These are the two key questions that this thesis was designed to explore.

In order to address these research concerns, a questionnaire was developed and distributed to a sample of volunteer participants. The questionnaire measured attitudes and knowledge concerning prison conditions in Canada. Prison conditions were chosen as the domain of inquiry because, unlike other criminal justice issues such as sentencing and parole,
prison conditions have received fairly limited coverage from the academic community. Thus, in addition to the primary areas of investigation, the nature of the relationship between attitudes and knowledge and the impact of knowledge on attitudes, this research will supplement the lean data on public opinion of prison conditions.

The upcoming chapter will summarize the pertinent literature concerning public attitudes and knowledge of prison conditions, with a focus on the relationship between attitudes and knowledge. Chapter Three will detail the research questions and hypotheses, as well as outline the specific methodology adopted for this research endeavour. Chapter Four will describe the data collected and present the data manipulation procedures utilized in this research. Chapter Five will present and discuss the findings from this research, as well as advance the author’s suggestions for future research. Finally, Chapter Six will contain the author’s conclusions.
Chapter Two: Literature Review

Introduction

Public opinion polls are administered regularly in order to gauge public thinking on a variety of important social issues. Politicians often call for legislative change based upon what they believe the public desire or will approve of. Consequently, it is necessary to document public opinion to discern whether it is congruent with and supportive of legislative activity. Similarly, it is vital to appraise public opinion on social problems so as to determine which policies and agendas members of the public believe require reform. In a democratic society, governmental policy should reflect both public approval and support, and must be demonstrative of the “will of the people”. Although subject to imperfections, public opinion research provides one of the most appropriate and readily available means of gauging public priorities and concerns.

Public opinion research is conducted and utilized frequently in the field of criminal justice. Public perceptions of crime have received considerable attention from the academic community, as well as pollsters. Additionally, researchers have probed the opinions of members of the public on a number of criminal justice issues, including the courts and sentencing, the correctional system, and mechanisms of early release from prison, particularly parole. This research has consistently indicated that the public hold negative views of the justice system. Members of the Canadian, American, and British public assess their justice systems, in whole and in their specific parts, as too lenient in their response to offenders (Banks, Maloney, & Willcock, 1975; Brillon, Louis-Guerin, & Lamarche, 1984; Cumberland & Zamble, 1992; Doble,
1987; Fishkin, 1995; Roberts, 1994; Roberts & Stalans, 2000; Warr, 1995;).

These findings may lead researchers, policymakers, and criminal justice personnel to believe that the public is highly punitive and desires a tougher criminal justice system. In fact, research illustrates that criminal justice elites (i.e., legislators, policymakers, and criminal justice personnel) are of the impression that the public is punitive and averse to correctional reform. In contrast, studies which compared the perceptions of criminal justice elites with public attitudes towards the correctional system indicate that members of the public are far less punitive than the elites presume and are responsive to progressive change (Gottfredson & Taylor, 1984; Riley & Rose, 1980). Since public opinion can and does impact upon criminal justice policy (see for example, Roberts & Cole, 1999), it is imperative to ensure that criminal justice practitioners and policymakers have an accurate appraisal of public sentiment. As the research illustrates, public opinion is not always assessed properly by elected representatives and policymakers.

Furthermore, public opinion research indicates that survey methodology may have direct bearing on the types of attitudes elicited by opinion polls. For instance, the severity of public attitudes may be magnified and distorted by the use of single, global, forced answer questions (Cumberland & Zamble, 1992). These types of questions mask the complexity and flexibility of public attitudes towards issues of criminal justice (Roberts, 1988). Consequently, it must be recognized that when asked global questions, the public responds punitively. However, when questioned about specific case scenarios (see for example, Cumberland & Zamble, 1992) or criminal justice policies, the public appears more tolerant.

Additionally, it has been demonstrated that although members of the public hold negative
attitudes towards the criminal justice system, these attitudes are based upon limited factual knowledge (see for example, Banks et al., 1975; Cumberland & Zamble, 1992; Roberts, 1988). For instance, in a Canadian convenience study, the majority of respondents were only capable of correctly answering 3 of 10 knowledge testing questions concerning the criminal justice system (Cumberland & Zamble, 1992). Similarly, the information concerning criminal justice issues possessed by the public is often erroneous (Gerber & Engelhardt-Greer, 1996). These research findings illustrate the importance of documenting both the nature of public attitudes towards and the extent of public knowledge of the criminal justice system. Simply concluding that the public is dissatisfied does not provide adequate insight into public opinion (Roberts, 1988). As Roberts (1994) argues, public attitudes cannot be understood without assessing the knowledge base underlying these attitudes.

By studying both attitudes and knowledge, researchers are capable of evaluating public opinion against objective facts and recording gaps and misperceptions in public thinking. If public attitudes result from erroneous information or inadequate knowledge, public education may be capable of influencing public appraisals of the criminal justice system. Similarly, public approval of criminal justice policies may be contingent upon accurate information concerning the justice system.

Roberts (1994) contends that public attitudes towards crime and criminal justice issues have been widely researched, whereas public knowledge has received limited attention from the academic community. However, unlike areas such as parole and sentencing, where public attitudes have been thoroughly explored, both public attitudes and knowledge of prison conditions have received fairly limited coverage. For instance, many surveys and polls that probe public
sentiment on prisons ignore the issue of prison conditions altogether. Since the state of today’s prisons may have considerable impact upon public appraisals of the criminal justice system, it is essential to examine public thinking on this issue. Moreover, although few researchers have focussed on public knowledge of prison conditions, it has been demonstrated that a “... gap [exists] between public perceptions and the reality of prison life” (Roberts, 1994, p. 37; see also, Banks et al., 1975). Consequently, the discrepancy between attitude and knowledge regarding prison conditions requires investigation.

Due to the absence of detailed information on public attitudes towards and knowledge of prison conditions, this thesis is devoted to these two areas. The focus of this research is to examine the relationship between attitudes and knowledge and to analyse the impact of factual information on attitudes using the specific case of prison conditions. In order to provide a context for public opinion on prison conditions, and to illustrate the relationship between attitude and knowledge, research concerning public opinion of prisons will be summarized, followed by a review of the literature pertinent to prison conditions.

This literature review includes both quantitative and qualitative studies of public opinion. However, the main emphasis of this review is upon quantitative research methods, including representative samples and convenience studies. This paper is further restricted to studies published in English and only addresses research conducted in the United States, Canada, and Britain. Although the time period covered by this review ranges from the late 1960's until present time, it must be noted that research conducted on public attitudes towards and knowledge of prisons and prison conditions is episodic and limited in availability. Therefore, the majority of research findings in this area do not permit historical comparisons.
Principal Methodologies used in Public Opinion Research

Prior to delving into a review of the literature pertaining to public opinion of prisons and prison conditions, it is necessary to discuss the central methodologies utilized in public opinion research and to highlight their limitations. Roberts and Stalans (2000) indicate that there are three main methodological techniques used in public opinion research: representative sampling, purposive or convenience sampling, and focus groups. Each of these three methods of measuring public opinion are subject to advantages and weaknesses.

Studies which employ representative sampling techniques are advantageous because they ensure that their survey respondents are representative of the larger population from which they were selected (Roberts & Stalans, 2000). Consequently, the results of these studies can be generalized to the larger population.

Although generalizability is an important outcome for scientific research, representative sampling techniques may be limited by the types of questions common to this methodology. For instance, many representative polls employ closed-ended questions, which restrict respondents’ answers to options provided by the researcher. Consequently, these polls are incapable of eliciting responses that do not coincide with predetermined answers and may force participants to select responses which do not accurately reflect their opinion on an issue (Himelfarb, 1990). Similarly, many large-scale polls utilize global questioning techniques, which, as already noted, do not address the complexity and flexibility of public opinion and tend to evoke punitive responses (Cumberland & Zamble, 1992; Turner, Cullen, Sundt, & Applegate, 1997). Further, the way in which a particular question is asked can have considerable impact upon the responses
of the public (Flanagan, 1996b; Flanagan & Caulfield, 1984). Finally, single isolated questions, common to large scale polls, do not provide a reliable indicator of public opinion. Therefore, it is unadvisable to make conclusions based upon a singular question asked on an opinion poll.

Although studies which utilize purposive sampling techniques are not representative and may also suffer from some of the above-noted limitations, their smaller sample sizes enable researchers to take more of the respondents' time and use case-scenarios or vignettes. Research demonstrates that the use of specific case-scenarios results in more liberal, flexible, and favourable public responses when compared with global questioning techniques (Cumberland & Zamble, 1992; Turner et al., 1997). Similarly, researchers using convenience samples may conduct experimental studies which are not possible with large-scale polls (Roberts & Stalans, 2000). Therefore, the convenience sample method may enable researchers to evoke public attitudes which are not apparent through representative research.

In contrast to the quantitative methodologies discussed, focus groups are a form of qualitative inquiry. Through intense interaction among respondents and interviewers, “focus groups are designed to probe issues more deeply than public opinion surveys can, allowing participants to explain their opinions in order to surface assumptions that underlie these perspectives” (Doble, 1987, p. 4). Therefore, focus group studies are a valuable supplement to quantitative research because they provide additional insight into public thinking on particular criminal justice concerns.

1 Please note that representative research may also employ vignettes (for example, the 1999 General Social Survey, cited in Tufts, 2000). However, this research method is more common with convenience samples. Due to their smaller sample sizes, convenience samples may be more accessible for in-depth questioning than probabilistic samples.
Focus groups are also subject to specific limitations. As with convenience samples, focus groups typically are not representative of the general population and therefore their findings cannot be generalized to larger groups. Additionally, since focus groups involve a high level of interaction between respondents and interviewers, there is an increased risk of experimenter bias influencing participant responses.

All three of the aforementioned public opinion research methodologies are useful in eliciting and understanding public attitudes towards corrections. Although each method is subject to particular limitations, as long as these shortcomings are recognized and considered, public opinion research findings can be disseminated accurately and appropriately. Further, by triangulating the results of these differing research methodologies, researchers may generate a more comprehensive and precise understanding of public opinion.

**Public Opinion of Prisons: Some General Findings**

This section is intended to provide a brief overview of some of the principal research findings concerning public opinion of incarceration-related issues. Specifically, research detailing public attitudes towards and public knowledge of sentences of incarceration, alternatives to incarceration, and parole will be summarized. These research areas have been included in this review in order to illustrate the relationship between public attitudes and public knowledge. The subsequent section will address public perceptions and knowledge of prison conditions.

**Public Opinion and Sentences of Incarceration**

Public opinion research demonstrates that members of the public are most familiar with
sentences of incarceration. Roberts (1994) provides two explanations for this phenomenon: (a) the news media inform the public about prison sentences over alternative sanctions, and (b) members of the public may be unaware of the existence of non-carceral alternatives. Additionally, both purposive and representative studies indicate that respondents prefer sentences of incarceration over community-based alternatives (Hough & Roberts, 1998; Turner et al., 1997). Since sentences of incarceration are both prevalent and preferred in public thinking, it is necessary to address public appraisals of prison as a sanction.

A number of public opinion studies have asked respondents to assign sentences to hypothetical offenders. These studies demonstrate that public sentencing preferences are more severe than actual criminal justice practice. Members of the public are more likely to impose incarceration as a sanction than are United States courts and desire longer prison sentences than those being served by convicted offenders (Blumstein & Cohen, 1980; Zimmerman, Van Alstyne, & Dunn, 1988). These studies illustrate that public attitudes towards sentences of incarceration do not correspond with criminal justice practice. Further, these findings imply that the public is not accurately apprised of existing sentencing practices.

Similarly, findings of the 1996 British Crime Survey indicate that the majority of respondents vastly underestimate incarceration rates (Hough & Roberts, 1998). Comparatively, research demonstrates that Canadians are unaware of the relatively higher rate of incarceration in Canada as opposed to other countries (J. V. Roberts, personal communication, December 3, 1999). These studies illustrate that public knowledge concerning the use of incarceration as a sanction is inaccurate and at odds with current criminal justice practice. In summary, both public attitudes towards and public knowledge of sentences of incarceration do not concur with
present sentencing practices.

**Public Opinion and Sentencing Alternatives**

Although members of the public favour sentences of incarceration (Hough & Roberts, 1998; Turner et al., 1997), cross-national qualitative and quantitative research consistently indicates that people are supportive of alternatives to prison under specific circumstances (Adams, 1990; Doble, 1987; Fishkin, 1995; Flanagan & Caulfield, 1984; Roberts, 1994; Turner et al., 1997). However, research conducted in Britain illustrates that the public is not fully cognizant of all the existing alternatives to incarceration. Respondents who were given a list of sentencing options were more likely to choose an alternative sanction than those who were not provided with this list of alternatives (Hough & Roberts, 1998). This research implies that lack of knowledge may have a considerable impact upon public support of and preference for sentencing alternatives.

Similarly, information concerning the costs of incarceration was shown to influence public attitudes towards the use of alternative measures. In a United States focus group study, Doble (1987) found that participants who were unaware of the costs associated with incarceration were more likely to support sentencing alternatives once they were informed of the expenses incurred through prison construction and maintenance. Likewise, the majority of participants in a national Canadian poll were unable to estimate the annual cost of incarcerating an offender (Roberts & Stalans, 2000). These findings demonstrate that a relationship exists between public attitudes and the knowledge base which informs these attitudes. Specifically, perceptions may be shaped by the amount of factual information at the disposal of respondents.
Public Opinion and Parole

Although the parole board is a separate component of the criminal justice system, early release from prison is inextricably linked to public appraisals of sentences of incarceration. For instance, Roberts (1988) argues that perceptions of leniency in the sentencing stage are related to the belief that parole is granted too easily and too often. However, as has been demonstrated, public perceptions of the criminal justice system are often inaccurate. Accordingly, a review of the literature pertaining to public opinion of parole may further illustrate the relationship between public attitudes and knowledge.

As with studies which focus upon other components of the criminal justice system, public opinion research on the parole system demonstrates that members of the public are dissatisfied. For instance, a number of Canadian studies found that the public feels that current release practices are too lenient and are granted to the wrong kinds of inmates, such as violent or repeat offenders (Adams, 1990; Cumberland & Zamble, 1992; Roberts, 1988, 1994; Zamble, 1990). Similarly, data from a nationally representative United States poll illustrate that the majority of Americans would refuse parole to recidivists (Flanagan, 1996c). Consequently, it can be argued that members of the public hold strong negative views of the parole system.

Although Canadians hold particularly negative attitudes towards early release from prison, the knowledge upon which they base their attitudes is severely lacking. For example, Roberts (1988) found that although members of the Canadian population are aware that early release mechanisms exist, they are uncertain about the specific details of their operation. For instance, the majority of respondents in this study were unable to correctly identify the definitions for mandatory supervision and full parole (Roberts, 1988).
Similarly, public opinion research conducted by the Canadian Sentencing Commission (1987) further demonstrates that members of the public are unaware of the meaning of the term “parole”. 85% of respondents did not choose the correct definition of parole and the same percentage of respondents were unable to approximate the time-period in which an inmate may become eligible for parole (Roberts, 1992). Furthermore, the majority of Canadians are incorrect in their assumptions concerning release rates from prison, believing that parole rates had increased, when in reality they had remained the same (Hann & Harmon, 1986 cited in Roberts, 1992; Roberts, 1988 cited in Roberts, 1992). Based upon the preceding studies, it is evident that public attitudes are misguided by both a lack of accurate knowledge of, and misperceptions concerning, the workings of the justice system.

**Public Opinion of Prison Conditions: A Review**

Although research concerning public perceptions and knowledge of prison conditions is rather limited, there is enough available material to illustrate both what the public “knows” and what the public “thinks” about prison conditions. As with other criminal justice issues, it is possible to establish a relationship between attitudes and knowledge. To demonstrate the connection between perceptions and knowledge, public opinion on the conditions of confinement, prison programs and policies, and prison overcrowding will be discussed.

**Public Attitudes and the Conditions of Confinement**

One of the most consistent research findings concerning public opinion of prison conditions is that members of the public believe prisons are too lax, liberal, and lenient in their treatment of offenders (Adams, 1990; Banks et al., 1975; Brillon et al., 1984; Doble, 1987;
Fattah, 1982; Fishkin, 1995; Roberts, 1994; Roberts & Stalans, 2000). For instance, a 1976 Gallup poll “... asked a sample of adult Canadians whether the conditions in our penal institutions are too harsh, too liberal or about right. Only 9% thought the conditions are too harsh, 56% thought they are too liberal, 14% felt they are about right and the remainder had no opinion” (Fattah, 1982, p. 373). These public perceptions emerge from both qualitative and quantitative research studies, cross national borders, and are persistent over time. Accordingly, the belief that prisons are not tough enough on offenders is a common and stable characteristic of public thinking.

Additionally, research conducted in Canada, the United States, and Britain illustrates that not only are members of the public dissatisfied with the laxity of prison conditions, they want prison life to be made more difficult (Adams, 1990; Doble, 1987; Fishkin, 1995; Flanagan, 1996a). Participants in Canadian focus groups indicate that prison conditions should be toughened in order to deter subsequent recidivism by ex-prisoners. Suggestions for increasing the deterrent value of prisons include forced labour and depriving prisoners of amenities (Adams, 1990). Similarly, participants in United States focus groups expressed the viewpoint that prisons are too easy on offenders because prisoners are given undeserved privileges and amenities and are allowed to remain idle and unproductive (Doble, 1987). In accordance with the perception of leniency, more than 70% of residents from three major Canadian cities are “somewhat” or “strongly” averse to improving prison conditions (Brillon et al., 1984). Comparatively, 71% of respondents in a nationally representative British study agreed that “prison life should be made tougher and more unpleasant” (Fishkin, 1995). Thus, it can be concluded that members of the public hold enduring unfavourable perceptions of the conditions
of confinement.

Although the majority of respondents surveyed express the view that prisons are too lenient, some Canadian and United States residents are aware that prisons are horrifying places. For instance, Brillon, Louis-Guerin, and Lamarche (1984) found that more than half of those interviewed regarded prisons as "veritable hotels", whereas the remainder of respondents had a more realistic appraisal of prison conditions. Similarly, focus group participants in the United States believed prisons to be simultaneously frightening and overly lax. Prison life was deemed terrifying on the grounds that prisoners may be subjected to violence while incarcerated.

Although not nationally representative, this study demonstrates that members of the public desire prison conditions to be toughened, but also want them to be humane (Doble, 1987).

**Public Knowledge and the Conditions of Confinement**

Whilst members of the public express strong opinions concerning prison life, these views are based upon very limited knowledge of and experience with prisons. For instance, results from a 1991 Canadian Gallup poll indicate that while approximately 50% of respondents believed prison conditions to be "too liberal", under 5% reported having direct contact with a penal facility (Roberts, 1994). Comparatively, a nationally representative British study found that 80% of respondents had never entered a prison for any reason (Hough & Roberts, 1998). These studies indicate that public perceptions of prison life, although negative and enduring, are based upon little or no first-hand experience with prisons.

Few studies have probed public knowledge of prison conditions. However, as has been demonstrated in other criminal justice domains, members of the public are unable to correctly answer knowledge-based questions concerning prison life. In a British study, conducted by
Banks, Maloney, and Willcock (1975), the majority of respondents answered incorrectly or simply said they “did not know” to a variety of knowledge testing questions. These included, the number of males incarcerated at the time of the study, the number of prisoners to a cell, the number of visits allowed per month, the number of letters allowed per week, the length of the work day, the amount paid for work while incarcerated, and the type of bathroom facilities available to inmates. Even though the majority of respondents were uninformed about prison life, half believed prison conditions should be made more onerous and a third thought they should remain the same (Banks et al., 1975). Although dated, this study illustrates that lack of knowledge does not prevent members of the public from forming and expressing punitive attitudes.

A variety of public opinion studies concerning criminal justice issues demonstrate that members of the public form strongly held beliefs in the absence of factual knowledge. However, most of the research discussed thus far fails to analyse the impact of knowledge on attitudes. When investigating the relationship between attitudes and knowledge, it is important to determine whether providing uninformed people with accurate information will lead to a change in attitude.

This question was addressed through a deliberative poll\(^2\) conducted in England. The

\(^2\) A deliberative poll combines the strengths of representative opinion polls and focus groups. In a deliberative poll, a random sample, representative of the population, is asked to reply to a questionnaire. A representative sub-sample of these respondents attend a “deliberative week-end” conference to discuss the issues and question experts. After which, the respondents reply to the questionnaire a second time. The results from the two administrations of the questionnaire are compared (Fishkin, 1995; Roberts & Stalans, 2000). The idea is to engage the public in the issues so as to solicit informed opinions. “The differences between their opinions on the first and second occasions reflect the difference between public opinion and informed public judgment” (Roberts & Stalans, 2000, p. 20).
findings of this study indicate that public attitudes can be influenced through the provision of factual information. For instance, as a result of this deliberative weekend, the percentage of respondents who believed that "incarcerating more offenders is an effective way to control crime" decreased by 20% (J. V. Roberts, personal communication, December 3, 1999; see also, Fishkin, 1995). Study participants were also more likely to support alternatives to incarceration and procedural rights for defendants. They further demonstrated increased knowledge of crime-related issues and were more aware of the limitations of using incarceration as a crime-preventive device (Fishkin, 1995). Although the results of one study are not conclusive, nor exhaustive of the issue, this research illustrates that there is in a fact a connection between knowledge and attitudes, whereby public attitudes are amenable to change through the provision of knowledge.

Public Opinion and Prison Programs and Policies

Over the last several decades, a number of American public opinion polls have attempted to gauge public thinking on existing penal practices and programs. These studies poll the public about policies and programs they favour and probe public thinking on strategies for correctional reform. This research demonstrates that the public is tolerant of, and favourable to, a variety of practices and programs that can be characterized as progressive and non-punitive. For instance, national polls and convenience studies consistently indicate high levels of support for vocational training programs and for providing inmates with a basic level of education (Flanagan, 1996c; Flanagan & Caulfield, 1984; Innes, 1993; Riley & Rose, 1980).

