RESTORATION OR RETRIBUTION:
AN EMPIRICAL EXAMINATION OF THE RECIDIVISTIC PATTERNS OF A
GROUP OF YOUNG OFFENDERS FROM NEW YORK CITY

by

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ABSTRACT

This study uses a data set on adolescent offending, originally collected by a team of researchers at the Vera Institute of Justice in New York City, to critically examine the role of incarceration in criminal rehabilitation. A theoretical explanation of recidivism is constructed using four criminological theories: life course theory (Sampson & Laub 1993), differential association theory (Sutherland 1939), deterrence theory, and reintegrative shaming theory (Braithwaite 1989). This thesis uses these theories to investigate societal factors that may contribute to young offenders’ recidivism (versus successful rehabilitation). It is argued that youths who: (1) come from unconventional family environments, (2) possess deviant peer associations, (3) receive incarceration as punishment, and (4) undergo a stigmatizing shaming process are more likely to recidivate. The combination of these factors is also expected to be intensified during incarceration.

An empirical examination of the effects of these factors on recidivism supports the main hypotheses advanced. Although conventional family environments and deviant peer associations are successful in determining first-time offending, results from this study suggest that these are inadequate as predictors of recidivism. Conversely, an extension of Braithwaite’s (1989) reintegrative shaming concept was found to be a strong predictor of subsequent offending. Medium sentence lengths in prison were associated with increased risk to recidivate. Most importantly, the results gathered some support for restorative justice approaches to criminal rehabilitation. Future considerations for recidivism research are explored.
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CHAPTER 1: INTRODUCTION

Research Questions

This study’s primary research goal is to explore the rehabilitation potential of incarceration by predicting the recidivism rates of young offenders in New York City. I will use a recent three-year longitudinal data set, originally collected by a team of researchers at the *Vera Institute of Justice* and featured in Lin’s (2007a) work, in order to conduct an empirically based examination of recidivism. More specifically, I will examine the relationship between types of punishments (i.e., incarceration or community programs) and recidivism. An integrated theoretical model will be constructed in order to examine other factors that might influence recidivism. Specific tests regarding adolescent family environments, peer associations, and feelings of personal responsibility (i.e., shame) will be included in order to enrich this study’s perception of recidivism. This study will use the following research questions to guide its theoretical narrative and hypotheses:

[1] What role does official punishment play in deterring recidivism?

[2] How do other factors such as the family environment, associations with deviant peers, and shaming labels shape recidivism?

[3] Does official punishment (i.e., prison or community program) alter the effect of other predictors of recidivism?

The investigation of these research questions will result in a fuller understanding of recidivism. It is assumed that recidivism is the result of an unsuccessful social reintegration process following a particular punishment (i.e., incarceration or community program). Although first-time offending remains an important topic in criminological
research, an examination of recidivism rates will offer more insight into appropriate solutions to social rehabilitation and reintegration.

This type of research is especially important since support for incarceration has remained relatively strong in Western judicial systems. Most recently, Canadian Prime Minister Stephen Harper has made strong claims that aim to once again empower the role of incarceration in young offenders’ rehabilitation. For example, it was suggested that cases involving violent offenders as young as 14 years old should be dealt with in adult courts (Clark, Alphonso & Perreaux 2008). This relocation of adolescent cases into adult court would permit advocators to impose stronger sanctions on youth that might further hinder their rehabilitation process.

Little is known about the linkages between different types of sentences (i.e., incarceration, probation, or community service programs) and re-offending. In recent years, there has been an increasing interest in developing alternative rehabilitation programs to replace incarceration (Rodriguez 2007; Stubbs 2007). These new programs adhere to more restorative principles and stray from the more traditional retributional philosophies of punishment. Although these studies offer some critiques of incarceration, Western judicial practices continue to rely on incarceration to address the problem of re-offending among adolescent youths. As consequence, there is a need to address these neglected areas of research so that the academic community can inform public policy in their search for appropriate punishment. This thesis represents a small contribution to this growing body of research.
**Overview to Chapters**

The body of this thesis includes four chapters that will outline the appropriate steps needed in order to test the impact of incarceration on recidivism. In Chapter 2, I outline contemporary trends in recidivism research. Specific attention will be placed on the relevance of mass incarceration in current penal philosophy. A critique of court proceedings and judicial tools will provide context for current patterns of incarceration. Following this outline of American judicial practices, I will provide a brief overview of the methodological considerations found in recidivism research. Recidivism, as a theoretical concept, will also be discussed in order to outline proper strategies for empirically-based research. The final section of the literature review will incorporate past literature outlining predictors of offending. To be more specific, I will review prior research that outlines the effect of gender, race, network social capital (i.e., family environment and peers), incarceration, and shaming on recidivism.