Furthermore, the majority of Washington state residents approve of prisoner self-government and conjugal visits, while disapproving of punitive prison practices, such as solitary
confinement and physical punishment (Riley & Rose, 1980). Similarly, a nonrepresentative Canadian study indicates that certain members of the public are amenable to conjugal visits, granting prisoners the right to vote, paying prisoners a competitive wage, and allowing them to contribute to their pensions (Brillon et al., 1984). These findings illustrate that the public is favourable to progressive prison programs and policies that take place within the penal institution.

In contrast, members of the public are far less supportive of penal practices that enhance the permeability of the penitentiary (Flanagan, 1996c). For example, national polls taken in both Canada and the United States illustrate that the majority of those surveyed disapprove of weekend leaves or work release (Fattah, 1982; Flanagan & Caulfield, 1984; Innes, 1993). Thus, although members of the public approve of penal practices which are carried out inside the prison, public support declines when these programs are thought to infringe upon the safety of society.

Although there is an absence of research that directly tests public knowledge of prison policies and programs, a Canadian focus group study provides indirect information on this topic. Specifically, focus group participants suggested a variety of prison policies that they felt should be adopted in Canadian institutions, such as cascading through varying security levels prior to release, segregation, compulsory programming, vocational training, and alcohol and drug abuse support groups (Adams, 1990). Adams (1990) argues that the majority of these policies and programs are already ongoing in Canadian penitentiaries. Consequently, the fact that members of the public suggested these measures as a means of reforming the system, indicates that they are not cognizant of their existence. As with other research concerning public knowledge, these
findings illustrate that public thinking is not based upon factual knowledge of the criminal justice system.

**Public Opinion and Prison Overcrowding**

Prison overcrowding is one aspect of prison life that has become increasingly relevant in recent years. The rising rate of incarceration, coupled with the fact that current construction practices are incapable of accommodating the number of new inmates entering prisons, has resulted in overcrowded custodial institutions (Doble, 1987). Overcrowding is detrimental to the smooth operation of the correctional system as it is related to higher rates of violence, inmate suicide, health concerns, and a decline in educational and vocational programming (Doble, 1987; Skovron, Scott, & Cullen, 1988; see also, Roberts & Jackson, 1991). Since this correctional crisis requires redress, public sentiments regarding strategies to reduce crowding have been solicited by researchers.

Three main strategies have been proposed to control prison crowding: front-end strategies, back-end strategies, and capacity expansion. Front-end strategies include practices aimed at reducing the number of prison sanctions and/or the amount of time served by offenders. Back-end strategies refer to practices which facilitate release from penal institutions. Whereas, capacity expansion involves improving the correctional system’s potential to accommodate offenders through construction and renovation (Skovron et al., 1988).

Nationally representative opinion polls conducted in the United States and Britain illustrate that members of the public are most supportive of certain front-end and back-end strategies. Specifically, the public is highly supportive of reducing prison populations by using alternative sanctions for nonviolent and first-time offenders, as well as granting administrative
release based upon good behaviour and program participation (Flanagan, 1996c; Hough & Roberts, 1998; Skovron et al., 1988). However, members of the American public strongly disapprove of reducing sentence lengths and oppose according the parole board more authority over release (Flanagan, 1996c; Skovron et al., 1988).

Comparatively, the British and American public do not endorse capacity expansion strategies. When asked to choose between three options for reducing prison crowding, less than 20% of British respondents favour prison construction.\(^3\) In fact, of the three proposed strategies, this option received the least support from respondents (Hough & Roberts, 1998). Similarly, when presented with a variety of proposals to reduce penal crowding, only one-third of Americans favour building additional carceral institutions (Flanagan, 1996c).\(^4\)

Although public support for this strategy is minimal, the manner in which the questions were phrased may have influenced participant responses. In both polls, respondents were asked whether they approved of building more prisons and paying for them through increased taxation. Therefore, the questions contained two elements for participants to respond to. As a result, it is not possible to ascertain whether members of the public disapprove of prison construction or of being financially responsible for its costs (Flanagan, 1996c).

\(^3\) Specifically, respondents to the 1996 British Crime Survey were asked to choose among the following three options for reducing prison overcrowding: "find new ways to punish offenders that are less expensive than prison but tougher than probation", ... "release some non-violent offenders from prison earlier than at present with more probation supervision after release", ... [and] "build more prisons and pay for them by raising taxes or cutting spending in other areas" [emphasis in original] (Hough & Roberts, 1998, p. 35).

\(^4\) Specifically, participants of the 1995 National Opinion Survey on Crime and Justice were "... asked ... to evaluate the proposal 'increasing taxes to build more prisons' as a measure to reduce prison overcrowding" (Flanagan, 1996c, p. 90).
In spite of the fact that members of the public do not favour capacity expansion, nor certain types of back-end strategies, these are the types of policies most frequently adopted in the United States (Austin & Krisberg, 1985 cited in Skovron et al., 1988). Consequently, public attitudes are incongruent with current criminal justice practices. Similarly, Skovron, Scott, and Cullen (1988) conclude that the policies least favoured by members of the public (i.e., shortening sentences and increasing parole board authority) are those which are most likely to reduce prison crowding. Since members of the public strongly oppose these policies, their sentiments may impede efforts to resolve this correctional crisis.

The aforementioned research fails to address public knowledge of the crowding problem. However, a United States focus group study provides some insight into public sentiments concerning crowding. Doble (1987) found that the majority of participants realized that United States prisons are overcrowded, but were not apprised of the extent of the problem. Nor were respondents cognizant of the detrimental effects of overcrowding. He argues that although participants were aware of the problem, they did not believe it required redress (Doble, 1987).

In light of these findings, it is evident that members of the public develop strongly held beliefs concerning the criminal justice system regardless of the amount of factual information they actually possess. Consequently, the public’s role in criminal justice policymaking is questionable. If the public’s will is to be taken seriously by policymakers, members of the public must be informed of the objective facts, prior to soliciting their viewpoints.

However, Doble’s (1987) study further illustrates that the provision of factual knowledge alone may be incapable of changing public attitudes. When members of this focus group were informed that tougher sanctions, such as mandatory sentencing, are a major cause of the
crowding crisis, they rejected this information as erroneous. Doble (1987) explains this finding as a consequence of cognitive dissonance. Thus, it can be argued that public attitudes may be amenable to change only in situations where the factual information provided does not challenge fundamental beliefs or values.

**Conclusion**

In summary, the preceding literature review demonstrates that there is in fact a connection between public attitudes towards and public knowledge of the criminal justice system and, more specifically, prison conditions. Previous research indicates that members of the public hold strong negative attitudes concerning the criminal justice system, even in the absence of accurate and appropriate knowledge of criminal justice issues. Furthermore, research illustrates that public viewpoints are often inconsistent with, and in opposition to, existing criminal justice practices. However, some studies also indicate that, under certain circumstances, public attitudes may be altered through the provision of factual information. Consequently, perceptions of the criminal justice system may be shaped by the amount of factual information at the disposal of the public.

Although scholarly research has generated a number of important findings concerning public opinion of prison conditions and the relationship between attitudes and knowledge, a number of issues in the literature require further study. For instance, as a research subject, public opinion of prison conditions has received only limited academic attention. The available research is episodic and lacks a Canadian focus. Furthermore, the most direct test of public knowledge of prison life is dated, hence, current research is recommended. Accordingly, both
public attitudes towards and public knowledge of prison conditions must be investigated in greater detail.

Additionally, although it has been demonstrated that the public perceives prison conditions to be too lenient, specific case scenarios have not been used to address this issue. Therefore, it is unknown whether the use of sample vignettes will evoke fewer punitive views. Since public opinion research indicates that utilizing the specific case-scenario method over global questioning techniques elicits attitudes which are more tolerant and flexible (see for example, Cumberland & Zamble, 1992), it is imperative to test whether applying specific questioning techniques to the issue of prison conditions will result in more progressive attitudes towards prison life.

Furthermore, supplementary research should be conducted on the impact of public opinion on criminal justice policy. Both public perceptions, as well as the attitudes of criminal justice elites should be investigated in order to determine if policymakers’ sentiments are in line with current public thinking and vice versa. Similarly, further inquiry should be made into public opinion of criminal justice policies which impact upon prison conditions. As Flanagan and Caulfield (1984) contend, “The data that are available are episodic, highly topical, and uneven in terms of quality and breadth. Moreover, the surveys tend to focus on relatively broad concepts . . . rather than on assessments of specific policy initiatives” (p. 40).

Finally, although previous research indicates that there is a relationship between public attitudes and the knowledge base underlying these attitudes, the nature of this relationship remains relatively ambiguous. The existing research fails to address whether there is a statistical association between attitudes and knowledge. Similarly, few studies have focussed on the
mechanisms involved in altering public attitudes. Consequently, additional research should be conducted on the effects of providing factual information to members of the public.

Accordingly, this thesis will examine the nature of the relationship between attitudes and knowledge and will explore the impact of knowledge on attitudes through a specific criminal justice concern: prison conditions. In this research, the author will assess public attitudes towards prison conditions, as well as the extent of factual knowledge possessed by members of the public at the time of questioning. The author will determine whether there is a statistical association between attitudes and knowledge. The author will also analyse the effects of disseminating factual information concerning prison conditions upon public attitudes towards prison life. Therefore, the primary issues under investigation are the relationship between attitudes and knowledge and the impact of knowledge on attitudes. However, the nature of this inquiry also enables the accumulation of current Canadian research regarding public opinion of prison conditions.

The upcoming chapter will detail the research questions and hypotheses, as well as outline the specific methodology adopted for this research endeavour.
Chapter Three: Methodology

Introduction

The purpose of this thesis was to address some of the major limitations in the existing research concerning public attitudes and public knowledge of criminal justice matters. Specifically, this research explores the relationship between attitudes and knowledge, and examines the impact of factual information on attitudes. A questionnaire was developed to address these research concerns. The questionnaire measured respondent attitudes towards and knowledge of prison conditions in Canadian federal penitentiaries, and consisted of both global and specific questions.

This chapter outlines the methodological approach employed in this research. Accordingly, the relevant key concepts are defined, followed by a discussion of the author’s research questions and hypotheses. Next, the data collection process is described, including details on sampling procedure, sample size, and questionnaire design. Finally, the process of data analysis is discussed.

Key Concepts

This research project involves the following key concepts: public, attitudes, knowledge, prison conditions, global questions, and specific questions. The precise definitions of these concepts are detailed below.

Although the term “public” is often used to characterize a representative sample of the population, due to financial and time constraints, this research was conducted upon a
convenience sample. Thus, for the purposes of this research, the term public refers to University of Ottawa students enrolled in the Anglophone sections of the Fall 2000 Introduction to Criminology course (CRM 1300) who chose to participate in this research.

The term "attitudes" refers to the cognitive positions held by survey respondents concerning prison conditions in Canadian federal penitentiaries. Respondent attitudes were measured on a scale of punitiveness, ranging from lenient beliefs (including for example, high approval for institutional privileges and amenities) to punitive beliefs (including for example, low approval for institutional privileges and amenities).

In contrast, "knowledge" refers to the amount of accurate factual information concerning prison conditions at the disposal of survey respondents at the time of questioning. Respondent knowledge was measured on a scale of knowledge, reflecting a range of correct answers to fact-testing questions as opposed to incorrect responses to these questions.

The term "prison conditions" refers to the living conditions of prisoners incarcerated at the federal level in Canada. It includes, but is not limited to: overcrowding, amenities and privileges, prison programs and policies, prisoner health, and other similar topics.

"Global questions" are questions that are designed to elicit a general attitude. Respondents are asked to make an evaluation, but are not provided with any additional information concerning the topic in question. For instance, in a previous study respondents were

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5 The purpose of this research was to analyze the relationship between attitudes and knowledge and to test the impact of differing measurement procedures (i.e., global versus specific questioning techniques) on attitudes. It was not intended to provide conclusions concerning the Canadian population. Hence, a representative sample was unnecessary. Further, it is common practice to utilize convenience samples when studying public opinion (see for example, Cumberland & Zamble, 1992; Geotys & Roberts, 1987; Roberts & White, 1986; Roberts & Stalans, 2000).
asked to determine whether prison conditions were “too harsh, too liberal or about right” (Fattah, 1982).

In contrast, “specific questions” involve the use of case-scenarios or vignettes. Respondents are provided with information through a case-scenario and are then asked to respond to a particular question (see for example, Cumberland & Zamble, 1992). Specific questions are intended to account for the complexity of respondent attitudes by providing them with information prior to soliciting their viewpoints on an issue.

**Research Questions and Hypotheses**

This thesis was designed to explore two primary research areas: (a) the relationship between attitudes and knowledge, and (b) the impact of factual information (i.e., knowledge) on attitudes. Thus, my research questions have been subdivided into these two areas. This section presents the research questions addressed in this thesis, as well as the expected findings.

**Research Questions: The Relationship between Attitudes and Knowledge**

**Research Question # 1**

In this area, the primary issue under investigation is whether there is a statistical association between respondent attitudes and knowledge concerning the topic of prison conditions. Thus, this research addressed the following question:

*Is there a relationship between respondent attitudes and knowledge of prison conditions in Canadian federal penitentiaries?*

It is hypothesized that knowledge is inversely related to punitiveness. Consequently, as the extent of factual knowledge concerning prison conditions increases, the level of respondent
punitiveness associated with prison conditions is expected to decrease.

**Research Question # 2**

This research was also devised to test the relationship between perceptions of sentencing and opinion of prison conditions in Canada. Consequently, the following research question was also examined:

*Is opinion of prison conditions associated with attitudes towards sentencing?*

It is hypothesized that attitudes towards prison conditions are positively associated with attitudes towards sentencing. Consequently, respondents who believe that prison conditions are too lenient will also believe that sentences are too lax. In contrast, a negative relationship is expected between knowledge of prison conditions and attitudes towards sentencing. Respondents who lack accurate factual knowledge of prison conditions are expected to believe that sentences are too lenient.

**Research Questions: The Impact of Knowledge on Attitudes**

**Research Question # 3**

In this area, the primary issue under investigation is whether providing respondents with factual information (i.e., knowledge) about prison conditions will impact their attitudes towards prison conditions. By comparing attitudinal responses to global and specific questions, this research tests the hypothesis that factual information influences respondent attitudes. Consequently, this research also examines the effects of differing measurement techniques (i.e., global versus specific questions) on attitudes. To explore the impact of knowledge on attitudes, this research addressed the following question:

*Can the provision of factual information (i.e., knowledge), through the use of case-scenarios,*
alter respondent attitudes towards prison conditions?

It is hypothesized that respondents will be less punitive under case-specific conditions than when presented with a global question. Thus, attitudes can be altered through the provision of factual information. These results would also indicate that specific questioning techniques evoke less punitiveness from respondents than global questions.

Research Question #4

In addition to this primary research question, a subsidiary hypothesis was tested through this research:

Does offence seriousness effect whether attitudes can be altered through the provision of factual information?

It is hypothesized that offence severity will act as an intervening variable in the relationship between attitudes and the level of information provided to respondents. Attitudes concerning prison conditions are expected to shift (i.e., become less punitive) when respondents are given a case-scenario involving a nonviolent offence, but will remain the same when they are presented with a case-scenario involving a violent offence. Thus, it is expected that respondents given a case-scenario involving a violent offence will express similar attitudes as those participants presented with a global question. In contrast, those presented with a non-violent case scenario are expected to express significantly different attitudes (i.e., less punitive) concerning prison conditions than those presented with a global question or a violent case-scenario.
Data Collection

To address the aforementioned research questions, a questionnaire was distributed to a sample of volunteer research participants. This section describes the sample and sampling procedure utilized, as well as the design of the questionnaire.

Sampling Procedure and Sample Size

This research was conducted using a convenience sample. This type of sample was chosen because it was a readily available source, and because financial and time constraints prevented the use of a representative sample of the population. The sample consisted of all students enrolled in the Anglophone sections of the Fall 2000 University of Ottawa Introduction to Criminology course (CRM 1300) who agreed to be involved in this research. Introduction to Criminology students were selected for this research because (a) they were convenient, and (b) among criminology students, they were less likely to have foreknowledge of prison conditions in Canada than students enrolled in later years of the criminology program at the University of Ottawa.

The questionnaires were distributed by the researcher and completed in class on September 7, September 15, and September 25, 2000. Each class had only one opportunity to participate. Introduction to Criminology students enrolled at the Pembroke and Cornwall campuses of the University of Ottawa took part in this research via teleconference. Their questionnaires were completed during class, sealed, and returned to the researcher via mail.
Approximately 400 students were asked to participate in this research. Of these, 190 questionnaires were returned, resulting in a response rate of 47.5%. Three questionnaires were discarded because substantial portions were incomplete, leaving a final sample of 187 useable questionnaires. Approximately 34% ($n = 63$) of the sample was male and the remaining 66% ($n = 124$) was female.

**Questionnaire Design**

The questionnaire was developed by the researcher and pretested on a small sample ($N = 5$) of test subjects prior to its distribution. The pretest participants consisted of university level students, known to the researcher, who volunteered to read the questionnaire and provide feedback on its formulation and wording. Since three versions of the questionnaire would be distributed to respondents (the reasoning behind the three versions is discussed below), pretest participants received and provided feedback on all three versions of the questionnaire. The

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6 Please note, that the exact number of students who were asked to participate in this research is unknown because only the students who attended class on the date of survey distribution were given the opportunity to partake in this research. Since not all students were present in each class, and it was not possible to count those present, the number of potential subjects (i.e., 400) is an estimated value.

7 A response rate of 47.5% is relatively low. However, participation in this research was voluntary. Further, so as not to interfere with class time, the surveys were distributed at the end of class. Since participation was voluntary, and class was officially over, many students chose to leave rather than participate in this research. The reader should note that this situation creates the potential for subject bias. Those who chose to participate in this research may have been particularly interested in the subject matter, or may have been more easily swayed to volunteer. The reader should keep this in mind when interpreting the results of this research. Further, introductory classes have a high rate of absenteeism in the first few weeks of classes. Any students absent from class were necessarily excluded from this research, and therefore, did not have the opportunity to participate and express their opinions. Thus, the results of this research may be biased by the composition of the sample.
pretest participants received the questionnaires and sent their comments back to the researcher via email. As a result of the pretest, minor variations were made to question wording in order to enhance clarity and improve understanding.

The questionnaire was designed to address the two research areas outlined above. These two research areas were tested separately on the questionnaire. Thus, the questionnaire consisted of two independent measurement instruments, each devised to address a specific research concern.

The first research instrument was comprised of an attitude scale and a knowledge scale. These scales were constructed from a series of questions measuring respondents' attitudes towards and knowledge of prison conditions in Canadian federal penitentiaries. These scales were used in order to test the hypothesis that there is a statistical relationship between attitudes and knowledge concerning prison conditions.

The second measurement instrument was an experimental manipulation in which respondents were systematically assigned to one of three experimental conditions. Participants were presented with either a global question, or one of two case scenarios. This experimental manipulation was included on the questionnaire in order to test the hypothesis that providing respondents with factual information (i.e., knowledge) can alter their attitudes.

Since there were three different experimental conditions, three versions of the questionnaire were distributed to respondents. Study participants received only one version of the questionnaire. Each version was the same, except for the final section which contained the experimental manipulation (Please see Appendix A, Appendix B, and Appendix C for copies of the three versions of the questionnaire).
Layout of the Questionnaire

As Appendices A, B, and C illustrate, the questionnaire was divided into four separate parts. This section describes the layout of the questionnaire and relates each part to the research questions.

Section One: Control Variables

The first section of the questionnaire consisted of questions to be used as control variables and in secondary data analysis. Since the survey respondents comprised a homogeneous group (i.e., students within a small age bracket), socio-demographic variables were not expected to provide much additional insight into the research questions. Weighted against the concern that the survey remain short, thereby reducing the inconvenience to participants, it was decided that socio-demographic information would not be solicited in the questionnaire.\(^8\)

This section also contained a question measuring respondent attitudes towards sentencing practices in Canada. This question would be used to test the relationship between perceptions of sentencing and opinion of prison conditions.

Section Two: Attitude Variables

The second section of the questionnaire consisted of 20 questions measuring respondent attitudes towards prison conditions in Canadian federal penitentiaries. The responses to these questions were summed into an attitude scale, the aim of which was to measure the overall level

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\(^8\) Although inconveniencing participants is less of an issue with convenience samples, in this case it was a primary concern. Since this research was conducted on university students, during class time, it was imperative to ensure that this study did not impede upon the professors’ teaching schedules. In order to reduce the amount of class time taken up by this research, the questionnaire did not include socio-demographic questions.
of respondent punitiveness concerning prison conditions in Canada. Along with the knowledge scale (to be discussed below), these questions were used to test the hypothesis that there is a relationship between attitudes and knowledge.

Section Three: Knowledge Variables

The third section of the questionnaire consisted of 20 questions measuring respondent knowledge of prison conditions in Canadian federal penitentiaries. These questions were designed to measure the amount of factual information at the disposal of respondents at the time of questioning. Consequently, these questions were objective in nature, each having a correct response. As with the attitudinal variables, the responses to each individual knowledge question were combined into a scale in order to provide an overall measure of respondent knowledge concerning prison conditions in Canada. As noted, this scale was used to test the hypothesis that there is a relationship between attitudes and knowledge.

Section Four: Experimental Design

The first three sections of the questionnaire were completed by all respondents. In the final section of the survey, participants were systematically assigned to one of three experimental conditions. Systematic assignment was necessary to ensure that approximately one-third of the sample received each version of the questionnaire (see Table 3.1 below).9

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9 To achieve systematic assignment, the questionnaires were prearranged so that every fourth student would receive the same version of the survey (i.e., version A, version B, version C, version A, version B, etc.). This process was necessary to ensure that each version had equal representation amongst the completed questionnaires.
Table 3.1

Experimental Design

<table>
<thead>
<tr>
<th>Version</th>
<th>Questionnaire</th>
<th>Treatment level</th>
<th>% of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td>Global question</td>
<td>31.0</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>Specific question: Violent offender</td>
<td>35.3</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>Specific question: Non-violent offender</td>
<td>33.7</td>
</tr>
</tbody>
</table>

In version A of the questionnaire, survey participants were asked to respond to a global question concerning prison conditions in Canada. In versions B and C, respondents read a factual case-scenario illustrating the conditions in Canadian federal penitentiaries prior to answering the same question posed to those completing version A of the questionnaire. In version B, the vignette involved a violent offender. Whereas, in version C, the case-scenario involved a non-violent offender. This experimental manipulation was included in the questionnaire in order to test the hypothesis that attitudes can be altered through the provision of factual information and to examine whether offence type acts as an intervening variable in the relationship between attitudes and the level of information provided to respondents.

Data Analysis

The preparatory work for data analysis, including data coding, inputting, and cleaning, was completed by the researcher. The data from this research were analysed using the Statistical Package for Social Scientists (SPSS) version 8.0. This research yielded nominal, ordinal, and ratio level data. However, the majority of the statistical procedures were carried out
at the non-parametric level. The following sections describe the scaling procedures utilized and the statistical tests that were performed.

**Scale Construction**

According to Jackson (1999), social scientists agree that scales comprised of a number of related questions provide more precise measurement than do individual questions on a survey. Hence, for the purposes of this research, the responses to the individual attitude questions and knowledge questions were combined into overall scores for each respondent. Thus, an attitude scale measuring the extent of respondent punitiveness towards prison conditions, and a knowledge scale measuring how much each respondent knows about prison conditions were generated. These scales would be used to test the hypothesis that there is a relationship between attitudes and knowledge concerning prison conditions.

**Attitude Scale: Punitiveness**

Respondents’ attitudes were measured using a 4-point Likert scale. The neutral position found in a typical 5-point Likert scale was purposely omitted from this research in order to force respondents to choose an attitudinal position. Including a neutral position was undesirable because it is difficult to determine where a neutral response falls along the punitiveness continuum. Any neutral response would therefore have been coded as a missing value. To reduce the number of potential missing values, and thereby increase the number of valid participants per attitude item, the neutral position was excluded from this scale.

Since Likert scales produce an overall score for each respondent by summing the responses to each of the items included in the scale (Hagan, 2000), it is important to deal with any missing values prior to scale construction. In this research, missing values were initially
coded as missing for the purpose of descriptive analysis. However, to ensure that these missing items did not lower overall respondent scores, they were recoded. Following guidelines outlined by Hagan (2000), for each respondent with a missing value, the unweighted average of the answered scale items was computed. Rounded to the nearest whole number, this value was assigned to any missing item for that respondent (Please see Appendix D for the frequency of missing values per attitude item).

In order to select the appropriate attitudinal variables to be included in the scale, a reliability analysis and tests for item sensitivity were conducted. One unreliable item was removed, leaving 19 of the initial attitudinal items in the final scale. The scores were standardized and weighted according to their ability to discriminate between high and low scorers on the punitiveness continuum. The responses to these items were summed for each respondent, resulting in a singular punitiveness score per participant. These procedures will be described in greater detail in Chapter Four.

**Objective Scale: Knowledge**

The variables used to measure respondent knowledge were objective in nature, measuring correct responses to fact-testing questions. Respondents were given the option of choosing correctly, incorrectly, or indicating that they did not know the answer to each question. The “don’t know” option was included in this scale in order to reduce respondent guessing. Any missing values were initially coded as missing for descriptive purposes. However, for scale

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10 I acknowledge that many of the correct responses may also be guesses. However, there is no method to test this possibility. Hence, this is a limitation of my approach. By including the “don’t know” option, respondents may be less inclined to guess. Further, by analysing this data at the ordinal level, rather than the ratio level, the impact that guessing has on my findings is reduced.
construction, missing values, incorrect answers, and “don’t know” responses were all recoded as being incorrect. Differentiating between missing, incorrect, and “don’t know” responses was unnecessary since the purpose of the knowledge scale was to measure correct responses to fact-testing questions.

Since the knowledge scale was an objective scale, reliability and item sensitivity analyses were unnecessary. All of the initial 20 knowledge items were included in the final scale. For each respondent, the correct answers to the knowledge-testing questions were summed, thereby producing an overall knowledge score. These scores were standardized for comparative purposes with the attitudinal scale.

**Statistical Tests**

The data from the questionnaire were initially investigated at the descriptive level. Next, a reliability analysis and tests for sensitivity were performed on the attitudinal items. The items’ ability to discriminate were tested using the univariate chi-square test for goodness of fit. Cronbach’s Alpha method was used to test the reliability of the attitudinal scale. The research hypotheses were tested using the One-Way Analysis of Variance (ANOVA) procedure and Spearman’s rho correlation coefficient. The upcoming chapter will present the descriptive data generated from this research and provide the basis for hypothesis testing in Chapter Five.
Chapter Four: Descriptives and Scaling Procedures

Introduction

This chapter presents descriptive information on the control, attitudinal, and knowledge variables collected through the questionnaire. Further, it details the scaling process and cites the statistical procedures that were employed in scale construction.

Control Variables

This section presents the sample characteristics as measured by the control variables. It includes descriptive information on socio-demographics, victimization, contact with correctional facilities, and perceptions of sentencing severity in Canada.

Socio-demographics of the Sample

The participants in this research were not in any way characteristic of the general Canadian population. Nearly two-thirds of the sample (66.3%) were female. This breakdown is considerably different from the general Canadian population which is comprised of a relatively even distribution of males (49.5%) and females (50.5%) (Statistics Canada, 2001). Further, the sample consisted of university level students, the majority of whom (84%) had taken at least one previous law-related course prior to participation in this research. Consequently, the reader is cautioned against generalizing these research findings to the Canadian population.

Victimization

Respondents were asked whether they had been victimized by violent and property
crimes.\textsuperscript{11} Nearly one-quarter (23.1\%) of valid respondents reported being the victim of a violent crime and over half (57.3\%) reported being the victim of a property offence. Of these, 18.5\% reported being the victim of both violent and property crimes. Thus, the majority of survey respondents had been victimized by at least one type of crime over their lifetime.

These rates of victimization appear exceptionally high when compared with the results of the 1999 General Social Survey (GSS).\textsuperscript{12} Findings from the GSS indicate that approximately 25\% of Canadians were victimized by at least one crime over a one year period. This percentage increased to 26\% of the population when violent spousal crimes were included in the analysis (Besserer & Trainor, 2000). Five percent of the Canadian population were victimized by violence, and approximately 20\% of Canadian households were victimized by household crime (Mihorean et al., 2001).\textsuperscript{13}

Although the reported percentages of violent and property victimization are considerably higher in the present study, than those reported in the 1999 GSS, this discrepancy may be

\begin{center}
\textsuperscript{11} Specifically, participants were asked to respond to the following questions:
\begin{itemize}
  \item Have you ever been the victim of(a) a violent crime (for example assault)? Yes No
  \item (b) a property crime (for example theft)? Yes No
\end{itemize}
\end{center}

\begin{center}
\textsuperscript{12} In the 1999 General Social Survey, approximately 26,000 Canadians aged 15 or older from 10 Canadian provinces were asked about their victimization experiences over the previous 12 months (Besserer & Trainor, 2000).
\end{center}

\begin{center}
\textsuperscript{13} The GSS measured only three types of violent crime: sexual assault, robbery, and assault. The statistics reported on these violent crimes exclude spousal violence. The GSS measured four types of household crime: break and enter, motor vehicle/parts theft, theft of household property, and vandalism (Mihorean et al., 2001). Thus, the statistics reported above refer solely to these seven types of crime. Theft of personal property was measured as well, but reported independently of household crime (Mihorean et al., 2001). Thus, theft of personal property is not included in the reported household crime statistics. The reader should exercise caution when comparing the results from the 1999 GSS to the current study.
\end{center}
explained by methodological differences. The current study employed lifetime measures of victimization. In contrast, the victimization statistics from the 1999 GSS, reported above, measured victimization over a span of 12 months. Logically, lifetime measures of victimization should be higher than those reported for a one year period.

Additionally, the definitions of property and violent victimization differed between the two studies. The GSS only measured a select number of crimes (i.e., seven in total), designated as violent or household. It is likely that respondents from the present study reported instances of victimization that were by definition excluded from the GSS.

Finally, the small sample size employed in the present study may have inflated the statistics on reported victimization. If a larger sample had been used in this research, it is likely that the percentages of respondents reporting violent and property victimization would converge with other sources.

The statistics on victimization reported in this study are not well suited for comparison with other victimization research. For instance, lifetime victimization surveys are usually conducted upon older adults. Since the sample for the current study consisted of young persons, the majority of whom were in their late teens or early twenties, comparing these results to other lifetime measures of victimization was not practical. Further, this study did not set limits on the types of victimization incidents that could be reported. Consequently, survey respondents may have included instances of childhood victimization, which are typically not measured by researchers.

In summary, the majority of survey respondents in the present study reported victimization by at least one type of crime over their lifetime. The percentages of participants
reporting property and/or violent victimization are considerably higher in this study than found in other research. However, methodological differences may account for this disparity.

**Contact with a Penal Institution**

Just over one-third (38.2%) of valid respondents had visited a prison. This percentage is considerably higher than reported for other samples in other studies (see Table 4.1). However, this statistic may be inflated due to the small sample size employed in this research. Further, the sample utilized in this study was comprised of criminology students. It is likely that criminology students have greater interest in visiting a correctional facility than members of the general public, and therefore may be more inclined to seek out opportunities to visit a prison. Thus, both sample size and sample composition may account for the higher percentage of respondents reporting contact with a penitentiary.

Although the proportion of respondents having contact with a penal facility is higher in this study, these respondents remain in the minority. Consistent with previous findings, this research demonstrates that most participants have little direct experience with carceral institutions.

**Table 4.1**

<table>
<thead>
<tr>
<th>Percentage of Respondents who had Contact with a Prison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Gallup Poll 1991&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>&lt;5%</td>
</tr>
</tbody>
</table>


Perceptions of Sentencing in Canada

Although they lacked first-hand knowledge of correctional facilities, the majority of respondents expressed dissatisfaction with sentencing practices in Canada. 59.2% of valid respondents indicated that the sentences imposed on offenders are “too lenient”, and a further 40.2% felt they are “about right”. Only one respondent believed that sentences imposed on offenders are “too harsh”.

This finding is consistent with previous representative Canadian research which indicates that the vast majority of Canadians perceive sentencing practices as lax. For instance, in a study conducted by Sanders (1999), 69% of Canadians judged sentences as “not severe enough”. A further 28% of the population believed sentences to be “about right”, and only 1% indicated that they were “too severe”.14 Thus, consistent with the present sample, most Canadians feel that sentences are not tough enough on offenders.

Attitude Variables

This section contains descriptive data concerning the 20 attitude items employed in this survey (Please see Table 4.2 below for the frequency of participant responses to each attitude item on the questionnaire). The 20 questions selected for inclusion in the questionnaire were constructed based upon face validity and findings from previous research. Each item is a measure of respondent punitiveness concerning prison conditions in Canadian federal penitentiaries. However, each question also provides insight into participant attitudes towards

14 For a list of other studies measuring public perceptions of sentencing severity in Canada see Sanders (1999).
prison conditions in Canada. These findings are important as they indicate what respondents believe concerning correctional policy and practice in Canada. Further, they provide a basis for comparison with other studies conducted in this area.

Table 4.2

<table>
<thead>
<tr>
<th>Frequency of Participant Responses to Attitude Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Prisoners should be allowed to earn their high school diplomas while incarcerated</td>
</tr>
<tr>
<td>Prisoners should be allowed to earn university degrees while incarcerated</td>
</tr>
<tr>
<td>Prisoners should be allowed to vote while incarcerated</td>
</tr>
<tr>
<td>Prisoners should be allowed to keep televisions in their cells while in prison</td>
</tr>
<tr>
<td>Prisoners receive too many privileges while in prison</td>
</tr>
<tr>
<td>Prisons are similar to hotels</td>
</tr>
<tr>
<td>Prisoners should be paid for their work in prison</td>
</tr>
<tr>
<td>Question</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Conjugal visits, which permit overnight visits by prisoners’ spouses or partners, are a good idea</td>
</tr>
<tr>
<td>Prisoners should be granted temporary absences from prison to visit their families</td>
</tr>
<tr>
<td>Once sentenced to prison, prisoners should lose all of their rights within society</td>
</tr>
<tr>
<td>Physical punishment should be used to control unruly prisoners</td>
</tr>
<tr>
<td>Solitary confinement is a good way to control prisoners</td>
</tr>
<tr>
<td>Prisoners’ mail should be censored by correctional personnel</td>
</tr>
<tr>
<td>Prisoners’ telephone conversations should be recorded by correctional personnel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conjugal visits, which permit overnight visits by prisoners’ spouses or partners, are a good idea</td>
<td>10.3%</td>
<td>48.1%</td>
<td>28.1%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Prisoners should be granted temporary absences from prison to visit their families</td>
<td>4.3%</td>
<td>21.2%</td>
<td>46.2%</td>
<td>28.3%</td>
</tr>
<tr>
<td>Once sentenced to prison, prisoners should lose all of their rights within society</td>
<td>7.1%</td>
<td>26.6%</td>
<td>50.0%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Physical punishment should be used to control unruly prisoners</td>
<td>4.3%</td>
<td>22.0%</td>
<td>43.0%</td>
<td>30.6%</td>
</tr>
<tr>
<td>Solitary confinement is a good way to control prisoners</td>
<td>8.2%</td>
<td>47.8%</td>
<td>31.0%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Prisoners’ mail should be censored by correctional personnel</td>
<td>19.0%</td>
<td>52.2%</td>
<td>22.8%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Prisoners’ telephone conversations should be recorded by correctional personnel</td>
<td>15.6%</td>
<td>50.5%</td>
<td>28.5%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Question</td>
<td>Response</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------</td>
<td>----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In order to reduce prison overcrowding, the parole board should be given more authority to release prisoners</td>
<td>16.0%</td>
<td>55.2%</td>
<td>42.6%</td>
<td>4.4%</td>
</tr>
<tr>
<td>In order to reduce prison overcrowding, more prisons should be built</td>
<td>16.9%</td>
<td>60.7%</td>
<td>22.4%</td>
<td></td>
</tr>
<tr>
<td>Prison life should be made more difficult for prisoners</td>
<td>12.0%</td>
<td>42.6%</td>
<td>42.6%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Releasing prisoners into the community on parole is dangerous</td>
<td>8.4%</td>
<td>36.0%</td>
<td>52.8%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Prisoners should be forced to participate in drug rehabilitation programs if deemed necessary by correctional personnel</td>
<td>52.9%</td>
<td>40.1%</td>
<td>5.3%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Prisoners should be forced to work while incarcerated</td>
<td>32.4%</td>
<td>50.8%</td>
<td>14.1%</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

**Perceptions of Prison Conditions**

Consistent with previous research (see for example, Adams, 1990; Doble, 1987), the majority of survey respondents were of the belief that “prisoners receive too many privileges while in prison”. Nearly 70% of valid respondents “agreed” or “strongly agreed” with this statement. Participants appear to be very uncomfortable with providing prisoners with privileges
or amenities that may make prison life less onerous. For example, almost 80% of valid respondents disapproved of allowing prisoners to keep television sets in their cells. Similarly, over 70% of valid participants “disagreed” or “strongly disagreed” with paying prisoners for their work in prison.

Although the majority of respondents felt inmates receive too many privileges, most had a realistic appraisal of prison itself. Over 70% of those surveyed did not believe that “prisons are similar to hotels”. Thus, these respondents did not express the popularized media image of “Club Fed” type carceral institutions. Further, just under half (45.3%) of all valid participants “disagreed” or “strongly disagreed” with making prison life more difficult for offenders. Hence, a significant portion of respondents are cognizant that prison conditions are onerous.

**Attitudes towards Prison Programs and Policies**

In accordance with previous research (see for example, Flanagan 1996c; Flanagan & Caulfield, 1984; Innes, 1993; Riley & Rose, 1980), study participants were favourable to progressive penal practices and programs. For instance, over 80% of valid respondents approved of enabling prisoners to earn their high school diplomas while incarcerated, and just under half (47%) favoured allowing prisoners to earn university degrees. This difference in approval levels may be attributed to the perception that university is a privilege. In general, the majority of respondents support providing prisoners with basic education, and a significant minority favour enabling inmates to attain higher education as well.

Participants were also supportive of conjugal visitation. Nearly 60% of valid respondents “agreed” or “strongly agreed” that “conjugal visits, which permit overnight visits by prisoners’ spouses or partners, are a good idea”. In contrast, nearly 75% of valid participants were averse to
granting prisoners temporary absences to visit their families. Hence, as illustrated by Flanagan (1996c), the public is favourable to progressive practices that occur within the institution, but is strongly against programs that are perceived to enhance the permeability of the penitentiary.

Similarly, study participants were supportive of punitive practices that may be viewed as serving a protective function. Although nearly two-thirds of valid respondents did not believe that “prisoners should lose all of their rights within society”, the majority of participants were comfortable with infringing upon specific rights when dealing with prisoners. For instance, less than 30% of valid respondents approved of allowing prisoners to vote while incarcerated. Further, over 70% of valid participants favoured censoring prisoners’ mail and nearly two-thirds sanctioned recording prisoners’ telephone conversations. Thus, respondents are willing to take away rights accorded to the non-carceral population when granting prisoners these rights may present a threat to society.

Study participants were also supportive of punitive measures that may have rehabilitative and/or deterrent value. Although the notions of forced labour and forced programming appear punitive, these ideas were most strongly endorsed by this sample. Ninety-three percent of valid respondents “agreed” or “strongly agreed” that “prisoners should be forced to participate in drug rehabilitation programs if deemed necessary by correctional personnel”. A further 83.2% of valid participants favoured forcing prisoners to work while incarcerated. Both labour and drug abuse programs may be viewed as rehabilitative. Further, they may be seen as measures capable of reducing recidivism. Consequently, respondents are favourable to forcing prisoners into activities against their will, if these programs are perceived to be in the interest of prisoners or society at large.
Although members of this sample endorsed some punitive penal policies, they did not support practices that may be perceived as inhumane. Nearly three-quarters of valid respondents “disagreed” or “strongly disagreed” with using physical punishment to control prisoners. However, a small majority (56%) of valid respondents approved of using solitary confinement as a means of controlling inmates. Hence, study participants strongly disapprove of overtly barbaric disciplinary measures, but are more comfortable with less stigmatized forms of punishment.

Overall, respondents express support for progressive penal programs and policies implemented within the institution. However, they are more resistant to correctional practices which may increase the threat to public safety. Further, they endorse punitive practices within the institution when they appear to serve protective or rehabilitative functions.

**Strategies to Reduce Overcrowding**

Corresponding with previous research (see for example, Flanagan 1996c; Skovron et al., 1998), study participants were strongly against granting the parole board greater authority over release. Over 80% of valid respondents “disagreed” or “strongly disagreed” with utilizing this strategy to reduce prison overcrowding. This finding is interesting, since the majority of valid participants (55.6%) did not believe that “releasing prisoners into the community on parole is dangerous”. Hence, regardless of whether they feel that parole presents a social threat, respondents do not wish to increase the opportunities for parole by relying on the parole board. These results may be explained by a lack of confidence in the parole board (Flanagan, 1996c). In fact, a number of Canadian studies have indicated that only a small percentage of Canadians have trust in the parole board (M. Vallee, personal communication, January 18, 1999).

In contrast, study participants were amenable to reducing overcrowding through capacity
expansion. Over 70% of valid respondents “agreed” or “strongly agreed” that “to reduce prison overcrowding, more prisons should be built”. Previous research indicated minimal support for this strategy (see for example, Flanagan 1996c; Hough & Roberts, 1998). However, this difference in approval rating may be a function of question wording. In other studies, participants were asked whether they favoured reducing overcrowding by building new prisons through increased taxation (see for example, Flanagan 1996c; Hough & Roberts, 1998). The question of cost was not addressed with this study’s participants. Consequently, it is unknown whether support for prison construction would decline if costs were considered. In sum, members of this sample support prison construction as a strategy to address prison overcrowding over increased reliance on the parole board.