In Chapter 3, I develop an integrated theoretical account of the rehabilitation process. Although Chapter 2 reviewed multiple theories of re-offending, Chapter 3 will focus on the contributions of four distinct theories of predicting recidivism: life course, differential association, deterrence, and reintegrative shaming theories. Following this theoretical elaboration, each theory will be discussed with respect to specific sets of hypotheses. These hypotheses were created in reference to previous research and more current theoretical developments. The first theory, Laub and Sampson’s (2001) life course theory, is used to assess the conventionality of family environments and their ability to act as agents of informal control. Next, I will discuss the importance of peer associations to recidivism by referring to Edward Sutherland’s (1939) differential association theory.
Deterrence theory is also included within the theoretical discussion in order to test the deterrent effect of incarceration. Lastly, John Braithwaite’s (1989) reintegrative shaming theory is utilized to test the effect of shame (and specifically taking responsibility for actions) on re-offending. The consideration of these four theories and their respective hypotheses are then discussed in the creation of three interactional predictions.

In Chapter 4, the methodological issues related to this study are discussed along with the statistical results of my descriptive, bivariate, multivariate, and interaction tables. This chapter summarizes the distinctions between Lin’s (2007) original statistical approach and the one rendered within the present study. The chapter includes five tables that outline important statistical information. Table 1 outlines the descriptive statistics of the twenty-five variables included in this study. The second table showcases the bivariate correlations between the independent variables and recidivism. These two tables are used to contextualize the theoretical elaboration which takes place in our multivariate modeling process in Table 3. The results of this table are discussed in relation to the previous research findings on recidivism. Further inquiries with regard to possible interactions are explored in the fourth and fifth tables.

In the fifth and final chapter, I explore the findings summarized in the previous chapter with reference to the twelve guiding theoretical hypotheses. This discussion will emphasize important findings and their significance for theory building in recidivism research. Also, the potential limitations of this research effort will be discussed to explain why some relationships were found to be insignificant. Efforts to improve the accuracy of results and the prospect of replicating studies along the lines of Lin’s (2006) original study will also be discussed. The final section of this chapter will revisit important
arguments in favor of restorative justice principles. The present study’s findings will be used to address policy implications for punitive philosophies of justice. A brief summary of the study’s contributions to criminological research will be outlined as well as a final plea to encourage the, at times overlooked, importance of conducting research on recidivism.
CHAPTER 2:
LITERATURE REVIEW

Introduction

It is, at times, difficult to justify the relevance of recidivism research. The vast majority of criminological inquiries are aimed at testing factors that might predict first-time offending. Arguably, a smaller propensity for first-time offending would result in a lower overall crime rate. While this is a dominant perception among academics and policy-makers, the examination of recidivism informs us that certain types of punishment might not be useful in lowering subsequent offending. Unsuccessful rehabilitation might, in turn, lead to greater prevalence of career criminals. The inability for a past-offender to be successfully reintegrated within conventional society assures continuity of offending.

This chapter will make reference to past recidivism research in order to clarify the present state of re-offending trends. Within this discussion, I will explore the mass incarceration crisis and critique sentencing (i.e., specific focus on judicial tools used in sentencing). Methodological issues will also be explored in an effort to explain the limited presence of recidivism research within broader criminological inquiries. The last section of this chapter will examine empirical linkages found in the recidivism and offending literatures. This section will offer insight into the construction of this study’s theoretical elaboration.

Mass Incarceration: Cause or Effect of Crime?

Mass incarceration rates have received considerable attention within the last few years. As a result, many scholars have attempted to explain this recent trend that is, contrary to popular belief, not restricted to the United States (Butts & Mears 2001;
Downes 2001). Nevertheless, the track record of the United States with regards to penal economy is not an example that other countries may wish to follow due to its excessive budgetary obligations (Stucky, Heimer, & Lang 2007:94) and rehabilitative failures (Downes 2001:74). Therefore, there is impetus to investigate patterns within rising incarceration rates, so that we may pinpoint possible causes for the obvious increase in prison populations.