**Knowledge Variables**

This section presents descriptive data on the 20 knowledge items employed in this survey (Please see Table 4.3 below for the frequency of correct responses to each knowledge item on the questionnaire). These questions were developed based upon face validity. Additionally, for comparative purposes, many of the knowledge items cover the same topics as the attitude questions used in the questionnaire. Each question tests respondents’ factual knowledge of prison conditions in Canadian federal penitentiaries at the time of questioning. Together, these questions illustrate the types of correctional issues that respondents are cognizant of, as well as those areas in which their knowledge is lacking.
### Table 4.3

**Frequency of Correct Responses to Knowledge Items by Percent Correct**

<table>
<thead>
<tr>
<th>Question</th>
<th>Correct response</th>
<th>% answering correctly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prisoners have access to a prison library</td>
<td>True&lt;sup&gt;a&lt;/sup&gt;</td>
<td>92.5%</td>
</tr>
<tr>
<td>In most cases, the government pays for the high school education of prisoners</td>
<td>True&lt;sup&gt;b&lt;/sup&gt;</td>
<td>82.4%</td>
</tr>
<tr>
<td>If they qualify, Canadian prisoners are allowed conjugal visits with their spouses or partners</td>
<td>True&lt;sup&gt;c&lt;/sup&gt;</td>
<td>77.5%</td>
</tr>
<tr>
<td>Prisoners are allowed to keep items of personal property, such as clothing and pictures, in their cells</td>
<td>True&lt;sup&gt;d&lt;/sup&gt;</td>
<td>77.0%</td>
</tr>
<tr>
<td>All prisoners are granted temporary absences to visit their families if they request them</td>
<td>False&lt;sup&gt;e&lt;/sup&gt;</td>
<td>73.8%</td>
</tr>
<tr>
<td>Prisoners may be double-bunked in a cell built for one person</td>
<td>True&lt;sup&gt;f&lt;/sup&gt;</td>
<td>57.2%</td>
</tr>
<tr>
<td>Prisoners’ visits and conversations may be recorded by correctional personnel</td>
<td>True&lt;sup&gt;g&lt;/sup&gt;</td>
<td>57.2%</td>
</tr>
<tr>
<td>Prisoners are paid to work within the prison</td>
<td>True&lt;sup&gt;h&lt;/sup&gt;</td>
<td>56.7%</td>
</tr>
<tr>
<td>All prisoners are granted work release within the community if they request it</td>
<td>False&lt;sup&gt;i&lt;/sup&gt;</td>
<td>55.6%</td>
</tr>
<tr>
<td>Prisoners are forced to work while incarcerated</td>
<td>False&lt;sup&gt;j&lt;/sup&gt;</td>
<td>44.4%</td>
</tr>
<tr>
<td>Prisoners have the right to vote</td>
<td>False&lt;sup&gt;k&lt;/sup&gt;</td>
<td>37.4%</td>
</tr>
<tr>
<td>All prisoners’ mail is read by correctional personnel</td>
<td>False&lt;sup&gt;l&lt;/sup&gt;</td>
<td>33.2%</td>
</tr>
<tr>
<td>Compared to the general Canadian population, there is a higher rate of HIV and Hepatitis C infection among prisoners</td>
<td>True&lt;sup&gt;m&lt;/sup&gt;</td>
<td>32.6%</td>
</tr>
<tr>
<td>Question</td>
<td>Correct response</td>
<td>% answering correctly</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Maximum security prisoners will not be released unless they serve part of their sentence in lower security prisons (such as minimum security)</td>
<td>False&lt;sup&gt;a&lt;/sup&gt;</td>
<td>30.5%</td>
</tr>
<tr>
<td>Prisoners must pay for their expenses, such as telephone calls, while incarcerated</td>
<td>True&lt;sup&gt;o&lt;/sup&gt;</td>
<td>27.8%</td>
</tr>
<tr>
<td>If they want television sets in their cells, prisoners must pay for them</td>
<td>True&lt;sup&gt;p&lt;/sup&gt;</td>
<td>26.2%</td>
</tr>
<tr>
<td>The suicide rate among prisoners is much lower than in the general Canadian population</td>
<td>False&lt;sup&gt;q&lt;/sup&gt;</td>
<td>21.9%</td>
</tr>
<tr>
<td>Prisoners will not be granted parole unless they complete the programs recommended by correctional personnel</td>
<td>False&lt;sup&gt;r&lt;/sup&gt;</td>
<td>20.9%</td>
</tr>
<tr>
<td>In most cases, the government pays for the university education of prisoners</td>
<td>False&lt;sup&gt;s&lt;/sup&gt;</td>
<td>18.7%</td>
</tr>
<tr>
<td>Prisoners who are unable to work receive an allowance from the government</td>
<td>True&lt;sup&gt;i&lt;/sup&gt;</td>
<td>16.6%</td>
</tr>
</tbody>
</table>

Note.  \( N = 187 \) for each knowledge question.

<sup>a</sup>From J. Renaud (Communications Officer, Communications and Consultation, Correctional Service Canada, personal communication, July 20, 2000).

<sup>b</sup>From D. Barbe (Manager, Education and Employment Programs, Correctional Service Canada, personal communication, July 20, 2000).


From B. Cooper (Senior Planning Analyst, Operational Planning, Correctional Service Canada, personal communication, July 18, 2000).


From J. Ginsburg (Acting Project Officer, Substance Abuse Programs, Correctional Service Canada, personal communication, July 18, 2000).

From J. Renaud (Communications Officer, Communications and Consultation, Correctional Service Canada, personal communication, July 20, 2000).


Knowledge of Prison Conditions in Canada

Study participants appear to be most knowledgeable when asked general questions concerning prison life, such as the types of programs and amenities prisoners have access to. For instance, over 90% of respondents correctly assessed that “prisoners have access to a prison library” (J. Renaud, personal communication, July 20, 2000). Further, the vast majority of participants knew that Canadian inmates are allowed conjugal visitation (Correctional Service Canada, 1999e), that prisoners are allowed to keep items of personal property in their cells (Correctional Service Canada, 1999c), and that the costs of inmates’ high school education are
assumed by the government (D. Barbe, personal communication, July 20, 2000).

In contrast, participants are least knowledgeable when questioned on specific details of prison life, such as operational policies and practices. For instance, the vast majority of respondents were not cognizant that prisoners assume the costs of their living expenses (Correctional Service Canada, 1999d), entertainment (J. Renaud, personal communication, July 20, 2000), and university education (Correctional Service Canada, 1999a). Nor were they aware that Canadian prisoners do not have the right to vote (J. Renaud, personal communication, July 20, 2000).

Study participants also lack factual information concerning release from prison. They were not aware that prisoners may be paroled prior to completing recommended programs, nor were they cognizant that inmates may be released without cascading through varying levels of security (J. Ginsburg, personal communication, July 18, 2000).

Finally, respondents are not apprised of prisoner health issues. For instance, only 32.6% of participants responded correctly when questioned about HIV and Hepatitis C infection rates in prison. Similarly, only 21.9% of respondents answered correctly when asked about the prisoner suicide rate.

In general, study participants lacked information concerning the specific details of prison life. They were not informed about existing penal policies, prisoners’ rights, health issues, and release from prison. In contrast, they were widely aware of the general facets of prison life, such as the existence of prison libraries. These findings may be explained, in part, by the medium through which most members of society obtain their information, the media.

According to Chartier (2000), "the electronic and print media, whether news or
entertainment, provide Canadians with most of the information they receive on corrections” (p. 2). Both fictional (for example, *The Shawshank Redemption*) and non-fictional (for example, *American Justice*) portrayals of prison, located in the entertainment media, present the public with general images of prison life, such as prisoners’ cells, prison libraries, and high school education. Whereas, the news media tend to focus on sensational criminal justice issues (Chartier, 2000). In general, these information sources do not provide their audiences with specific facts concerning prison life. If study participants do in fact draw most of their information on corrections from the media, it is unlikely that they would have at their disposal the information necessary to correctly answer highly specific factual questions concerning prison conditions.

**Scale Construction**

After examining the attitude and knowledge variables at the individual level, these items were combined into scales for further analysis. This section depicts the methodology employed in scale construction and presents descriptive information on the attitude and knowledge scales.

**Punitiveness Scale**

Participants expressed a wide range of attitudes concerning prison conditions in Canadian federal penitentiaries. Although individual attitudinal measures provide valuable insight into respondent opinion concerning specific policy issues, on their own, they do not present an overall picture of punitiveness. By constructing an attitudinal scale, a more precise portrait of respondent punitiveness towards prison conditions is generated. This section describes the construction of the attitude scale used for this research. It includes data on participant raw
scores, scale item sensitivity analysis, reliability, weighting, and standardization.

**Raw Scores**

The initial step in scale construction is to calculate a total score for each respondent. This total score is computed by summing participant responses to each question used in the scale (Frankfort-Nachmias & Nachmias, 1996; Hagan, 2000). Thus, to construct the punitiveness scale each attitude question was scored from zero to three, with three being the most punitive response. The answers to each attitude item were summed for each respondent, resulting in a singular punitiveness score per participant.

With 19 attitude items used in the scale, respondents could potentially score between 0 and 57. In this study, participant punitiveness scores ranged from a minimum of 8 to a maximum of 54. For this set of scores, the interquartile range was 11. Hence, there is evidence of variability in the level of respondent punitiveness towards prison conditions in Canada (see Figure 4.1 below).

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15 After conducting a reliability analysis (discussed below), one unreliable item was removed from the scale. For the purpose of accurate reporting, I am only presenting data on the 19 variables included in the final scale.
Figure 4.1

Range of Respondent Punitiveness Scores by Frequency

As is illustrated in Figure 4.1, the most frequent punitiveness score is 26. However, minor modes exist at scores 25, 31, and 35. The median score for this distribution is 31. Hence, the majority of respondent punitiveness scores are located within the center of the distribution.

As depicted in Figure 4.1, the distribution of punitiveness scores closely approximates a normal distribution. Dividing this distribution along its troughs (i.e., areas of low frequency), so as to maximize variance between groups, creates three categories of respondents: those expressing low levels of punitiveness, those expressing moderate levels of punitiveness, and those expressing high levels of punitiveness.

Based upon the shape of the punitiveness distribution, low punitiveness includes participants scoring between 8 and 22 on the attitude scale. Moderate punitiveness includes respondents scoring between 23 and 38 on the attitude scale. Whereas, high punitiveness
includes participants scoring 39 and above on the attitude scale.

The majority of respondents can thus be characterized as holding moderately punitive beliefs concerning prison conditions in Canada (see Table 4.4). Only a small percentage of respondents (9.6%) conveyed lenient beliefs regarding prison conditions. Comparatively, less than 20% of participants expressed highly punitive attitudes pertaining to prison conditions. Thus, as previously demonstrated, this sample is not wholly punitive. Rather, participants are supportive of a mixture of progressive and punitive penal policies and practices, resulting in an overall moderate level of punitiveness. This finding illustrates that singular attitude items on an opinion survey, which indicate high levels of punitiveness, may be masking the true nature of attitudes towards corrections.

Table 4.4

<table>
<thead>
<tr>
<th>Level of Respondent Punitiveness</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>9.6%</td>
</tr>
<tr>
<td>Moderate</td>
<td>72.2%</td>
</tr>
<tr>
<td>High</td>
<td>18.2%</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Item Sensitivity Analysis

After constructing a raw scale, item sensitivity analysis is carried out to determine which attitudinal items should remain in the final scale. Some of the items selected for inclusion in an attitude scale may not be sensitive to attitudinal differences. Hence, it is necessary to test each item and eliminate the poorer choices. According to Frankfort-Nachmias and Nachmias (1996), item analysis is conducted in order “. . . to find items that consistently distinguish those who are high on the attitude continuum from those who are low” (p. 466). The objective is to remove
items from the scale which fail to discriminate between these high and low scorers (Frankfort-Nachmias & Nachmias, 1996; Hagan, 2000).

The chi-square test for goodness of fit can be used to assess the items' ability to discriminate. The univariate chi-square test for goodness of fit was run on each of the 20 attitude items included on the questionnaire. The chi-square test was significant for all 20 variables. Based upon the goodness of fit test, the lower the chi-square value, the greater the dispersal among participant responses. Thus, questions yielding lower chi-square values were better able to discriminate between high and low scorers on the punitiveness continuum (Please see Appendix E for each attitude item's ability to discriminate).

As Appendix E illustrates, the attitude items' ability to discriminate among high and low punitiveness scorers was highly varied. The items generating the greatest amount of dispersal included questions on whether prisoners should be allowed to earn university degrees, whether they should be allowed to vote, and whether they should be compensated for their work in prison. These findings may be explained by the nature of the questions. These questions are highly controversial as they pertain to whether prisoners should be allowed certain privileges while incarcerated. As previously noted, the public is strongly averse to giving prisoners what they deem as undeserved privileges. However, what is considered an undeserved privilege may differentiate between those who are highly punitive and those who are more lenient in their beliefs. Consequently, issues of controversy are more likely to elicit a broad spectrum of opinion.

In contrast, the attitude items generating the least amount of dispersal included questions on whether more prisons should be built to reduce overcrowding, whether parole is dangerous, and whether prisoners should be forced into drug rehabilitation programs. These types of
questions are more likely to generate a homogeneous response because they are less controversial. They reflect dominant societal beliefs concerning corrections. For instance, as a society, we are advised that drug users require treatment. Thus, it is not surprising that this question would elicit the least amount of dispersal in participant responses. Consequently, accepted social perceptions may reduce the variability in participant responses to attitude items on a questionnaire.

Although there were some extremes, the majority of attitude items on the questionnaire generated a moderate level of dispersal among participant responses. Of the 20 attitude items included in the questionnaire, at least 3 should have been eliminated on the basis of low sensitivity to differences in attitude. However, since only a limited number of variables were used to comprise the initial scale, it was decided that none of the variables would be removed on this basis.16

To compensate for this decision, each attitude item was weighted according to its ability to discriminate among high and low scorers on the punitiveness continuum. The chi-square value generated from the goodness of fit test was therefore used as a factor weight (Please see Appendix E for the chi-square value of each attitude item). Each attitude item was divided by its chi-square value so that the items with the greatest dispersal were given more weight than those with less ability to discriminate. This procedure enhanced the scale's overall ability to distinguish between high and low scorers.

The downside of using chi-square values as factor weights is that they are empirical

16 Further, after conducting a reliability analysis (to be discussed below), it was determined that removing these items from the scale would decrease the reliability of the scale.
weights, derived from a statistical procedure. If low levels of dispersal are a result of group homogeneity, rather than the items’ ability to discriminate, weighting these items in this manner may not be appropriate. However, with the current sample, this possibility cannot be tested.

Reliability

As with item analysis, the reliability procedure is performed in order to determine which items should be retained in the final scale (Jackson, 1999). The reliability procedure measures the internal consistency of the scale and assesses the contribution of each individual item used to comprise the scale (Frankfort-Nachmias & Nachmias, 1996; Hagan, 2000; Jackson, 1999). Any items that do not meet accepted statistical standards should be removed from the scale.

The goal of a reliability analysis is to construct an internally consistent scale. Internal consistency, or reliability, is measured by alpha, a correlation coefficient that ranges from 0 to 1 (Bryman & Cramer, 1990; Frankfort-Nachmias & Nachmias, 1996). According to the literature, a reliable scale is indicated when alpha equals .80 or above (Bryman & Cramer, 1990; Hagan, 2000). However, some researchers accept lower alpha values (see for example, Frankfort-Nachmias & Nachmias, 1996). Using Cronbach’s Alpha method, a reliability analysis was performed on the 20 attitude variables included on the questionnaire.\(^{17}\) The total scale was reliable, achieving an alpha value of .8305.

However, according to Jackson (1999), as a general rule a potential scale should also satisfy the following standards: the inter-item correlations should be positive, the mean inter-item

\(^{17}\) It must be noted that the reliability procedure is dependent upon parametric assumptions. Although it is common practice in the social sciences, parametric procedures should not be applied to nonparametric data (R. Melchers, personal communication, March 3, 1999). Likert based scales produce nonparametric data. By utilizing the reliability procedure on ordinal level data, this procedure is less likely to find an effect.
correlations should be at least .20, and the corrected item-total correlations should be over .25.\textsuperscript{18}

He further indicates, that any items which reduce the alpha value should be deleted from the final scale.

When all 20 items were assessed, the scale did not meet the above-noted benchmarks. Many of the inter-item correlations were negative, the mean inter-item correlations was below .20 (.1965), and two of the corrected item-total correlations were below .25. Additionally, the alpha if item deleted statistic indicated that removing the variable “prisoners should be forced to work while incarcerated” would increase the alpha value. This same variable was responsible for many of the negative inter-item correlations. Thus, the variable “prisoners should be forced to work while incarcerated” was removed from the scale.\textsuperscript{19}

The reliability procedure was rerun using the remaining 19 attitude items. Barring a few minor exceptions, the scale met the conditions outlined by Jackson (1999). The majority of the

\textsuperscript{18} Jackson (1999) indicates that in a reliable scale, the mean inter-item correlations should be over .25. However, he notes that when using less than 9 point Likert scales (as in this study) this criterion can be reduced to .20.

\textsuperscript{19} Based upon the reliability analysis, the variable “prisoners should be forced to work while incarcerated” was not a reliable indicator of punitiveness. This finding was surprising, since at face value the notion of forced labour appears punitive. This result may be explained by the nature of the question itself. Study participants may not have interpreted this question as it was intended. It is likely that respondents answered this question in terms of their beliefs concerning labour in prison, rather than focussing on its coercive connotations. Previous research has indicated that members of the public believe that prisoners should work while incarcerated (see for example, Adams, 1990; Doble, 1987). Further, respondents may perceive work as rehabilitative rather than punishing. Consequently, the ambiguous nature of the question may explain why it failed to measure respondent punitiveness.
inter-item correlations were positive. Only 3 negative correlations were found.\textsuperscript{20} However, these correlations were small spot values that were not systematic across all variables. Further, the alpha if item deleted statistics indicated that removing these variables would reduce the overall reliability of the scale. Therefore, they were retained. The mean inter-item correlations was above .20 (.2155). One corrected item-total correlation narrowly fell below .25 (.2406).\textsuperscript{21}

However, removing this item from the scale would decrease the alpha value; thus, it was retained. The alpha if item deleted statistics indicated that all 19 variables should remain in the scale. By removing one unreliable item, the punitiveness scale satisfied accepted standards.

Based upon the remaining 19 attitude items, the punitiveness scale achieved an alpha value of .8386. This alpha value surpasses the minimum requirement for a reliable scale (.80) and is higher than the one attained using all 20 attitude variables. Predicated upon these findings, the final punitiveness scale used to test my hypothesis was comprised of 19 of the original 20 attitude items included on the questionnaire.

\textbf{Standardization}

Prior to computing the final scale, the 19 attitude items were standardized as z-scores.

\textsuperscript{20} The three negative correlations were found among the following variables. A correlation of -.0302 occurred between “conjugal visits, which permit overnight visits by prisoners’ spouses or partners, are a good idea” and “in order to reduce prison overcrowding more prisons should be built”. A correlation of -.0357 occurred between “physical punishment should be used to control unruly prisoners” and “in order to reduce prison overcrowding, more prisons should be built”. A correlation of -.0940 occurred between “physical punishment should be used to control unruly prisoners” and “prisoners should be forced to participate in drug rehabilitation programs if deemed necessary by correctional personnel”.

\textsuperscript{21} The corrected item-total correlation of .2406 occurred for the variable “prisoners should be forced to participate in drug rehabilitation programs if deemed necessary by correctional personnel.”
Standardization was carried out so that the attitude and knowledge scales would share the same base for comparison.

**Final Attitude Scale**

To summarize, the final punitiveness scale used to test the research hypotheses was constructed as follows. Based upon the reliability analysis, the punitiveness scale was comprised of 19 attitude items. These items were first standardized as z-scores and then weighted according to their ability to discriminate between high and low scorers on the attitude continuum. These standardized and weighted items were then summed for each participant resulting in a singular punitiveness score per respondent.

**Knowledge Scale**

For this research, a knowledge scale was created to measure the overall level of respondent knowledge concerning prison conditions in Canada. This section describes the construction of this knowledge scale. It contains data on participant raw scores, scale item sensitivity analysis, reliability, and standardization.

**Raw Scores**

As with the attitude scale, the initial step in constructing the knowledge scale was to compute a total score for each respondent. This total score was generated by summing participant responses to each of the individual knowledge questions used in the scale. Participant responses were scored as either zero or one. Each correct response was scored as a one. Whereas, any other response (i.e., incorrect, missing, or where respondents indicated “don’t know”) was scored as zero. The answers to each knowledge item were summed for each respondent, resulting in a singular knowledge score per participant.
With 20 knowledge items used in the scale, respondents could potentially score between 0 and 20. In this study, participants’ knowledge scores ranged from a minimum of 0 to a maximum of 17, thereby utilizing nearly the full range of the scale (see Figure 4.2). For this set of scores, the standard deviation was 2.97. Hence, there is evidence of variability in the level of respondent knowledge concerning prison conditions in Canada.

**Figure 4.2**

**Range of Respondent Knowledge Scores by Frequency**

As Figure 4.2 illustrates, the majority of participant knowledge scores fall around the center of the distribution. On average, members of this sample were able to correctly answer 9 of 20 fact-testing questions on prison conditions in Canada ($M = 9.40, SD = 2.97$). Although low, this number is higher than expected from previous research. In a study by Cumberland and Zamble (1992), participants were only capable of correctly answering 3 of 10 knowledge-testing questions on the criminal justice system.
Even though respondents were able to answer more questions correctly in this study, the average number of incorrect responses was higher than correct answers. Thus, this sample did not possess a high level of knowledge concerning prison conditions in Canada. In fact, less than one-quarter of respondents could be characterized as highly knowledgeable on the topic of prison conditions and a further 15.5% of participants could be characterized as lacking basic knowledge in this area (see Table 4.5).\footnote{As in the case of the punitiveness scale, the distribution of respondent knowledge scores approximates a normal distribution. So as to maximize variation between groups, the distribution of knowledge scores was divided along areas of low frequency resulting in three categories of respondents: those possessing low levels of knowledge on prison conditions, those possessing moderate levels of knowledge on prison conditions, and those possessing high levels of knowledge on prison conditions. Based upon the shape of the distribution, low knowledge includes those scoring between 0 and 6 on the knowledge scale. Moderate knowledge includes those scoring between 7 and 11 on the knowledge scale. Whereas, high knowledge includes those scoring 12 or above on the knowledge scale.}

Overall, the majority of respondents were somewhat knowledgeable concerning prison conditions in Canada. Contrary to what has been found in other studies, research participants possessed some factual information on issues of criminal justice. However, if members of the broader public are to provide informed opinions on specific correctional issues, it may be necessary to provide them with factual information prior to soliciting their opinions.

**Table 4.5**

<table>
<thead>
<tr>
<th>Level of respondent knowledge</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Some</td>
</tr>
<tr>
<td>15.5%</td>
<td>62.6%</td>
</tr>
<tr>
<td>High</td>
<td></td>
</tr>
<tr>
<td>21.9%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
**Item Sensitivity Analysis**

As previously noted, item-sensitivity analysis is performed in order to distinguish between high and low scorers on an attitude continuum. Since the knowledge scale was not based upon an attitudinal continuum, item sensitivity analysis was inappropriate, and therefore not performed. Hence, none of the 20 knowledge items were removed from the scale based upon their ability to discriminate.

**Reliability**

The purpose of the knowledge scale was to score the number of correct responses to fact-testing questions on the topic of prison conditions. Therefore, it is an objective measure. Consequently, a reliability analysis was not necessary for this scale. Thus, all 20 knowledge items included on the questionnaire were retained in the final knowledge scale.

**Standardization**

Prior to computing the final knowledge scale, the 20 knowledge items were standardized as z-scores. Standardization was carried out so that the attitude and knowledge scales would share the same base for comparison.

**Final Knowledge Scale**

To summarize, the final knowledge scale used to test the research hypotheses was constructed as follows. The knowledge scale was composed of all 20 items included on the questionnaire. These items were first standardized as z-scores. Next, these scores were summed for each participant resulting in a singular knowledge score per respondent.

The final versions of the attitude and knowledge scales were used to test the hypothesis that there is a statistical association between punitiveness and knowledge. The results of this
research, as well as other hypothesis tests, are presented in the upcoming chapter.
Chapter Five: Findings and Discussion

Introduction

This chapter reviews the research findings from the questionnaire distributed to Introduction to Criminology students from the University of Ottawa on September 7, September 15, and September 25, 2000. It includes a restatement of the research questions and hypotheses, cites the results of the statistical tests employed to test these hypotheses, and presents a discussion of the specific findings.

As aforementioned, this thesis was designed to explore two primary research areas: (a) the relationship between attitudes and knowledge, and (b) the impact of factual information on attitudes. Consequently, the results of this research will be presented under these two topic headings.

The Relationship between Attitudes and Knowledge

Results: Research Question # 1

Although it has been demonstrated that public attitudes may be shaped by factual information, little is known about the relationship between attitudes and knowledge. Thus, one of the goals of this research was to determine whether there is a statistical association between attitudes and knowledge. The topic “prison conditions in Canada” was chosen to test this relationship. Therefore, this research addressed the following question:

Is there a relationship between respondent attitudes and knowledge of prison conditions in Canadian federal penitentiaries?
It was hypothesized that knowledge is inversely related to punitiveness. Consequently, as the extent of factual knowledge concerning prison conditions increased, the level of respondent punitiveness associated with prison conditions was expected to decrease.

In order to test this hypothesis, an attitude scale, measuring respondent punitiveness towards prison conditions, and a knowledge scale, measuring participant knowledge of prison conditions, were constructed. The premise was to correlate respondent scores on the two scales in order to determine if a relationship exists between attitudes and knowledge.

The final versions of the attitude and knowledge scales, described in the previous chapter, were used to test this hypothesis. Since the scales yielded ordinal level data, Spearman’s rho correlation coefficient for nonparametric data was run on the two scales. With an alpha level of .05, the result of this test was not statistically significant, $r_s = +.03, N = 187, p = .682$. Thus, no relationship between attitudes and knowledge was supported by this research.

In order to determine if any other factors influenced the relationship between attitudes and knowledge, tests for partial correlations were run using the control variables. There were no statistically significant partial correlations. Therefore, gender, prior contact with a penal facility, violent victimization, property victimization, and the number of law-related courses taken by respondents did not produce variations in the relationship between attitudes and knowledge.

\[23\] For this research, an alpha level of .05, two-tailed, was used for all statistical tests.

\[24\] The results of the partial correlation tests run on the attitude and knowledge scales were as follows:
controlling for gender, $pr = +.0398, N = 187, p = .589$,
controlling for contact with a penal facility, $pr = +.0283, N = 186, p = .702$,
controlling for violent victimization, $pr = +.0266, N = 186, p = .719$,
controlling for property victimization, $pr = +.0315, N = 185, p = .672$, and
controlling for law-related courses taken by respondents, $pr = +.0250, N = 187, p = .734$. 
Using data from the raw punitiveness scale, recoded into three categories of respondents expressing low, moderate, and high levels of punitiveness, chi-square tests were run with each of the control variables. These tests were also not statistically significant. Thus, respondent punitiveness concerning prison conditions did not vary according to gender, contact with a prison, violent victimization, property victimization, or the number of law-related courses taken by participants.  

Using data from the raw knowledge scale, recoded into three categories of respondents expressing low, moderate, and high levels of knowledge, chi-square tests were run with each of the control variables. Respondents’ gender significantly affected the level of factual knowledge possessed by participants (see Table 5.1 below). Female respondents were more likely to possess low levels of knowledge concerning prison conditions (20.2%) than their male counterparts (6.3%). Although gender significantly influenced the level of respondent knowledge concerning prison conditions, the strength of this relationship was negligible to weak, $\nu = .181, N = 187, p < .05$.

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25 The results of the chi-square tests were as follows: for level of respondent punitiveness by respondents’ gender, $\chi^2 (2, N = 187) = 3.755, p = .153$, for level of respondent punitiveness by contact with a prison, $\chi^2 (2, N = 186) = 1.511, p = .470$, for level of respondent punitiveness by violent victimization, $\chi^2 (2, N = 186) = 1.350, p = .509$, for level of respondent punitiveness by property victimization, $\chi^2 (2, N = 185) = 3.930, p = .140$, and for level of respondent punitiveness by previous law-related courses taken by respondents, $\chi^2 (2, N = 187) = 1.817, p = .403$. 
Table 5.1

Level of Respondent Knowledge by Gender

<table>
<thead>
<tr>
<th>Level of respondent knowledge</th>
<th>Gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Low</td>
<td>6.3%</td>
<td>20.2%</td>
</tr>
<tr>
<td>Moderate</td>
<td>68.3%</td>
<td>59.7%</td>
</tr>
<tr>
<td>High</td>
<td>25.4%</td>
<td>20.2%</td>
</tr>
</tbody>
</table>

$\chi^2 (2, N = 187) = 6.152, p < .05$

Although gender impacts knowledge, it does not influence the relationship between attitudes and knowledge. Based upon the partial correlation test, previously reported, gender does not produce significant variation in the relationship between attitudes and knowledge, $pr = +.0398, N = 187, p = .589$.

Chi-square tests run between the remaining control variables and the level of respondent knowledge concerning prison conditions were not statistically significant. Therefore, respondent knowledge did not vary according to contact with a penal facility, violent victimization, property victimization, or the number of law-related courses taken by participants.²⁶

²⁶ The results of the chi-square tests between the level of respondent knowledge and the control variables were as follows: for level of respondent knowledge by contact with a prison, $\chi^2 (2, N = 186) = .358, p = .836$; for level of respondent knowledge by violent victimization, $\chi^2 (2, N = 186) = .087, p = .958$; for level of respondent knowledge by property victimization, $\chi^2 (2, N = 185) = .117, p = .943$; and for level of respondent knowledge by previous law-related courses taken by respondents, $\chi^2 (2, N = 187) = 1.069, p = .586$. 
Discussion: Research Question # 1

Previous research has demonstrated that providing members of the public with information can alter their attitudes (see for example, Doble, 1987; Fishkin, 1995; Sanders, 1999). Further, research has illustrated that furnishing the public with factual information prior to soliciting their viewpoints results in more liberal and tolerant opinions (see for example, Cumberland & Zamble, 1992). Hence, it seemed probable that the existing level of factual information possessed by members of the public at the time of questioning should influence their attitudes. It was hypothesized that persons expressing punitive attitudes concerning prison conditions would be less knowledgeable about corrections than those conveying more tolerant opinions. However, the results of this research indicate that the null hypothesis should be accepted. Members of this sample held particular beliefs concerning prison conditions in Canada regardless of the amount of factual information at their disposal. Contrary to expectations, punitiveness was not dependent upon knowledge. Thus, opinion is formed irrespective of the amount of existing information possessed by respondents.

Although these findings cannot be generalized beyond the research sample, if the same is true of the general population, this research calls into question the role of public opinion. If

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In this study, it was hypothesized that respondent attitudes concerning prison conditions are influenced by their level of factual knowledge on prison conditions. This relationship was measured using a coefficient of correlation. It is not possible to infer causality from correlational data. Although it seems more plausible that the level of knowledge at the disposal of respondents influences the nature of their attitudes, it is possible that attitudes influence knowledge. For instance, people may seek out factual information in support of their existing attitudes. However, based upon the methodology employed in this research, it is not possible to determine causal direction. The reader should keep this in mind when interpreting the results and conclusions of this research. This same limitation applies to the other correlational analyses conducted in this research.
factual knowledge does not influence public attitudes concerning prison conditions, or more broadly the criminal justice system, then public opinion research cannot solicit informed public judgement. If public opinion research is to hold value in criminal justice decision-making, it is essential for researchers to determine how public attitudes are formed. What factors do members of the public take into consideration when assessing the justice system? Qualitative research, such as focus groups, which is devised to delve beneath the surface of public opinion, may help researchers uncover the answers to these questions. Identifying the factors that influence attitudes, and more specifically punitiveness, may give researchers and policymakers a better understanding of public opinion.

Although this research did not find a statistical association between attitudes and knowledge, it is possible that a beta error was committed. There were a number of methodological limitations to this study which may have precluded positive findings. The sample chosen for this research was unique and not representative of the Canadian population. Consisting of first-year criminology students, the sample was comprised of persons of similar age and educational background. In consequence, the sample was fairly homogeneous producing attitude and knowledge scores that were centrally distributed. Although there was some variability associated with both scales, the majority of respondents scored moderately on both punitiveness and knowledge. It is possible that these findings are unique to the sample chosen and do not accurately reflect the punitiveness and knowledge distributions located within the general Canadian population. A more heterogeneous sample may have produced greater variation on the attitude and knowledge measures, thereby making it possible to discern a relationship between attitudes and knowledge. Therefore, sample homogeneity may account for the lack of
research findings.

Similarly, the size of the sample used for this study may help account for the research findings. With a total sample of 187 respondents, the data ascertained from the questionnaire were limited to a small number of observations. It is more difficult to identify significant relationships within a small data set than when analysing a large set of scores. It is possible that with a larger sample size, small variations within the attitude and knowledge measures would be significant. Thus, both sample size and sample composition may have hindered this study's ability to identify a relationship between attitudes and knowledge.

Aside from limitations related to sampling, the measurement tools created for this research may have been flawed. Both the attitude and knowledge scales were constructed based upon face validity and were developed specifically for this research. Since comparable scales did not exist, it was not possible to rely on previously validated indices or scales. It is possible that the scales created for this research failed to measure the intended variables.

In relation to the attitude scale, respondent punitiveness scores were centrally distributed, with the majority of participants scoring moderately. This homogeneous pattern of response may reflect a normative bias in which participants were responding superficially, expressing dominant social perceptions rather than their true beliefs on the issues. This type of economical responding would indicate that the attitude scale failed to measure respondent punitiveness. It would not be possible to discern a relationship between punitiveness and knowledge if the attitude scale was incapable of probing the intended attitude.

Similarly, the knowledge scale constructed for this research may not have been appropriate. Although the knowledge scale was objective, measuring correct responses to factual
questions on prison conditions, the questions comprising the scale were highly specific, relating
to particular traits of correctional policy and operations. It is possible that this type of factual
information has little bearing on respondent punitiveness. Perhaps more general knowledge
measures, such as questions on crime and the criminal justice system, would more readily
demonstrate a relationship with attitudes.

Another potential explanation for the research findings lies with the research hypothesis
itself and the subsequent method used to test this hypothesis. It was hypothesized that the
relationship between attitudes and knowledge is both linear and directional and therefore could
be measured using a coefficient of correlation. However, further analysis indicates that this
relationship may be more complex than originally anticipated.

In order to better understand the relationship between attitudes and knowledge, a
correlation matrix was run using the raw individual attitude and knowledge questions. From this
matrix, 31 correlations between individual attitude and knowledge measures were statistically
significant. However, the direction of these relationships were not as expected. In some
instances, the correlations were negative (as anticipated), whereas in other instances the
correlations were positive. Thus, knowledge was inversely related to punitiveness only some of
the time.

Chi-square tests were run on each of the 31 significant relationships. Of these, 16
crosstabs were statistically significant. However, as with the correlations, these relationships
differed from expectations. In some instances, members of the sample who answered the
knowledge questions correctly were more likely to express punitive attitudes than those
answering incorrectly. For example, participants who correctly assessed that prisoners are not
allowed to vote in Canada were more likely to disagree (47.8%) and strongly disagree (39.1%) with allowing prisoners to vote while incarcerated than those who responded incorrectly (36.5% and 27.0% respectively), \( \chi^2 (3, N = 184) = 12.006, p < .01 \). However, in other instances, respondents answering the knowledge questions correctly were more likely to express tolerant attitudes than those answering incorrectly. For example, participants who were aware of the high rate of suicide among prisoners were more likely to disagree (53.8%) and strongly disagree (7.7%) with making prison life more difficult than those who were uninformed of this fact (39.6% and 1.4% respectively), \( \chi^2 (3, N = 183) = 9.307, p < .05 \).

Thus, it appears that specific attitudes may differ based upon the amount of factual knowledge possessed by respondents. However, the nature of this relationship is complex and cannot be reduced to a simple linear association. In some cases, foreknowledge of correctional policy may influence respondents to support these policies, even if they are punitive. In other instances, factual knowledge may influence participants to hold more tolerant opinions. If the relationship between attitudes and knowledge is complex and multidirectional, then the measurement instruments created for this research (i.e., additive scales), and the corresponding statistical test, were inappropriate and incapable of finding an association between attitudes and knowledge.

Further, when analysing complex relationships it may be necessary to divide the research sample into sub-samples. It is essential that the sample be large enough to support statistical procedures when divided into smaller groups. In this research, the sample was small and inappropriate for complex analysis. Therefore, to investigate the relationship between attitudes and knowledge, future researchers should consider using much larger samples.
In summary, this research failed to find a relationship between respondent attitudes and knowledge of prison conditions in Canada. Although it is possible that punitiveness is not dependent upon the amount of factual information possessed by respondents, a number of methodological concerns specific to this research may have limited this study’s ability to identify an association between attitudes and knowledge. Further analysis indicates that the relationship between punitiveness and knowledge may be multidirectional. If this is the case, it may be useful for researchers to explore how factual information influences attitudes. Under what circumstances does factual information result in punitive opinions, and under what conditions does knowledge lead to liberal opinions? By determining how information impacts punitiveness researchers and policymakers may be better positioned to educate the public on matters of criminal justice.

Research Question # 2

Public attitudes concerning sentencing practices is a subject frequently probed by researchers. One of the most consistent findings is that members of the public perceive sentences as too lenient in their treatment of offenders (Roberts, 1994). In a review of Canadian research concerning public opinion and public knowledge on issues of criminal justice, Roberts (1994) argues that “. . . the perception of leniency in sentencing at the trial court level is based upon a misperception of the actual severity of sentences imposed” (p. 34). Thus, public perceptions of sentencing may be influenced by their appraisals of severity within other areas of the system, such as corrections. One of the goals of this research was to explore this relationship. Hence, the following research question was addressed:

*Is opinion of prison conditions associated with attitudes towards sentencing?*
This research question had two primary aims: (a) to examine the relationship between perceptions of sentencing severity and appraisals of prison conditions, and (b) to explore the relationship between perceptions of sentencing severity and knowledge of prison conditions. In the interest of clarity, the results and subsequent discussion concerning each of these research areas will be presented separately.

**Results: Research Question # 2a**

This research was devised to explore whether perceptions of leniency in the sentencing stage are associated with perceptions of laxity in the penal stage. A positive relationship was expected between attitudes towards prison conditions and attitudes towards sentencing. Thus, it was hypothesized that participants who believe that prison conditions are too lenient will also appraise sentences as soft.

In order to test this hypothesis, respondents were asked the following questions: “Do you think that sentences imposed are too harsh, too lenient, or about right?” and “In your opinion, do you think that prison conditions are too harsh, too soft, or about right?” 28 The premise was to correlate participant responses to these two questions in order to determine if a relationship exists between respondent appraisals of prison conditions and their perceptions of sentencing severity.

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28 The question measuring respondent perceptions of prison conditions was included in the experimental portion of the questionnaire. Therefore, participants receiving versions B and C of the questionnaire were provided with a case scenario to consider while answering this question. Whereas, respondents receiving version A of the questionnaire were not provided with any information and were simply asked to answer this question. In order to ensure that respondents receiving versions B and C of the questionnaire took the case scenario information into account when answering this question, the question was worded as follows: “Having read about the experiences of this prisoner, in your opinion, do you think that prison conditions are too harsh, too soft, or about right?”. Approximately two-thirds of participants received the alternate wording of this question. In contrast, the question measuring respondent perceptions of sentencing was phrased the same way for all participants.
Since both questions yielded ordinal level data, Spearman's rho correlation coefficient for nonparametric data was run on these two variables. The result of this test was statistically significant, \( r_s = +.324, N = 172, p < .001 \). Thus, this research supports a moderate positive association between perceptions of laxity in the penal stage and evaluations of leniency in the sentencing stage. Respondents judging prison conditions as "too soft" also appraised sentences as "too lenient".

In order to determine if this relationship was influenced by the different questioning techniques utilized in the three versions of the questionnaire, nonparametric correlations between attitudes towards sentencing and attitudes towards prison conditions were run separately for each version of the questionnaire. There were no discernible differences in the relationship between sentencing attitudes and perceptions of prison conditions. The relationship was significant and maintained the same magnitude when all responses were combined as well as when the three versions were analysed individually.\(^{29}\) Thus, a moderate positive relationship between appraisals of prison conditions and perceptions of sentencing was supported under all conditions.

In order to determine if any other factors influenced the relationship between attitudes towards prison conditions and attitudes towards sentencing, tests for partial correlations were run with each of the control variables. The relationship between perceptions of sentencing severity and appraisals of prison conditions was significant when controlling for gender, contact with a penal facility, violent victimization, property victimization, and the number of law related courses

\(^{29}\) The results for the individual correlations between attitudes towards sentencing and attitudes towards prison conditions were as follows: 
- for experimental condition A (no information), \( r_s = +.361, N = 55, p < .01 \),
- for experimental condition B (case scenario violent crime), \( r_s = +.301, N = 60, p < .05 \), and
- for experimental condition C (case scenario non-violent crime), \( r_s = +.363, N = 57, p < .01 \).
taken by respondents. However, based upon Jackson’s rule of thirds (see Jackson, 1999), the magnitude of this relationship remained the same (i.e., within one-third of the original relationship) when controlling for these variables.\(^{30}\) Consequently, the relationship between attitudes towards prison conditions and attitudes towards sentencing did not vary according to gender, contact with a penal facility, violent victimization, property victimization, or the number of law related courses taken by respondents.\(^{31}\)

Since one of the primary aims of this research was to investigate the association between attitudes and knowledge, it was important to determine whether the relationship between perceptions of sentencing and attitudes towards prison conditions was influenced by knowledge. Thus, a partial correlation test was run using the knowledge scale. When controlling for knowledge, the relationship between attitudes towards sentencing and attitudes towards prison conditions was statistically significant. However, the relationship maintained the same magnitude, remaining within one-third of the original relationship, \(pr = .3057, N = 172,\)

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\(^{30}\) Jackson (1999) provides a rule of thumb for interpreting third variable tests. According to Jackson (1999), when controlling for a third variable, if the partial correlation remains within one-third of the original relationship then the third variable is neither intervening nor a source of spuriousness. This relationship should be interpreted as remaining the same. However, if the partial correlation is less than one-third of the original relationship then the results support a source of spuriousness or intervening variable model. The relationship should be interpreted as decreasing or disappearing when the third variable is introduced.

\(^{31}\) The results of the partial correlation tests run on attitudes towards sentencing and attitudes towards prison conditions were as follows: controlling for gender, \(pr = .3269, N = 172, p < .001,\) controlling for contact with a prison, \(pr = .3234, N = 171, p < .001,\) controlling for violent victimization, \(pr = .3045, N = 171, p < .001,\) controlling for property victimization, \(pr = .3094, N = 171, p < .001,\) and controlling for the number of law related courses taken by respondents, \(pr = .3111, N = 172, p < .001.\)
$p < .001$. Consequently, the amount of factual information at the disposal of respondents did not influence the relationship between attitudes towards sentencing and perceptions of prison severity.

In contrast, the relationship between perceptions of sentencing severity and appraisals of prison conditions decreased or disappeared when controlling for punitiveness. The results of the partial correlation test indicate that this relationship decreased by more than one-third of the original relationship when the punitiveness scale was introduced as a control, $pr = +.1583$, $N = 172, p < .05$. It appears that respondent punitiveness is a source of spuriousness, influencing both participant attitudes towards sentencing and attitudes towards prison conditions. Thus, respondent punitiveness impacts perceptions of severity within different stages of the criminal justice system.

Nonparametric correlations run between the punitiveness scale and the questions measuring attitudes towards sentencing and attitudes towards prison conditions provide further support for the source of spuriousness model. The correlations between the punitiveness scale and respondent attitudes towards sentencing and between the punitiveness scale and respondent attitudes towards prison conditions were greater in magnitude than the original relationship between perceptions of sentencing and appraisals of prison conditions.\(^{32}\)

In summary, there is a statistically significant relationship between respondent perceptions

\(^{32}\) The results of the nonparametric correlations were as follows: between the punitiveness scale and attitudes towards sentencing, $r_s = +.433$, $N = 174$, $p < .001$, between the punitiveness scale and attitudes towards prison conditions, $r_s = +.435$, $N = 182$, $p < .001$, and between attitudes towards sentencing and attitudes towards prison conditions, $r_s = +.324$, $N = 172$, $p < .001$. 
of sentencing severity and their evaluations of penal severity. However, this relationship is spurious. The underlying variable influencing both attitudes towards sentencing and attitudes towards prison conditions is punitiveness.