While it is difficult to amalgamate legal trends on a global front, there have been some recent changes in trends and public opinions internationally that indicate concern regarding recidivism rates and mass incarceration. In England and Wales, attention has been brought to the alarming over-reliance on child custody and incarceration of delinquent youth. According to Bateman (2005:92), the 1990’s trend in tougher penalties (a time referred to as the “get tough on crime” or the “new punitiveness” era) made a significant impact on youth incarceration rates in England and Wales. In addition, incarceration rates across demographics are on the rise and have at times mirrored similar trends in the United States (Downes 2001:74). Ironically, this new age of punitiveness also saw a decade in the 1980’s in which there was great success in minimizing youth incarceration (Bateman 2005:95). Blame for the blatant increase in youth custody has been attributed to several sources. Amongst those deemed responsible were those who fueled the media’s inflation of youth crime as a social problem in need of immediate resolve (Allen 2002; Bateman 2005; Nacro 2003). The aforementioned “youth crime” crisis propagated throughout the media led politicians to enact stronger penal equivalents in an attempt to broaden their appeal as figures of law enforcement with strong moral values (Bateman 2005; Garland 2001). The rise of incarceration as an appropriate
punishment for non-violent youth crime has led to challenges regarding the rehabilitative effectiveness of excessive punishment on recidivistic behavior.

The inaccurate reporting of criminal activity has, at times, increased public concerns over punishment and personal safety. Consequently, public opinion polls can offer some insight into the evolution of perspectives regarding criminal justice. For example, Canadians’ perception of law enforcement and legal sanctions has created an interesting dynamic for court and public policy officials. Over the last 30 years, public opinion polls have revealed that most Canadians believe that the Canadian judicial system’s practices are too lenient with regard to sanctions (Roberts, Crutcher, & Verbrugge 2007:77). More recently, a public poll conducted in 2005 confirmed this longstanding trend, reporting that 74% of Canadians who participated in the poll maintained a perception of leniency in the courts (Robert et al. 2007:78). This finding is interesting given that Canada has also been identified as one of the few judicial systems that have begun to advocate for restorative justice principles (Correctional Services of Canada 2008). As Roberts et al. (2007:82) outline in their discussion of Canadian judicial trends, the Canadian Criminal Code’s definition of punishment objectives was updated in 1996 to include the subsections 718.2(e) and (f) which read: “to provide reparations for harm done to victims or to the community” (Criminal Code, R.S.C. 1996, c.C-46, s.718.2) and “to promote a sense of responsibility in offenders. And acknowledgement of the harm done to victims and to the community” (Criminal Code, R.S.C. 1996, c.C-46, s.718.2). This interpretation of punishment makes use of restorative principles in an effort to enrich the importance of community involvement in criminal rehabilitation.
Consequently, this rationale also strays away from traditional retributive claims of punishment that involve isolating an offender in hopes of maintaining public safety.\textsuperscript{1}

Conversely, Bateman (2005:103) argues that although impressive, the creation of alternative punishments, such as those within the restorative justice initiative, is not enough to change punitive trends. Rather, one should look toward shifting systemic biases and procedural responses as an adequate decarcerative strategy. Amongst the systemic changes needed to address the creation of alternative punishment is a more thorough understanding of delinquency and crime as a whole. The first step within a decarcerative strategy, which aims to rehabilitate rather than punish, is the recognition that multiple factors affect juvenile delinquency (Hinton et al. 2007:473). Unfortunately, as Hinton et al. (2007:479) claim, the juvenile justice system is a “system divided.” There is strong support for harsher sentences and yet knowledge of the unsuccessful nature of these punishments is well established within the research literature. As a result, the system attempts to introduce policies that support rehabilitation, while continuing to incarcerate youth in response to the public opinion of rising crime rates (Hinton et al. 2007:480).

At first glance, one could assume that the creation of alternative punishments may not satisfy the public’s demands for stronger punishments. Yet, unexpectedly, these new initiatives toward restorative justice have received considerable support. For example, there was strong support (84\% regarded as very important) for reparation objectives within the 2005 Canadian survey section on purpose of sentencing (Hinton et al.