Once punitiveness was identified as influencing respondent assessments of the criminal justice system, this research was directed towards investigating the relationship between punitiveness and perceptions of severity. In order to do so, the raw punitiveness scale, recoded into three categories of respondents expressing low, moderate, and high levels of punitiveness, was used as a grouping variable.

A One-Way Analysis of Variance (ANOVA) test was run using punitiveness as the independent variable and attitudes towards sentencing as the dependent variable. The ANOVA revealed a significant between groups difference, $F(2, 171) = 15.397, p < .001$ (see Table 5.2 below for the means and standard deviations).

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33 Attitudes towards sentencing was measured by the following question, “Do you think that sentences imposed are too harsh, too lenient, or about right?”.

34 Please note that the ANOVA procedure is dependent upon parametric assumptions. It is based upon means and standard deviations, which are not appropriate for ordinal level data. Although it is common practice in the social sciences, parametric procedures should not be applied to nonparametric data (R. Melchers, personal communication, March 3, 1999). By utilizing the ANOVA procedure on ordinal level data, this procedure is less likely to find an effect.
Table 5.2

Mean Attitudes towards Sentencing by Respondent Punitiveness

<table>
<thead>
<tr>
<th>Level of respondent punitiveness</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>16</td>
<td>2.13</td>
<td>.50</td>
</tr>
<tr>
<td>Moderate</td>
<td>126</td>
<td>2.56</td>
<td>.50</td>
</tr>
<tr>
<td>High</td>
<td>32</td>
<td>2.91</td>
<td>.30</td>
</tr>
<tr>
<td>Total</td>
<td>174</td>
<td>2.59</td>
<td>.51</td>
</tr>
</tbody>
</table>

A post hoc test, Tamhane’s T2 for unequal variances, was run in order to determine the source of this difference. There was a large mean difference (-.78) in perceptions of sentencing between participants categorized as low in punitiveness \((M = 2.13)\) and participants categorized as highly punitive \((M = 2.91)\). This difference was statistically significant \((p < .05)\). There was a statistically significant mean difference (-.44) in perceptions of sentencing between respondents characterized as low in punitiveness \((M = 2.13)\) and those characterized as moderately punitive \((M = 2.56)\). This difference was significant at an alpha level of \(p < .05\). There was a statistically significant mean difference (-.34) in perceptions of sentencing between respondents characterized as moderately punitive \((M=2.56)\) and those categorized as highly punitive \((M = 2.91)\). This difference was statistically significant at an alpha level of \(p < .05\). Thus, participant evaluations of sentencing were significantly different for all three categories of punitiveness.

In order to isolate how the groups differed in their appraisals of sentencing severity, a chi-square test was run using attitudes towards sentencing as the dependent variable and punitiveness as the independent variable. Respondents scoring high on punitiveness were far more likely to perceive sentences as “too lenient” (90.6%) compared with those scoring moderately (56.3%) or
low (18.8%) on punitiveness (see Table 5.3). Thus, the level of respondent punitiveness
significantly impacts perceptions of sentencing severity. Those with highly punitive attitudes are
more likely to evaluate sentencing practices as soft.

Table 5.3

<table>
<thead>
<tr>
<th>Perceptions of sentencing</th>
<th>Level of respondent punitiveness</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>Too harsh</td>
<td>6.3%</td>
<td></td>
</tr>
<tr>
<td>About right</td>
<td>75.0%</td>
<td>43.7%</td>
</tr>
<tr>
<td>Too lenient</td>
<td>18.8%</td>
<td>56.3%</td>
</tr>
</tbody>
</table>

\( \chi^2 (4, N = 174) = 32.556, p < .001 \)

The results of these statistical tests indicate that there is a relationship between respondent
punitiveness and perceptions of sentencing severity. As previously identified, respondent
punitiveness is also associated with appraisals of penal severity. In order to further investigate
this relationship, a One-Way ANOVA was run using punitiveness as the independent variable and
attitudes towards prison conditions as the dependent variable.\(^{35,36}\) The ANOVA revealed a
significant between groups difference, \( F (2, 179) = 14.277, p < .001 \) (see Table 5.4 below for the

\(^{35}\) Attitudes towards prison conditions was measured by the following question, “In your
opinion, do you think that prison conditions are too harsh, too soft, or about right?” The raw
version of the punitiveness scale, recoded into three categories of respondents scoring low,
moderate, or high on punitiveness, was used as the grouping variable.

\(^{36}\) As previously noted, the ANOVA procedure should not be used with nonparametric
data. However, this practice is common within the social sciences, and therefore I am following
procedures common to my discipline.
means and standard deviations).

Table 5.4

**Mean Attitudes towards Prison Conditions by Respondent Punitiveness**

<table>
<thead>
<tr>
<th>Level of respondent punitiveness</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>16</td>
<td>2.06</td>
<td>.57</td>
</tr>
<tr>
<td>Moderate</td>
<td>133</td>
<td>2.36</td>
<td>.53</td>
</tr>
<tr>
<td>High</td>
<td>33</td>
<td>2.82</td>
<td>.46</td>
</tr>
<tr>
<td>Total</td>
<td>182</td>
<td>2.42</td>
<td>.56</td>
</tr>
</tbody>
</table>

Tamhane’s T2 test for unequal variances was run in order to determine the source of this difference. There was a large mean difference (-.76) in appraisals of prison conditions between respondents characterized as low in punitiveness ($M = 2.06$) and those categorized as highly punitive ($M = 2.82$). This difference was statistically significant at an alpha level of $p < .05$. There was a statistically significant mean difference (-.46) in appraisals of prison conditions between respondents characterized as moderately punitive ($M = 2.36$) and those categorized as highly punitive ($M = 2.82$). This difference was significant at an alpha level of $p < .05$. The mean difference (-.30) in perceptions of prison conditions between respondents characterized as low in punitiveness ($M = 2.06$) and those categorized as moderately punitive ($M = 2.36$) was not significant ($p = .177$). Thus, participant appraisals of prison conditions were significantly different for only two categories of punitiveness.

In order to isolate how the groups differed in their perceptions of penal severity, a chi-square test was run using attitudes towards prison conditions as the dependent variable and punitiveness as the independent variable. Those scoring high on punitiveness were far more
likely to judge prison conditions as “too soft” (84.8%) compared with those scoring moderately (38.3%) or low (18.8%) on punitiveness (see Table 5.5). Comparatively, those scoring low or moderately on punitiveness were far more likely to believe that prison conditions are “about right” (68.8% and 59.4% respectively) than respondents who were highly punitive (12.1%). Thus, perceptions of penal severity differ significantly based upon the level of respondent punitiveness. Those with highly punitive attitudes are more likely to believe that prison conditions in Canadian federal penitentiaries are too lenient in their treatment of offenders.

Table 5.5

<table>
<thead>
<tr>
<th>Perceptions of prison conditions</th>
<th>Level of respondent punitiveness</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too harsh</td>
<td>Low 12.5%</td>
<td>Moderate 2.3%</td>
</tr>
<tr>
<td>About right</td>
<td>68.8%</td>
<td>59.4%</td>
</tr>
<tr>
<td>Too soft</td>
<td>18.8%</td>
<td>38.3%</td>
</tr>
</tbody>
</table>

\[ \chi^2 (4, N = 182) = 32.375, p < .001 \]

Discussion: Research Question # 2a

Public opinion research has consistently found that members of the public evaluate the criminal justice system, as a whole and in its specific parts, as too lenient in its treatment of offenders (Banks, Maloney, & Willcock, 1975; Brillon, Louis-Guerin, & Lamarche, 1984; Cumberland & Zamble, 1992; Doble, 1987; Fishkin, 1995; Roberts, 1994; Roberts & Stalans, 2000; Warr, 1995;). To date, researchers have not determined where this perception of leniency stems from. It has been suggested that misperceptions concerning the severity of criminal justice
sanctions may account for public perceptions of leniency in the sentencing stage (see Roberts, 1994). Thus, one of the goals of this research was to determine whether there is an association between perceptions of laxity in the penal stage and perceptions of leniency in the sentencing stage.

The results of this research indicate that there is a statistical association between appraisals of penal severity and perceptions of sentencing severity. Respondents who assessed prison conditions as too soft, also appraised sentences as too lenient. However, the results of this research also illustrate that this relationship is spurious. Respondent appraisals of sentencing severity were not dependent upon their perceptions of penal severity. Rather, an underlying individual trait, punitiveness, was identified as influencing both attitudes towards sentencing and attitudes towards prison conditions. Thus, assessments of the criminal justice system, as a whole and in its specific parts, may be guided by a respondent’s desire to punish.

Since this research was conducted on a small sample that was not representative of the Canadian population, it is not possible to generalize these findings to all Canadians. However, this study has identified punitiveness as an important factor in respondent assessments of criminal justice toughness. Thus, the relationship between punitiveness and public appraisals of the criminal justice system requires further examination. Future research in this area should be conducted upon a representative sample of the population in order to determine whether punitiveness can account for public perceptions of leniency in the justice system.

A link between punitiveness and perceptions of leniency in the justice system has important implications for criminal justice policy. If public opinion is guided by a desire to punish, rather than knowledge of the system, then the role of the public in shaping criminal
justice policy is questionable. Rather than developing "get tough on crime" policies, such as three strikes legislation, in order to appease a public that perceives the system as too soft, policymakers may want to focus on altering public perceptions of the justice system. For example, education campaigns that identify and target punitiveness may be capable of changing public attitudes. By minimizing the impact of punitiveness, it may be possible to elicit public input on criminal justice policies that is based upon accurate perceptions of the justice system.

Although punitiveness was identified as an important factor in respondent assessments of sentencing and corrections, the magnitude of this association was moderate. Thus, there may be a number of other factors which influence appraisals of the criminal justice system. For example, in this research, violent victimization was significantly associated with perceptions of sentencing severity. Respondents who reported having been the victims of a violent crime were far less likely to believe that the sentences imposed on offenders are "about right" (18.9%) compared with those who had not been victimized by violence (46.3%). Although the majority of all valid participants indicated that sentencing practices in Canada are "too lenient", victims of violence (78.4%) were more likely to perceive sentences as lax than those who had not been victimized by violence (53.7%), $\chi^2(2, N = 173) = 12.085, p < .01$.

Although this finding cannot be generalized beyond the research sample, it demonstrates that factors other than punitiveness may influence respondent perceptions of criminal justice severity. Previous research indicates that public attitudes concerning the justice system may be influenced by respondents' gender, age, education, prior contact with the justice system, victimization experience, and feelings of personal safety (see Tufts, 2000). All of these factors must be taken into account by researchers if they are to develop effective methods for altering
public perceptions of the justice system.

**Results: Research Question # 2b**

The second research question exploring attitudes towards sentencing was aimed at determining if respondent appraisals of sentencing severity are influenced by their knowledge of prison conditions in Canada. This research question is based upon the assumption that, in the public mind, there is a connection between sentencing and corrections. Further, since one of the primary aims of this research was to investigate the relationship between attitudes and knowledge, it was important to determine whether respondent perceptions of sentencing are influenced by knowledge.

A negative relationship was expected between knowledge of prison conditions and attitudes towards sentencing. It was hypothesized that participants who lack accurate factual knowledge of prison conditions will appraise sentences as too lenient.

In order to test this hypothesis, respondents' perceptions of sentencing severity were correlated with the knowledge scale. Since these variables yielded ordinal level data, Spearman’s rho correlation coefficient for nonparametric data was run on these two variables. The result of this test was not statistically significant, $r_s = -.059$, $N = 174$, $p = .437$. Therefore, this research does not support a relationship between knowledge of prison conditions and attitudes towards sentencing. The amount of factual information concerning prison conditions at the disposal of respondents did not influence their evaluations of sentencing practices.

In order to determine if any other factors influenced the relationship between knowledge

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37 Participants’ attitudes towards sentencing were measured by the following question: “Do you think that sentences imposed are too harsh, too lenient, or about right?”.
of prison conditions and attitudes towards sentencing, tests for partial correlations were run with each of the control variables. The results of these tests were not statistically significant. Therefore, the relationship between knowledge of prison conditions and attitudes towards sentencing did not vary according to gender, contact with a penal facility, violent victimization, property victimization, or the number of law-related courses taken by respondents.38

In order to determine if respondent perceptions of sentencing severity differed according to the level of knowledge at their disposal, a One-Way ANOVA test was run using knowledge as the independent variable and attitudes towards sentencing as the dependent variable.39,40 The result of this test was not significant, \( F(2, 171) = 1.400, p = .249 \) (see Table 5.6 below for the means and standard deviations). Therefore, respondent evaluations of sentencing severity did not differ according to their level of knowledge concerning prison conditions.

38 The results of the partial correlation tests between knowledge of prison conditions and attitudes towards sentencing were as follows:
controlling for gender, \( pr = -.0656, N = 174, p = .391 \),
controlling for contact with a prison, \( pr = -.0837, N = 173, p = .275 \),
controlling for violent victimization, \( pr = -.0692, N = 173, p = .367 \),
controlling for property victimization, \( pr = -.0819, N = 173, p = .286 \), and
controlling for the number of law-related courses taken, \( pr = -.0852, N = 174, p = .265 \).

39 The raw knowledge scale, recoded into three categories of respondents expressing low, moderate, and high levels of knowledge, was used as the grouping variable.

40 As previously noted, the ANOVA procedure is inappropriate with nonparametric data. It is therefore less likely to find an effect.
Table 5.6

Mean Attitudes towards Sentencing by Respondent Knowledge

<table>
<thead>
<tr>
<th>Level of respondent knowledge</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>27</td>
<td>2.56</td>
<td>.58</td>
</tr>
<tr>
<td>Moderate</td>
<td>111</td>
<td>2.63</td>
<td>.48</td>
</tr>
<tr>
<td>High</td>
<td>36</td>
<td>2.47</td>
<td>.51</td>
</tr>
<tr>
<td>Total</td>
<td>174</td>
<td>2.59</td>
<td>.51</td>
</tr>
</tbody>
</table>

Discussion: Research Question # 2b

Members of the public associate sentencing with incarceration (Roberts, 1994). Thus, it seemed probable that factual knowledge of prison conditions should influence respondents' assessments of sentencing severity. Those participants who lacked accurate information on prison conditions were expected to appraise sentences as soft. However, the results of this research do not support a relationship between knowledge of prison conditions and attitudes towards sentencing. Respondents held particular beliefs concerning sentencing severity regardless of the amount of factual information at their disposal.

This finding is not surprising given that a relationship between punitive attitudes and knowledge of prison conditions was not supported by this research either. Although it is possible that knowledge of prison conditions does not impact respondents’ perceptions of sentencing severity, methodological limitations specific to this research may account for the lack of research findings.

As previously mentioned, both sample size and sample composition may have hindered this study’s ability to discern a relationship between attitudes and knowledge. These same
limitations may explain the lack of association between sentencing attitudes and knowledge.

Further, the knowledge scale used to test the relationship between perceptions of sentencing severity and knowledge of prison conditions was the same scale used to test the association between punitiveness and knowledge of prison conditions in Canada. As noted, the knowledge scale constructed for this research may have been inappropriate. If the knowledge scale did not measure the type of information that influences attitudes, then it would not be possible for this research to find an association between attitudes towards sentencing and knowledge of prison conditions.

The possibility that the knowledge scale was inappropriate presents a point of departure for future research. In order to establish a link between attitudes and knowledge, it may be necessary for researchers to better conceptualize and operationalize the term “knowledge”. Factual knowledge concerning criminal justice policy and operations may have little impact on public perceptions of the justice system. However, other types of information, for example knowledge of issues that relate to public concerns over safety, such as awareness of falling crime rates, may be more directly associated with public attitudes on issues of criminal justice. Future research should focus on identifying which, if any, types of information influence public attitudes concerning the justice system.

Although for this sample this research did not establish a relationship between sentencing attitudes and knowledge, and more broadly between punitiveness and knowledge, researchers should continue to explore the link between public opinion and public knowledge. Finding a relationship between attitudes and knowledge could help researchers to identify methods of altering public opinion of the justice system. If knowledge impacts attitudes, then education
campaigns may be capable of correcting misperceptions concerning the justice system, while at the same time providing the public with the facts necessary for informed criminal justice decision-making.

The Impact of Knowledge on Attitudes

The first section of this research was aimed at exploring the relationship between attitudes and knowledge. Specifically, it was devised to examine whether the amount of information at the disposal of respondents at the time of questioning influences their attitudes towards the criminal justice system. In contrast, this section of this research explores whether providing respondents with factual information prior to soliciting their viewpoints can alter their attitudes.

Results: Research Questions # 3 and # 4

Previous research has demonstrated that providing members of the public with information through case scenarios, deliberative polls, and focus groups can alter their attitudes concerning the criminal justice system (see for example, Cumberland & Zamble, 1992; Doble, 1987; Fishkin, 1995; Sanders, 1999). These studies indicate that specific questioning techniques, such as the use of cases scenarios, result in more tolerant and flexible attitudes. In contrast, global questions may intensify the severity of public attitudes towards issues of criminal justice (Cumberland & Zamble, 1992). Consequently, it is essential to supplement global questions with sample vignettes in order to determine whether the attitudes evoked through global questioning techniques are wholly punitive and whether they are amenable to change.

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41 Research questions three and four are presented together because they are tested through the same statistical procedure.
Although the benefits of specific questioning techniques have been demonstrated in the public opinion research literature, they have not been applied to research concerning prison conditions. Thus, this research addressed the following question:

*Can the provision of factual information (i.e., knowledge), through the use of case-scenarios, alter respondent attitudes towards prison conditions?*

To examine this research concern, study participants were assigned to one of three experimental conditions. Respondents received either a global question measuring their perceptions of prison conditions, or one of two cases scenarios followed by the same question.\(^42\) The purpose of the experimental portion of the questionnaire was to determine whether participant attitudes towards prison conditions differ based upon the amount of information presented to them.

It was hypothesized that respondents would be less punitive under case-specific conditions than when presented with a global question. Thus, it was expected that respondents presented with a global question would be more likely to evaluate prison conditions as “too soft” compared with participants receiving a case scenario. These results would indicate that attitudes towards prison conditions can be altered through the provision of factual information. Further, these results would support Cumberland and Zamble’s (1992) finding that specific questioning techniques evoke less punitiveness from respondents than global questions.

\(^{42}\) In version A of the questionnaire, respondents were asked the following global question, “In your opinion, do you think that prison conditions are too harsh, too soft, or about right?” In versions B and C of the questionnaire, respondents were presented with a case scenario and then asked the following question, “Having read about the experiences of this prisoner, in your opinion, do you think that prison conditions are too harsh, too soft, or about right?” Please see Appendices B and C for the specific information contained in the case scenarios.
Participants receiving sample vignettes were presented with exactly the same information on prison conditions. However, an offence characteristic, offence severity, was varied between the two case scenarios. In version B of the questionnaire, participants read a case scenario involving a violent offence (i.e., armed robbery). Whereas, in version C of the questionnaire, the case scenario involved a nonviolent offence (i.e., fraud and embezzlement).

Previous research has indicated that offence severity influences public attitudes concerning issues of criminal justice, such as sentencing and parole (see for example, Cumberland & Zamble, 1992; Gebotys & Roberts, 1987). Offence severity was manipulated in this research in order to determine if it also influences perceptions of prison conditions. Thus, this research addressed the following question:

*Does offence seriousness effect whether attitudes can be altered through the provision of factual information?*

It was hypothesized that offence severity would act as an intervening variable in the relationship between attitudes towards prison conditions and the level of information provided to respondents. Perceptions of prison conditions were expected to shift (i.e., become less punitive) when respondents were given a case-scenario involving a nonviolent offence, but would remain the same when they were presented with a case-scenario involving a violent offence. Thus, it was expected that respondents given a case-scenario involving a violent offence would express similar attitudes as those participants presented with a global question. In contrast, those presented with a nonviolent case-scenario were expected to express significantly different (i.e., less punitive) attitudes.

In this research, the majority (51.6%) of all valid participants felt that prison conditions in
Canadian federal penitentiaries are “about right” and a significant minority (45.1%) believed that prison conditions are “too soft” (see Table 5.7 below). This finding differs from previous Canadian research which indicates that the majority of Canadians evaluate prison conditions as lax (see for example, Fattah, 1982). This difference may be explained by the nature of the questioning techniques utilized. In the current study, participants received either global or specific questions. Whereas, in other research, respondents replied solely to global questions.

Although the majority of respondents in this research perceived prison conditions to be “about right,” when the frequency of participant responses are broken down according to the version of the survey received the picture changes slightly (see Table 5.7 below). The majority of respondents who received version A of the questionnaire (i.e., the global question) evaluated prison conditions as “too soft”. Whereas the majority of respondents receiving versions B and C of the questionnaire (i.e., the two case scenarios) appraised prison conditions as “about right”. Thus, based solely upon frequencies, questioning technique appears to influence respondent perceptions of prison conditions. Participants receiving information on prison conditions via case scenarios expressed more tolerant opinions compared to those responding to a global question.
Table 5.7

**Frequency of Respondent Attitudes towards Prison Conditions by Questionnaire Version**

<table>
<thead>
<tr>
<th>Perceptions of prison conditions</th>
<th>Questionnaire version</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A: global</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B: violent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C: nonviolent</td>
<td></td>
</tr>
<tr>
<td>question</td>
<td>case scenario</td>
<td>case scenario</td>
</tr>
<tr>
<td>Too harsh</td>
<td>1.8%</td>
<td>1.5%</td>
</tr>
<tr>
<td>About right</td>
<td>48.2%</td>
<td>55.4%</td>
</tr>
<tr>
<td>Too soft</td>
<td>50.0%</td>
<td>43.1%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Note.** $N = 182$

In order to determine if these differences were significant, and thereby test research questions three and four, a One-Way ANOVA was run using questionnaire version as the grouping variable and perceptions of prison conditions as the dependent variable.\(^{43}\)\(^{44}\) The result of this test was not statistically significant, $F(2, 179) = .692, p = .502$ (see Table 5.8 below for the means and standard deviations).\(^{45}\) Respondent perceptions of prison conditions were

\(^{43}\)Questionnaire version corresponds with the level of information received by respondents. Version A involved the global question, version B involved the violent case-scenario, and version C involved the nonviolent case-scenario. As noted, perceptions of prison conditions was measured by the following question: “In your opinion, do you think that prison conditions are too harsh, too soft, or about right?”