\textsuperscript{1}The 2009 publication of the Canadian Criminal Code has redefined the aforementioned sections to include subsection 718.2(e) which states that “all available sanctions other than imprisonment that are reasonable in the circumstances should be considered for all offenders, with particular attention to the circumstances of aboriginal offenders” (Criminal Code, R.S.C. 2008, c.C-46, s.718.2). Although the restorative initiatives are not as explicit as in the earlier conception, section 718.2 still recognizes and encourages the implementation of alternatives to traditional punishment.
Some scholars have suggested that the public’s demand for harsher sanctions might stem from misrepresented, or rather exaggerated, media coverage concerning the seriousness of criminal occurrences (Allen 2002; Bateman 2005; Nacro 2003; Roberts et al. 2007). From this viewpoint, fear of victimization might lead citizens to support stronger sanctions in hopes of protecting themselves and their loved ones from potential threats to their personal safety.

Other researchers have commented on the public’s preference for punishments by examining the meaning of “appropriateness” in public opinion surveys (Hinton et al. 2007; Marinos 2005). Traditionally, the notion of “appropriateness” was represented by longer and harsher sentences. This particular perception of “appropriateness” relied heavily on strong retributive values and ignored rehabilitation. However, recent trends in restorative reasoning have altered the perception of “appropriate punishment” by suggesting new parameters. The new found perception of “appropriateness” suggests that punishment should be more contextual. Furthermore, there is an increased interest in satisfying victims’ needs as well as offenders’ rehabilitation (Marinos 2005:442).

Scholars, such as Marinos (2005:443), have commented extensively on the public and legal transformation of “appropriate punishment.” Within her discussion on sentencing reform and penal equivalents, she makes use of Braithwaite’s (1982) critique on the severity of the offense (i.e., “just desserts model”) to highlight the simplistic rationalization of crime and punishment (Marinos 2005:444). Marinos (2005:445) argues that there are qualitative and quantitative dimensions to punishment that should be taken into account when examining the denouncing act of “being punished” (Marinos 1997, 2005; Morris & Tonry 1990). For instance, factors such as feelings of personal
responsibility (Braithwaite 1989; Hosser et al. 2008), age (Marinos 2005; Von Hirsh 2001), racial inequality (Kubrin, Squires, & Stewart 2007; Reisig et al. 2007), type of offenses (Lin 2007; Marinos 2005), and gender (Kowalski & Caputo 1999; Reisig, Holtfreter, & Morash 2006) should all be examined using a multidimensional lens when conducting analyses of appropriate punishment.

Therefore, an “appropriate” punishment should be evaluated on four distinct areas of interest: (1) the severity of the offender’s criminal infraction, (2) the offender’s social background, (3) the victim’s emotional reparation, and (4) the offender’s successful rehabilitation and reintegration. With these parameters in mind, there is a possibility that one could create “appropriate” sanctions that could better suit certain offenders who face incarceration. As a result, there might be less focus on incarceration as the only effective means to address offender rehabilitation. The current problem of mass incarceration will hopefully continue to inspire more scholars to question the present overuse of incarceration. It is within these discussions that we can hope to research alternatives to imprisonment that remain “appropriate.”

**Regulating the Judicial System: An Examination of Sentencing Procedures**

The previously mentioned inquiry regarding “appropriate punishment” introduces many questions that can only be examined through an analysis of sentencing procedures within court systems. Although this examination will by no means attempt to encompass all facets of sentencing trends and procedures, I will attempt to highlight some pertinent issues that have, at times, been overlooked. For example, the examination of procedural
tools used in the sentencing process grants greater insight into the mass incarceration trend and offers some aid in debunking claims regarding recidivistic behavior.

The political nature of the American judicial system relies heavily on public opinion polls. Court judges are nominated through electoral debates and campaigns. Consequently, the supposed subjective nature of the judicial system is at times a representation of popular outlooks on appropriate measures of punishment. Whether this implies that the judicial orientation of the American court system is chosen through a democratic process is debatable. Upon reflection, one could argue that the retributive orientation of the American criminal court system is a result of politicians using the risk of recidivistic behavior to justify the incapacitation of certain types of offenders (Ulmer & Johnson 2004). While this might be known as a central tenet of the retributive justice mantra, the actual rehabilitation effort is often regarded as a secondary concern.

Moreover, the degrees in which a sanction is regarded justifiable and fair varies across academic, public, and judicial domains. The supposed predictive ability regarding future offending has been scrutinized by various academics (Kraus 2004; Krauss & Lee 2003; Kraus & Sales 2001; Loza 2003). Consequently, the process of decision-making has been evaluated through various academic realms such as biology, psychology, and sociology (Dick et al. 2004; Loza 2003; Ulmer & Johnson 2004).^2

In an effort to summarize this vast literature, Krauss (2004:735) studied the empirical process of sentencing by deconstructing the “criminal history score.” This score is a tool used to predict risk factors by accumulating the number of previous arrests and prior deviant behavior in hopes of categorizing the individual so that he or she is given an

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^2 Although a study relating to the individual thought processes of judges and their cognitive ability to make fair judgments is relevant to the discussion of decision-making, it is not the focus of our examination.
appropriate sentence (Krauss 2004:733). In order to examine the predictive accuracy of
the “criminal history score,” Krauss (2004:740) selected 102 cases that dealt specifically
with judges using the score as a departure for decision-making. After conducting a six-
year follow-up, Krauss (2004:748) concluded that not only was the score inaccurate in its
predictive potential, but it may have over-exaggerated the recidivistic risks of certain
offenders which in turn resulted in harsher punishments.

Similar findings were revealed by Reisig et al. (2006) in their examination of
sentencing and female recidivistic patterns. Reisig et al. (2006) argued that some judicial
tools, which have been developed solely through male-oriented criminological theories,
are not suitable to predict female criminal pathways (Reisig et al. 2006:388). This implies
that both men and women have distinct risk factors associated with crime that are not
addressed in existing judicial tools. More specifically, the researchers critique the
universal application of the “Level of Supervision Inventory - Revised” (LSI-R). The
LSI-R is used to classify recidivism risks as “low,” “medium,” and “high” (Reisig et al.
2006:387). Consequently, Reisig et al. (2006:390) argue that the LSI-R does not account
for “special populations.” (i.e., subtypes of female offenders such as women with
histories of abuse, drug dependencies, or those living below the poverty line).

Reisig and his colleagues (2006:391) interviewed an estimated 400 women prior
to their community supervision programs and were able to conduct follow-up interviews
with 248 women, an estimated sixty-two percent of the original sample. Upon reviewing
the notes accumulated through the 60 to 90-minute interviews, they concluded that the
LSI-R was successful in gauging economically-motivated female offenders but
miscalculated the potential risk factors for more “gendered pathways” of crime (Reisig et
al. 2006:400). These “gendered pathways” of crime were regarded as offenses that involved drugs and violence against women (Reisig et al. 2006:401). The inaccurate predictions of re-offending amongst the female offenders contributed to unwarranted serious punishment (i.e., longer prison or community sentences).

In addition to the skeptical perceptions of sentencing tools (i.e., criminal history score and LSI-R), a study by Loza (2003) critiqued the role of court experts and their ability to predict violent and non-violent behaviour during court proceedings. Although Loza’s (2003) discussion is rooted in psychiatry and the ethical treatment of patients, his arguments presented some interesting critiques with regard to sentencing policies. For example, Loza (2003:176) argued that there is no actual evidence that clinicians can reliably and accurately predict violent behaviour. Moreover, Loza (2003:177) also reiterated the controversial critique found within deterrence theory and stated that punishing an offender for a predictive (e.g., anticipated) behaviour is unjust as they have yet to commit an infraction. Interestingly, he made theoretical linkages between this common ideology and one found in medicine where professionals are trained to predict illness when in doubt (Loza 2003:178). This cautious approach to sentencing consultations might result in incarcerating individuals who are not at risk to re-offend (Roberts 1997:311).