\(^{44}\)As noted, the ANOVA procedure should not be used with nonparametric data. However, this practice is common in the social sciences. By applying the ANOVA to ordinal level data, this test is less likely to find an effect.

\(^{45}\)Since the ANOVA procedure is less likely to find an effect with ordinal level data, a nonparametric test similar to the ANOVA, the Kruskal-Wallis test, was also run on these variables. This test was run because it had the potential of identifying significant differences that were not picked up by the ANOVA. However, the result of this test was not significant.
statistically the same regardless of whether they received a global question, violent case-scenario, or nonviolent case-scenario. Therefore, the questioning technique utilized did not influence participant appraisals of prison conditions. These results indicate that respondent attitudes towards prison conditions were not altered through the provision of factual information. Further, in terms of the case scenarios, participant evaluations of penal severity did not differ when offence seriousness was manipulated.

Table 5.8

<table>
<thead>
<tr>
<th>Questionnaire Version</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: global question</td>
<td>56</td>
<td>2.48</td>
<td>.54</td>
</tr>
<tr>
<td>B: violent case scenario</td>
<td>65</td>
<td>2.42</td>
<td>.53</td>
</tr>
<tr>
<td>C: nonviolent case scenario</td>
<td>61</td>
<td>2.36</td>
<td>.61</td>
</tr>
<tr>
<td>Total</td>
<td>182</td>
<td>2.42</td>
<td>.56</td>
</tr>
</tbody>
</table>

In order to determine if any other factors influenced respondent perceptions of prison conditions, chi-square tests were run with each of the control variables. The results of these tests were not statistically significant. Therefore, participant appraisals of penal severity did not vary according to gender, prior contact with a correctional facility, violent victimization, property victimization, or the number of law-related courses taken by respondents.46

46 The results of the chi-square tests between perceptions of prison conditions and the control variables were as follows:
for perceptions of prison conditions by gender, $\chi^2 (2, N = 182) = 2.020, p = .364$,
for perceptions of prison conditions by contact with a prison, $\chi^2 (2, N = 181) = 2.498, p = .287$,
for perceptions of prison conditions by violent victimization, $\chi^2 (2, N = 181) = 1.792, p = .408$,
for perceptions of prison conditions by property victimization, $\chi^2 (2, N = 180) = 1.603, p = .449$,
and for perceptions of prison conditions by law-related courses, $\chi^2 (2, N = 182) = .067, p = .967$. 
Since one of the primary concerns of this research was to examine the relationship between attitudes and knowledge, it was important to determine whether the preexisting level of respondent knowledge concerning prison conditions influenced their perceptions of penal severity. Spearman’s rho correlation coefficient for nonparametric data was run using the knowledge scale as the independent variable and attitudes towards prison conditions as the dependent variable. The result of this test was not statistically significant, $r_s = -.100$, $N = 182$, $p = .178$. Therefore, this research does not support a relationship between knowledge of prison conditions and respondent appraisals of penal severity.

In order to determine if participant perceptions of prison conditions differed according to the level of knowledge at their disposal, a One-Way ANOVA was run using level of knowledge as the grouping variable and attitudes towards prison conditions as the dependent variable.\textsuperscript{47,48} The result of this test was not statistically significant, $F (2, 179) = 1.480$, $p = .230$ (see Table 5.9 below for the means and standard deviations). Therefore, respondent perceptions of penal severity did not vary according to the amount of factual information concerning prison conditions at their disposal.

\textsuperscript{47} Level of knowledge was measured by recoding the raw knowledge scale into three categories of respondents: those expressing low, moderate, and high levels of knowledge concerning prison conditions.

\textsuperscript{48} As previously noted, by using the ANOVA procedure on nonparametric data it is less likely to find an effect.
Table 5.9

**Mean Attitudes towards Prison Conditions by Respondent Knowledge**

<table>
<thead>
<tr>
<th>Level of respondent knowledge</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>28</td>
<td>2.46</td>
<td>.58</td>
</tr>
<tr>
<td>Moderate</td>
<td>115</td>
<td>2.45</td>
<td>.55</td>
</tr>
<tr>
<td>High</td>
<td>39</td>
<td>2.28</td>
<td>.56</td>
</tr>
<tr>
<td>Total</td>
<td>182</td>
<td>2.42</td>
<td>.56</td>
</tr>
</tbody>
</table>

In contrast, respondent perceptions of penal severity were influenced by their level of punitiveness. As previously discussed in the section on sentencing attitudes, a moderate positive association was found between perceptions of prison conditions and respondent punitiveness, $r_s = +.435$, $N = 182$, $p < .001$. Thus, as the level of respondent punitiveness increased, so did the tendency to evaluate prison conditions as soft. Further, a significant between groups difference in attitudes towards prison conditions was found when participants were grouped according to punitiveness, $F(2, 179) = 14.277$, $p < .001$ (see Table 5.4 above for the means and standard deviations). Those with highly punitive attitudes were more likely to appraise prison conditions as lax.

**Discussion: Research Questions # 3 and # 4**

This section of this research was aimed at exploring the impact of factual knowledge on respondent attitudes. It was hypothesized that participants receiving factual information on prison conditions, prior to soliciting their viewpoints, would express more tolerant opinions than respondents presented solely with a global question. Thus, this research examined whether factual information can alter attitudes.
The results of this research indicate that the null hypothesis should be accepted. Providing participants with factual information in the form of case scenarios did not produce variations in their perceptions of prison conditions. This finding differs from previous research which indicates that factual knowledge is capable of changing public attitudes (see for example, Cumberland & Zamble, 1992; Doble, 1987; Fishkin, 1995; Sanders, 1999). Similarly, this research fails to support Cumberland and Zamble’s (1992) finding that specific questioning techniques, such as case scenarios, produce more tolerant opinions.

Methodological limitations specific to this study may explain why this research did not support the findings of other researchers. As previously mentioned, the sample used in this research was relatively small, consisting of a total of 187 respondents. It is more difficult for statistical procedures to pick up significant relationships within a small data set. The One-Way ANOVA procedure, used to test the research hypotheses, is sensitive to sample size. With between 56 and 65 participants located within each ANOVA grouping (i.e., questionnaire version A, version B, or version C), small variations in attitudes were not significant. However, if a larger sample had been utilized, these variations may have been statistically significant.

Further, with a larger sample, there may have been greater variation in participant responses to the attitude question between the three experimental conditions. Since the ANOVA procedure is based upon variability, greater between group variation increases the likelihood that the differences would be statistically significant. In order to avoid these pitfalls, future researchers should consider using samples large enough to support statistical procedures when the sample is broken up into smaller groups.

Sample composition may also help account for the lack of research findings. As
mentioned, the sample was comprised of criminology students. By the nature of their inquiry, criminology students have a vested interest in the criminal justice system. It is possible that these students have already formed strongly held beliefs concerning the justice system that could not be changed by providing them with new or contradictory information. Cognitive dissonance may have led respondents to answer the attitude question without considering the case scenario information or to reject this information as erroneous or inconsequential to their beliefs concerning prison conditions. If so, then the treatment conditions would not produce differences in respondent perceptions of prison conditions.

Further, the type of information presented in the case scenarios may not have been relevant to respondent assessments of prison conditions. It is possible that participants did not consider prison programs, operations, or amenities when they evaluated criminal justice toughness. If the type of information presented to respondents did not influence their attitudes, then their perceptions of prison conditions should not differ from the attitudes of those presented with a global question.

Although it cannot be determined with certainty why this research failed to produce changes in respondent attitudes towards prison conditions, the lack of results highlights an important area for future research. It is known that public attitudes can be altered through the provision of factual information. However, there is little information on the mechanisms involved in changing attitudes. What types of information do members of the public consider when evaluating the justice system? And, under what conditions are public attitudes amenable to change? Future research should focus on identifying the circumstances under which public attitudes are malleable and the conditions under which they are resistant to change. By
determining how public attitudes are altered, researchers may be better positioned to change public perceptions of the justice system, while providing them with the factual information necessary for informed criminal justice decision-making.

The second research concern examined in this section explored whether offence severity intervenes in the relationship between attitudes towards prison conditions and the level of information presented to respondents. Participants receiving a violent case scenario were expected to express similar attitudes as those presented with a global question. In contrast, respondents receiving a nonviolent case scenario were expected to express significantly different (i.e., less punitive) evaluations of prison conditions. However, the results of this research indicate that participant perceptions of prison conditions did not differ regardless of whether they received a global question, violent case scenario, or nonviolent case scenario. Thus, manipulating offence severity did not influence whether respondent attitudes could be altered through the provision of factual information.

This research result may be explained by the same limitations discussed above. Since a relationship was not found between level of information and attitudes towards prison conditions, it is not possible to determine whether a third variable, offence severity, intervenes in this relationship. If a significant difference had been found in respondent attitudes towards prison conditions, then a post hoc test would have been capable of determining whether offence severity acted as an intervening variable. However, since the original relationship was not significant, a post hoc test was inappropriate. Thus, based upon the results of this research, it is only possible to conclude that participant perceptions of prison conditions did not differ on the basis of questioning technique.
Although questioning technique did not produce differences in participant perceptions of penal severity, the relationship between respondent punitiveness and appraisals of prison conditions was influenced by questioning technique. As noted, participants with a highly punitive disposition were more likely to appraise prison conditions as lenient. This relationship was strengthened when respondents were provided with factual information via case scenarios. Nonparametric correlations run between the punitiveness scale and each experimental condition illustrate stronger correlations between respondent evaluations of prison condition leniency when they were presented with information via case scenarios compared with when they were presented solely with a global question. Therefore, factual information, provided to participants via case scenarios, strengthened the relationship between perceptions of leniency and punitiveness. Providing punitive respondents with factual information increased their tendency to evaluate prison conditions as soft.

Although these results cannot be generalized beyond the research sample, this research implies that factual information on issues of criminal justice may influence respondents differently, depending upon their level of punitiveness. Rather than changing their opinions, punitive respondents may use the information provided to them to support already held beliefs concerning the justice system. Future researchers may want to examine this relationship in the general population to determine whether there is a difference in how information impacts the attitudes of punitive and tolerant respondents. They may further want to explore what types of

49 The correlations between the punitiveness scale and the responses to the attitude question in each experimental condition were as follows:
for experimental condition A: global question, $r_s = +.357, N = 56, p < .01$,
for experimental condition B: violent case scenario, $r_s = +.447, N = 65, p < .001$, and
for experimental condition C: nonviolent case scenario, $r_s = +.499, N = 61, p < .001$. 
information would be capable of altering the attitudes of punitive respondents.

Although previous research has demonstrated that specific questioning techniques result in more tolerant opinions (see for example, Cumberland & Zamble, 1992), the findings of this research indicate that, in combination with the level of respondent punitiveness, specific questions may enhance negative appraisals of the justice system. If a relationship between factual information, punitiveness, and attitudes towards the justice system is found in the general public, then education campaigns aimed at altering public perceptions of the justice system, or informing the public on important criminal justice matters, may not have their intended effect. Therefore, it is essential for researchers to supply the public with factual information in a manner that does not enhance their desire to punish. Researchers will need to counteract punitiveness when devising information campaigns. Otherwise, it may not be possible to solicit informed rational criminal justice decision-making from members of the public.

Further, since the public receive most of their information on crime and the criminal justice system from the media (Chartier, 2000), members of the media should be educated on how to present information to the public (Sanders, 1999). Crime reporters should be trained to present news in a manner that does not simply sensationalise the issues, but rather informs the public and responds to their concerns over safety. By educating the media, it may be possible to reduce negative public appraisals of the justice system.

Although this research failed to demonstrate that attitudes can be altered through the provision of factual information, it is essential for researchers to continue to explore the link between public attitudes and public knowledge. By determining how information impacts attitudes, researchers will be better positioned to use factual information in order to alter negative
perceptions of the justice system. Further, they may discover methods of providing the public with the facts necessary for informed criminal justice decision-making, without enhancing the public's desire to punish. These issues will be discussed further in the upcoming chapter.
Chapter Six: Conclusion

Summary of Research Findings

This research explored the relationship between attitudes and knowledge, and assessed the impact of factual information on attitudes towards prison conditions in Canada. Specifically, it addressed the following four research questions:

(a) *Is there a relationship between respondent attitudes and knowledge of prison conditions in Canadian federal penitentiaries?*

(b) *Is opinion of prison conditions associated with attitudes towards sentencing?*

(c) *Can the provision of factual information (i.e., knowledge), through the use of case-scenarios, alter respondent attitudes towards prison conditions?*

(d) *Does offence seriousness effect whether attitudes can be altered through the provision of factual information?*

With respect to the first research question, this study finds no support for a relationship between attitudes and knowledge of prison conditions in Canada. In this research, the term “attitudes” refers to the cognitive positions held by survey respondents concerning prison conditions in Canadian federal penitentiaries. Respondent attitudes were measured on a scale of punitiveness, ranging from lenient beliefs (including for example, high approval for institutional privileges and amenities) to punitive beliefs (including for example, low approval for institutional privileges and amenities). The punitiveness scale was comprised of a series of questions measuring the level of respondent approval for a variety of penal practices, programs, and policies. Comparatively, in this research, the term “knowledge” refers to the amount of factual
information on prison conditions at the disposal of respondents at the time of questioning.

Respondent knowledge was measured through a series of fact-testing questions concerning prison programs, policies, and operations. Participant responses to the individual knowledge measures were combined into a scale reflecting the total number of correct responses to the fact-testing questions per respondent.

Participant scores on the two scales were correlated in order to determine if there is a statistical association between attitudes and knowledge of prison conditions. This research found no support for a relationship between attitudes and knowledge of prison conditions in Canada. Respondents held particular perceptions of prison conditions regardless of the amount of factual information at their disposal. Therefore, punitiveness was not dependent upon participants' level of knowledge at the time of questioning. Opinion was formed irrespective of knowledge.

Additional analysis indicates that specific attitudes (i.e., individual measures of opinion) may be influenced by knowledge. However, the nature of this relationship appears to be complex and multidirectional. In some instances, knowledge of specific correctional issues increased respondent punitiveness, whereas, in other instances, knowledge led to more tolerant opinions.

In general, the majority of participants held moderately punitive attitudes concerning prison conditions in Canada. They were supportive of a mixture of progressive and punitive penal policies, practices, and programs. Further, the majority of respondents were moderately knowledgeable on the topic of prison conditions. They were widely aware of the general facets of prison life, but lacked factual knowledge on issues relating to prisoner health, prisoners' rights, penal policies, and release from prison.

In terms of the second research question, this study found moderate support for a
relationship between attitudes towards prison conditions and attitudes towards sentencing. Participants evaluating prison conditions as lenient were more likely to appraise sentencing practices as soft. However, this research indicates that this relationship is spurious. An underlying individual trait, punitiveness, influenced both attitudes towards sentencing and attitudes towards prison conditions.

This study found no support for a relationship between sentencing attitudes and knowledge of prison conditions. Respondents held particular opinions of sentencing irrespective of the level of factual information concerning prison conditions at their disposal.

With respect to the third research question, this study found that respondents who received factual information via cases scenarios, prior to soliciting their viewpoints, expressed statistically similar attitudes as participants who received a global question. Thus, participant attitudes concerning prison conditions were not altered through the provision of factual information. In this research, specific questioning techniques, in the form of case scenarios, were not capable of producing more tolerant opinions than global questioning techniques. However, specific questions strengthened the relationship between punitiveness and perceptions of criminal justice leniency. Punitive respondents receiving information via case scenarios were more likely to perceive prison conditions as soft.

Finally, in terms of the fourth research question, offence severity did not intervene in the relationship between perceptions of prison conditions and the level of information provided to respondents. Participant appraisals of prison conditions did not differ regardless of whether they received a global question, violent case scenario, or nonviolent case scenario. Therefore, manipulating offence severity did not influence whether respondent attitudes could be altered
through the provision of factual information.

**Research Limitations**

This research was subject to a number of methodological limitations that may have precluded positive research findings. The sample selected for this research was chosen on the basis of convenience. The sample was comprised of university level students enrolled in introductory level criminology courses who volunteered to participate in this research. As a result, the sample was small and homogeneous. Sample size and composition may have limited the variability of participant responses and the statistical procedures' abilities to identify significant relationships between the variables under investigation.

The lack of research findings may also be explained by the nature of the measurement instruments created for this research. Specifically, the concept of "knowledge" may not have been appropriately operationalized. The knowledge scale, used to measure respondent knowledge of prison conditions, and the factual information presented in the case scenarios may not have reflected the type of information that influences attitudes. If the knowledge measures were invalid, then it would not be possible to discern a relationship between attitudes and knowledge, nor would it be possible to alter respondent attitudes through the provision of factual information.

Further, in this research, it was hypothesized that knowledge is inversely related to attitudes. Thus, it was expected that persons expressing punitive attitudes concerning prison conditions would be less knowledgeable about corrections than those conveying more tolerant opinions. However, when the relationships between individual measures of attitude and
knowledge were analysed, knowledge was inversely related to punitiveness only some of the time. In some instances, knowledge of specific correctional issues increased respondent punitiveness, whereas, in other instances, knowledge led to more tolerant opinions. Thus, the nature of the relationship between attitudes and knowledge, if it exists, may be complex and multidirectional rather than linear and directional. This implies that the measurement instruments created to assess this relationship (i.e., additive scales), and the corresponding statistical test, may have been inappropriate and therefore incapable of finding a statistical association between attitudes and knowledge. In consequence, this research may have been limited by the assumptions of the researcher and the corresponding measurement instruments created to test these assumptions.

Finally, this research was conducted upon a non-representative sample. Although a representative sample is not necessary to measure relationships between variables, it is a requirement for generalizability. Thus, the findings of this research cannot be generalized beyond the research sample. In consequence, it remains unknown if a relationship between attitudes and knowledge exists in the general Canadian population. Similarly, other research findings, for example the relationship between punitiveness and perceptions of leniency, are also limited to the current research sample.

In order to improve upon these limitations, future researchers, interested in examining the relationship between attitudes and knowledge and/or the impact of knowledge on attitudes, should consider using much larger, representative samples of the population. Further, they should reconceptualize the concept of “knowledge” and explore different avenues of measuring knowledge, as well as the relationship between attitudes and knowledge. As a point of departure,
future researchers may want to first conduct exploratory, qualitative inquiries to determine what types of information, and other factors, members of the public consider when forming and expressing opinions on issues of criminal justice.

**Conclusions**

The results of this research find no support for a relationship between attitudes and knowledge of prison conditions in Canada. Although this finding cannot be generalized beyond the current research sample, if attitudes and knowledge on issues of criminal justice are unrelated in the general population then the role of public opinion in criminal justice policy-making is all the more complex in nature. How should researchers and criminal justice practitioners interpret public opinion results? Is it possible to solicit informed public judgement? How might public opinion interact with more fundamental processes shaping individual and collective identities? If public evaluations of the criminal justice system are based upon an emotional response, or other factors, rather than factual knowledge of the issues, should their opinions guide public policy?

In order to answer these questions, future research should be conducted upon the relationship between attitudes and knowledge in order to determine if an association between opinion and factual information exists in the general population. If this relationship is prevalent in the general population, then it may be possible for researchers to alter negative perceptions of the justice system while supplying the public with the facts necessary for informed criminal justice decision-making. However, if this relationship is nonexistent, then researchers and policymakers may need to reassess the weight given to public opinion.

As a point of departure, researchers should explore the factors that influence public
opinion. They should attempt to determine what types of information and issues members of the public consider when evaluating the justice system. Qualitative research, such as focus groups and interviews, may be exceptionally useful when exploring these research concerns.

The second research area examined in this study was the impact of knowledge on attitudes. The results of this research indicate that providing respondents with factual information prior to soliciting their viewpoints could not alter their perceptions of prison conditions. However, previous research findings indicate that some public attitudes may be shaped by factual information (see for example, Cumberland & Zamble, 1992; Doble, 1987; Fishkin, 1995; Sanders, 1999). The discrepancy between the findings of this research and those of other researchers may be explained by the nature of the topic presented to the respondents in this study. Attitudes concerning prison conditions may be particularly resistant to the influence of factual information. However, attitudes concerning other criminal justice issues may be more flexible (see for example, Cumberland & Zamble, 1992; Doble, 1987; Fishkin, 1995; Sanders, 1999). Thus, researchers should continue to assess the impact of factual information on public attitudes concerning criminal justice matters. They should attempt to identify the types of public attitudes open to the influence of factual information.

Further, although there is some support for the ability of information to change attitudes, the process involved in altering opinion remains unclear. Researchers should explore the conditions under which public attitudes are malleable and the situations under which they are resistant to change. By determining how information impacts attitudes, researchers and policymakers may be better equipped to design effective information campaigns.

Similarly, further research should be conducted upon the effects of differing questioning
techniques on public attitudes. This research indicates that supplying respondents with factual information in the form of case scenarios may have the unintended effect of enhancing negative perceptions of the justice system in punitive persons. If education campaigns are to be used to inform the public on important matters of criminal justice, it is imperative that they do not heighten negative perceptions of the system.

In conclusion, this research failed to find an association between attitudes and knowledge on issues of criminal justice. It was also incapable of supporting previous research findings that attitudes can be altered through the provision of factual information. However, the results of one study are not conclusive on these issues. Further, this research was fraught with methodological limitations that may have precluded positive research findings. It is essential that researchers continue to explore the link between public attitudes and knowledge, and to assess the impact of knowledge on attitudes. By determining how information influences opinion, researchers and policymakers will have a better understanding of public opinion and may be capable of soliciting informed public judgement on issues of criminal justice.
References


United States: the Public Agenda Foundation.


Appendix A
Questionnaire Version A
Public Opinion of Prison Conditions in Canadian Federal Penitentiaries

The following survey is designed to explore your opinions of prison conditions in Canadian federal penitentiaries. Canadian federal penitentiaries house adult inmates who have been sentenced to two years or more in prison in Canada. You will be asked to respond to a series of statements concerning prison conditions in Canadian federal penitentiaries. Thank you for your participation in this research.

The following questions will provide background information to the researcher.

1. Gender: Male _______ Female _______

2. How many law-related courses have you taken? _______

3. Have you ever visited a prison? Yes _______ No _______

4. Have you ever been the victim of
   (a) a violent crime (for example assault)? Yes _______ No _______
   (b) a property crime (for example theft)? Yes _______ No _______

5. Do you think that sentences imposed are too harsh, too lenient, or about right?
   Too Harsh _______ Too Lenient _______ About Right _______
The following statements are designed to explore your opinions of prison conditions in Canadian federal penitentiaries. Please read the following statements carefully and indicate whether you strongly agree, agree, disagree, or strongly disagree with each statement by circling the response that best represents your opinion.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prisoners should be allowed to earn their high school diplomas while incarcerated.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>2. Prisoners should be allowed to earn university degrees while incarcerated.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>3. Prisoners should be allowed to vote while incarcerated.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>4. Prisoners should be allowed to keep televisions in their cells.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>5. Prisoners receive too many privileges while in prison.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>6. Prisons are similar to hotels.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>7. Prisoners should be paid for their work in prison.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>8. Conjugal visits, which permit overnight visits by prisoners’ spouses or partners, are a good idea.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>9. Prisoners should be granted temporary absences from prison to visit their families.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>10. Once sentenced to prison, prisoners should lose all of their rights within society.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>11. Physical punishment should be used to control unruly prisoners.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>12. Solitary confinement is a good way to control prisoners.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>-------</td>
<td>----------</td>
<td>-------------------</td>
</tr>
<tr>
<td>13.</td>
<td>Prisoners' mail should be censored by correctional personnel.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>14.</td>
<td>Prisoners' telephone conversations should be recorded by correctional personnel.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>15.</td>
<td>In order to reduce prison overcrowding, the parole board should be given more authority to release prisoners.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>16.</td>
<td>In order to reduce prison overcrowding, more prisons should be built.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>17.</td>
<td>Prison life should be made more difficult for prisoners.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>18.</td>
<td>Releasing prisoners into the community on parole is dangerous.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>19.</td>
<td>Prisoners should be forced to participate in drug rehabilitation programs if deemed necessary by correctional personnel.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>20.</td>
<td>Prisoners should be forced to work while incarcerated.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
</tbody>
</table>
The following statements are designed to explore your knowledge of prison conditions in Canadian federal penitentiaries. Please read the following statements carefully and indicate whether you think they are true or false by circling your response.

<table>
<thead>
<tr>
<th>Statement</th>
<th>True</th>
<th>False</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prisoners have the right to vote.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>2. In most cases, the government pays for the university education of prisoners.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>3. In most cases, the government pays for the high school education of prisoners.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>4. Prisoners will not be granted parole unless they complete the programs recommended by correctional personnel.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>5. All prisoners’ mail is read by correctional personnel.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>6. If they want television sets in their cells, prisoners must pay for them.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>7. If they qualify, Canadian prisoners are allowed conjugal visits with their spouses or partners.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>8. Prisoners are paid to work within the prison.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>9. Prisoners are forced to work while incarcerated.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>10. Prisoners who are unable to work receive an allowance from the government.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>11. All prisoners are granted work release within the community if they request it.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>12. All prisoners are granted temporary absences to visit their families if they request them.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>13. Maximum security prisoners will not be released unless they serve part of their sentence in lower security prisons (such as minimum security).</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>14. Prisoners are allowed to keep items of personal property, such as clothing and pictures, in their cells.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
</tbody>
</table>
15. Prisoners’ visits and conversations may be recorded by correctional personnel.  
   True  False  Don’t Know

16. The suicide rate among prisoners in Canada is much lower than in the general Canadian population.  
   True  False  Don’t Know

17. Prisoners must pay for their expenses, such as telephone calls, while incarcerated.  
   True  False  Don’t Know

18. Prisoners have access to a prison library.  
   True  False  Don’t Know

19. Compared to the general Canadian population, there is a higher rate of HIV and Hepatitis C infection among prisoners.  
   True  False  Don’t Know

20. Prisoners may be double-bunked in a cell built for one person.  
   True  False  Don’t Know

Please answer the following question concerning prison conditions in Canadian federal penitentiaries.

1. In your opinion, do you think that prison conditions are too harsh, too soft, or about right?

   Too Harsh _____  Too Soft _____  About Right _____

You have reached the end of the questionnaire. Thank you very much for participating in this survey. Your time is greatly appreciated.
Appendix B

Questionnaire Version B
Public Opinion of Prison Conditions in Canadian Federal Penitentiaries

The following survey is designed to explore your opinions of prison conditions in Canadian federal penitentiaries. Canadian federal penitentiaries house adult inmates who have been sentenced to two years or more in prison in Canada. You will be asked to respond to a series of statements concerning prison conditions in Canadian federal penitentiaries. Thank you for your participation in this research.

The following questions will provide background information to the researcher.

1. Gender: Male _____ Female _____

2. How many law-related courses have you taken? _____

3. Have you ever visited a prison? Yes _____ No _____

4. Have you ever been the victim of
   (a) a violent crime (for example assault)? Yes _____ No _____
   (b) a property crime (for example theft)? Yes _____ No _____

5. Do you think that sentences imposed are too harsh, too lenient, or about right? Too Harsh _____ Too Lenient _____ About Right _____
The following statements are designed to explore your opinions of prison conditions in Canadian federal penitentiaries. Please read the following statements carefully and indicate whether you strongly agree, agree, disagree, or strongly disagree with each statement by circling the response that best represents your opinion.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prisoners should be allowed to earn their high school diplomas while incarcerated.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>2. Prisoners should be allowed to earn university degrees while incarcerated.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>3. Prisoners should be allowed to vote while incarcerated.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>4. Prisoners should be allowed to keep televisions in their cells.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>5. Prisoners receive too many privileges while in prison.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>6. Prisons are similar to hotels.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>7. Prisoners should be paid for their work in prison.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>8. Conjugal visits, which permit overnight visits by prisoners' spouses or partners, are a good idea.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>9. Prisoners should be granted temporary absences from prison to visit their families.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>10. Once sentenced to prison, prisoners should lose all of their rights within society.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>11. Physical punishment should be used to control unruly prisoners.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>12. Solitary confinement is a good way to control prisoners.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Disagree</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>----------------</td>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>13.</td>
<td>Prisoners’ mail should be censored by correctional personnel.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>14.</td>
<td>Prisoners’ telephone conversations should be recorded by correctional personnel.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>15.</td>
<td>In order to reduce prison overcrowding, the parole board should be given more authority to release prisoners.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>16.</td>
<td>In order to reduce prison overcrowding, more prisons should be built.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>17.</td>
<td>Prison life should be made more difficult for prisoners.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>18.</td>
<td>Releasing prisoners into the community on parole is dangerous.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>19.</td>
<td>Prisoners should be forced to participate in drug rehabilitation programs if deemed necessary by correctional personnel.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>20.</td>
<td>Prisoners should be forced to work while incarcerated.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
</tbody>
</table>
The following statements are designed to explore your knowledge of prison conditions in Canadian federal penitentiaries. Please read the following statements carefully and indicate whether you think they are true or false by circling your response.

<table>
<thead>
<tr>
<th></th>
<th>True</th>
<th>False</th>
<th>Don’t Know</th>
</tr>
</thead>
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<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>2.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>3.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>4.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>5.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>6.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>7.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>8.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>9.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>10.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>11.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>12.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>13.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>14.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
</tbody>
</table>

1. Prisoners have the right to vote.
2. In most cases, the government pays for the university education of prisoners.
3. In most cases, the government pays for the high school education of prisoners.
4. Prisoners will not be granted parole unless they complete the programs recommended by correctional personnel.
5. All prisoners’ mail is read by correctional personnel.
6. If they want television sets in their cells, prisoners must pay for them.
7. If they qualify, Canadian prisoners are allowed conjugal visits with their spouses or partners.
8. Prisoners are paid to work within the prison.
9. Prisoners are forced to work while incarcerated.
10. Prisoners who are unable to work receive an allowance from the government.
11. All prisoners are granted work release within the community if they request it.
12. All prisoners are granted temporary absences to visit their families if they request them.
13. Maximum security prisoners will not be released unless they serve part of their sentence in lower security prisons (such as minimum security).
14. Prisoners are allowed to keep items of personal property, such as clothing and pictures, in their cells.
15. Prisoners’ visits and conversations may be recorded by correctional personnel.  
   True  False  Don’t Know

16. The suicide rate among prisoners in Canada is much lower than in the general Canadian population.  
   True  False  Don’t Know

17. Prisoners must pay for their expenses, such as telephone calls, while incarcerated.  
   True  False  Don’t Know

18. Prisoners have access to a prison library.  
   True  False  Don’t Know

19. Compared to the general Canadian population, there is a higher rate of HIV and Hepatitis C infection among prisoners.  
   True  False  Don’t Know

20. Prisoners may be double-bunked in a cell built for one person.  
   True  False  Don’t Know

The following paragraph describes the experiences of a prisoner in a Canadian federal penitentiary. Please read the paragraph and then answer the question which follows.

Joe is serving five years in a federal penitentiary for armed robbery. He has several previous convictions for crimes involving violence. Joe works in the institution and earns $6.90 per day, from which he is expected to pay for his needs and hobbies while in prison. He also takes university courses by correspondence at Queens University, which he pays for himself. Joe is allowed to own and keep a television set in his cell. He paid for the television with his own money and is responsible for paying his cable bill. Although not previously a hard drug user, he has become addicted to heroin and through sharing needles has contracted Hepatitis C. Joe participates in an anger management program that was recommended by correctional personnel. He has applied for an unescorted temporary absence to visit his family, but so far has been denied approval. He has been told to reapply in six months. Joe keeps in close telephone contact with his family and receives occasional visits from them.

1. Having read about the experiences of this prisoner, in your opinion, do you think that prison conditions are too harsh, too soft, or about right?
   Too Harsh _____  Too Soft _____  About Right _____

You have reached the end of the questionnaire. Thank you very much for participating in this survey. Your time is greatly appreciated.
Appendix C
Questionnaire Version C
Public Opinion of Prison Conditions in Canadian Federal Penitentiaries

The following survey is designed to explore your opinions of prison conditions in Canadian federal penitentiaries. Canadian federal penitentiaries house adult inmates who have been sentenced to two years or more in prison in Canada. You will be asked to respond to a series of statements concerning prison conditions in Canadian federal penitentiaries. Thank you for your participation in this research.

The following questions will provide background information to the researcher.

1. Gender: Male ______ Female ______

2. How many law-related courses have you taken? ______

3. Have you ever visited a prison? Yes ______ No ______

4. Have you ever been the victim of
   (a) a violent crime (for example assault)? Yes ______ No ______
   (b) a property crime (for example theft)? Yes ______ No ______

5. Do you think that sentences imposed are too harsh, too lenient, or about right?
   Too Harsh ______ Too Lenient ______ About Right ______
The following statements are designed to explore your opinions of prison conditions in Canadian federal penitentiaries. Please read the following statements carefully and indicate whether you strongly agree, agree, disagree, or strongly disagree with each statement by circling the response that best represents your opinion.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prisoners should be allowed to earn their high school diplomas while incarcerated.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>2. Prisoners should be allowed to earn university degrees while incarcerated.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>3. Prisoners should be allowed to vote while incarcerated.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>4. Prisoners should be allowed to keep televisions in their cells.</td>
<td>SA</td>
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<td>5. Prisoners receive too many privileges while in prison.</td>
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<td>A</td>
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<td>SD</td>
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<tr>
<td>6. Prisons are similar to hotels.</td>
<td>SA</td>
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<tr>
<td>7. Prisoners should be paid for their work in prison.</td>
<td>SA</td>
<td>A</td>
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<tr>
<td>8. Conjugal visits, which permit overnight visits by prisoners’ spouses or partners, are a good idea.</td>
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<td>9. Prisoners should be granted temporary absences from prison to visit their families.</td>
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<td>10. Once sentenced to prison, prisoners should lose all of their rights within society.</td>
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<tr>
<td>11. Physical punishment should be used to control unruly prisoners.</td>
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<td>SD</td>
</tr>
<tr>
<td>12. Solitary confinement is a good way to control prisoners.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
<td>SD</td>
</tr>
</tbody>
</table>
13. Prisoners’ mail should be censored by correctional personnel.  
   Strongly Agree | Agree | Disagree | Strongly Disagree  
   SA | A | D | SD

14. Prisoners’ telephone conversations should be recorded by correctional personnel.  
   Strongly Agree | Agree | Disagree | Strongly Disagree  
   SA | A | D | SD

15. In order to reduce prison overcrowding, the parole board should be given more authority to release prisoners.  
   Strongly Agree | Agree | Disagree | Strongly Disagree  
   SA | A | D | SD

16. In order to reduce prison overcrowding, more prisons should be built.  
   Strongly Agree | Agree | Disagree | Strongly Disagree  
   SA | A | D | SD

17. Prison life should be made more difficult for prisoners.  
   Strongly Agree | Agree | Disagree | Strongly Disagree  
   SA | A | D | SD

18. Releasing prisoners into the community on parole is dangerous.  
   Strongly Agree | Agree | Disagree | Strongly Disagree  
   SA | A | D | SD

19. Prisoners should be forced to participate in drug rehabilitation programs if deemed necessary by correctional personnel.  
   Strongly Agree | Agree | Disagree | Strongly Disagree  
   SA | A | D | SD

20. Prisoners should be forced to work while incarcerated.  
   Strongly Agree | Agree | Disagree | Strongly Disagree  
   SA | A | D | SD
The following statements are designed to explore your knowledge of prison conditions in Canadian federal penitentiaries. Please read the following statements carefully and indicate whether you think they are true or false by circling your response.

<table>
<thead>
<tr>
<th></th>
<th>True</th>
<th>False</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>T</td>
<td>F</td>
<td>DK</td>
</tr>
<tr>
<td>2.</td>
<td>In most cases, the government pays for the university education of prisoners.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>In most cases, the government pays for the high school education of prisoners.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Prisoners will not be granted parole unless they complete the programs recommended by correctional personnel.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>All prisoners’ mail is read by correctional personnel.</td>
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<tr>
<td>6.</td>
<td>If they want television sets in their cells, prisoners must pay for them.</td>
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<tr>
<td>7.</td>
<td>If they qualify, Canadian prisoners are allowed conjugal visits with their spouses or partners.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Prisoners are paid to work within the prison.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Prisoners are forced to work while incarcerated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Prisoners who are unable to work receive an allowance from the government.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>All prisoners are granted work release within the community if they request it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>All prisoners are granted temporary absences to visit their families if they request them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Maximum security prisoners will not be released unless they serve part of their sentence in lower security prisons (such as minimum security).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Prisoners are allowed to keep items of personal property, such as clothing and pictures, in their cells.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
15. Prisoners’ visits and conversations may be recorded by correctional personnel.  
   True  False  Don’t Know  
   T     F     DK

16. The suicide rate among prisoners in Canada is much lower than in the general Canadian population.  
   True  False  Don’t Know  
   T     F     DK

17. Prisoners must pay for their expenses, such as telephone calls, while incarcerated.  
   True  False  Don’t Know  
   T     F     DK

18. Prisoners have access to a prison library.  
   True  False  Don’t Know  
   T     F     DK

19. Compared to the general Canadian population, there is a higher rate of HIV and Hepatitis C infection among prisoners.  
   True  False  Don’t Know  
   T     F     DK

20. Prisoners may be double-bunked in a cell built for one person.  
   True  False  Don’t Know  
   T     F     DK

The following paragraph describes the experiences of a prisoner in a Canadian federal penitentiary. Please read the paragraph and then answer the question which follows.

Joe is serving five years in a federal penitentiary for fraud and embezzlement. He has several previous convictions for fraud. Joe works in the institution and earns $6.90 per day, from which he is expected to pay for his needs and hobbies while in prison. He also takes university courses by correspondence at Queens University, which he pays for himself. Joe is allowed to own and keep a television set in his cell. He paid for the television with his own money and is responsible for paying his cable bill. Although not previously a hard drug user, he has become addicted to heroin and through sharing needles has contracted Hepatitis C. Joe participates in an anger management program that was recommended by correctional personnel. He has applied for an unescorted temporary absence to visit his family, but so far has been denied approval. He has been told to reapply in six months. Joe keeps in close telephone contact with his family and receives occasional visits from them.

1. Having read about the experiences of this prisoner, in your opinion, do you think that prison conditions are too harsh, too soft, or about right?

   Too Harsh _____   Too Soft _____   About Right _____

You have reached the end of the questionnaire. Thank you very much for participating in this survey. Your time is greatly appreciated.
Appendix D
Attitude Items by Frequency of Missing Values
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<th>Question</th>
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<tr>
<td>Prisoners should be allowed to earn their high school diplomas while incarcerated</td>
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</tr>
<tr>
<td>Prisons are similar to hotels</td>
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</tr>
<tr>
<td>Prisoners should be paid for their work in prison</td>
<td>1</td>
<td>186</td>
</tr>
<tr>
<td>Physical punishment should be used to control unruly prisoners</td>
<td>1</td>
<td>186</td>
</tr>
<tr>
<td>Prisoners’ telephone conversations should be recorded by correctional personnel</td>
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<td>Prisoners should be allowed to earn university degrees while incarcerated</td>
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<td>Conjugal visits, which permit overnight visits by prisoners’ spouses or partners, are a good idea</td>
<td>2</td>
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<td>Prisoners should be forced to work while incarcerated</td>
<td>2</td>
<td>185</td>
</tr>
<tr>
<td>Prisoners should be allowed to vote while incarcerated</td>
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<td>184</td>
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<tr>
<td>Prisoners should be granted temporary absences from prison to visit their families</td>
<td>3</td>
<td>184</td>
</tr>
<tr>
<td>Once sentenced to prison, prisoners should lose all of their rights within society</td>
<td>3</td>
<td>184</td>
</tr>
<tr>
<td>Solitary confinement is a good way to control prisoners</td>
<td>3</td>
<td>184</td>
</tr>
<tr>
<td>Prisoners’ mail should be censored by correctional personnel</td>
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<td>184</td>
</tr>
<tr>
<td>Question</td>
<td>Missing values</td>
<td>Valid participants</td>
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<td>Prisoners should be allowed to keep televisions in their cells</td>
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<td>In order to reduce prison overcrowding, the parole board should</td>
<td>4</td>
<td>183</td>
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<tr>
<td>be given more authority to release prisoners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prison life should be made more difficult for prisoners</td>
<td>4</td>
<td>183</td>
</tr>
<tr>
<td>In order to reduce prison overcrowding, more prisons should be built</td>
<td>6</td>
<td>181</td>
</tr>
<tr>
<td>Prisoners receive too many privileges while in prison</td>
<td>8</td>
<td>179</td>
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<tr>
<td>Releasing prisoners into the community on parole is dangerous</td>
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Appendix E
Attitude Items by their Ability to Discriminate Punitiveness
<table>
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<tr>
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<th>$N$</th>
<th>df</th>
<th>$p$</th>
</tr>
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</tr>
<tr>
<td>Prisoners should be allowed to vote while incarcerated.</td>
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<td>&lt; .001</td>
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<tr>
<td>Prisoners should be paid for their work in prison.</td>
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<td>186</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Physical punishment should be used to control unruly prisoners.</td>
<td>59.032</td>
<td>186</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Prisoners receive too many privileges while in prison.</td>
<td>61.201</td>
<td>179</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>In order to reduce prison overcrowding, the parole board should be given more authority to release prisoners.</td>
<td>62.295</td>
<td>183</td>
<td>2</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Conjugal visits, which permit overnight visits by prisoners’ spouses or partners, are a good idea.</td>
<td>66.049</td>
<td>185</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Prisoners should be granted temporary absences from prison to visit their families.</td>
<td>66.304</td>
<td>184</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Solitary confinement is a good way to control prisoners.</td>
<td>72.391</td>
<td>184</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Prisons are similar to hotels.</td>
<td>74.215</td>
<td>186</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Prisoners should be allowed to keep televisions in their cells.</td>
<td>74.814</td>
<td>183</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Once sentenced to prison, prisoners should lose all of their rights within society.</td>
<td>75.435</td>
<td>184</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Prisoners should be allowed to earn their high school diplomas while incarcerated.</td>
<td>83.376</td>
<td>186</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Prisoners’ mail should be censored by correctional personnel.</td>
<td>83.957</td>
<td>184</td>
<td>3</td>
<td>&lt; .001</td>
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<tr>
<td>Prisoners’ telephone conversations should be recorded by correctional personnel.</td>
<td>84.667</td>
<td>186</td>
<td>3</td>
<td>&lt; .001</td>
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<tr>
<td>Prison life should be made more difficult for prisoners.</td>
<td>94.093</td>
<td>183</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Question</td>
<td>$\chi^2$</td>
<td>N</td>
<td>df</td>
<td>$p$</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>----------</td>
<td>----</td>
<td>----</td>
<td>-------</td>
</tr>
<tr>
<td>Prisoners should be forced to work while incarcerated.</td>
<td>99.043</td>
<td>185</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>In order to reduce prison overcrowding, more prisons should be built.</td>
<td>102.779</td>
<td>181</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Releasing prisoners into the community on parole is dangerous.</td>
<td>118.225</td>
<td>178</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Prisoners should be forced to participate in drug rehabilitation programs if deemed necessary by correctional personnel.</td>
<td>145.299</td>
<td>187</td>
<td>3</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>