Investigations of sentencing have also revealed disposition trends across demographic factors. For example, Kowalski and Caputo (1999) examined the

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3 It should be noted that this is a highly controversial argument. Many theorists have been in favor of predictive judicial tools (i.e., scientific consults and their assessment surveys). Nevertheless, Loza (2003:176) cited similar opinions by other published works such as: (1) American Psychiatric Association 1974, (2) American Psychological Association 1978, (3) Kozol & Garofalo 1972, (4) Quinsey, Pruess, & Fernley 1975, (5) Steadman & Keves 1972, and (6) Thornberry & Jacoby 1979. Although there remains some doubt in clinicians’ ability to predict violent behaviour, clinical consults are still widely used within judicial procedures (Loza 2003:178). As consequence, offenders are at times incarcerated because they are perceived to be a “threat” to society (i.e., hypothesizing they will re-offend).
discrepancies across youth court decision-making processes with respect to young offenders’ personal attributes including: age, gender, and prior criminal record. Kowalski and Caputo (1999) suggested that judges will be heavily influenced by the personal attributes of young offenders and will treat them according to their own perceptions of culpability. Kowalski and Caputo (1999:63) used the “Youth Court Survey” (YCS) in order to examine all cases involving Canadian offenders who were between 12 and 17 years of age and who were detained during the 1995-96 fiscal year.\(^4\)

Their results (Kowalski & Caputo 1999:80) confirmed long-standing trends in the area of sentencing and recidivism. When compared to first-time offenders, Kowalski and Caputo (1999:81) found that judges grant harsher sentences to repeat offenders detained for the same crime. Furthermore, males were more likely to receive custody dispositions than their female counterparts (Kowalski & Caputo 1999:80). Males also received harsher sentences than females as repeat offenders (Kowalski & Caputo 1999:66). This indicates that male repeat offenders are perceived to be more dangerous than female repeat offenders. This biased perception leads to longer sentences for most male offenders.

While Kowalski and Caputo (1999:80) acknowledged that previous research (see Doherty & de Souza 1995; Doob, Marinos, & Varma 1995; Kueneman & Linden 1983) have highlighted the importance of age within court dispositions, their findings indicated no linkages between the age of the offender and custody dispositions.

The uncertainty of sentencing procedures and the use of empirical tools during dispositions is not an isolated concern. These types of critiques stem from more robust

\(^4\) The YCS recorded all data on detained youths with the exception of those residing in Nova Scotia (Kowalski & Caputo 1999:63). The reason for this omission was due to the unique nature of the Nova Scotia youth court system. This system differs in certain pertinent regulations regarding young offenders and thus would not reflect the custody disposition trends in other provinces (Kowalski & Caputo 1999:64).
academic inquiries that attempt to demonstrate how undeveloped our understanding is of the judicial process. For example, Dick et al. (2004) attempted to highlight the importance of social theory in evaluating judicial processes. Specifically, Dick et al. (2004:1451) drew upon three sociological theories to demonstrate their usefulness in evaluating peer courts. These theories included: (1) labeling theory, (2) deterrence theory, and (3) differential association theory (p. 1451). Krauss (2004:1455) argued that labeling theory should be implemented in order to examine the usefulness of labels and the consequent shaming process that accompanies these new labels. The main focus of the second theory, deterrence theory, is to properly investigate the celerity of attending peer courts with that of the recidivistic behavior (Krauss 2004:1456). Within this theoretical framework, a faster transition from a youth’s apprehension to an appearance in peer court will strengthen his/her perceived connection between his/her criminal acts and punishment. Hence, the timing and speed between arrest and court appearance is crucial in minimizing recidivistic behaviour. Finally, Krauss suggested that differential association theory can offer a valuable contribution to the examination of peer courts. Researchers emphasize the use of this theory as a way to examine the acquisition of deviant definitions during offenders’ peer court trials (Krauss 2004:1457). It is through the acquisition of deviant definitions favorable among their peers that an offender will be more likely to recidivate.

Dick et al. (2004:1455) summarized the usefulness of social theory in general by stating the following:

…theory will help define and frame programmatic purposes and goals. Theory will guide the development of research questions, data interpretation, and policy recommendations. Theory will lend great insights for understanding offenders’ characteristics, their success or failure with the peer court process, and whether they recidivate. Finally, theory will help us evaluate and determine which peer court model is most effective and why.
Social theory can be used as an investigative tool that can not only help to create rehabilitative programs but can also be instrumental in maintaining court standards by offering itself as a re-evaluative tool. Moreover, the recent demand for greater recidivism research is outlined in Dick et al.’s (2004) philosophical stance that social theory belongs in the judicial system. While psychology has at times been the dominant informer of offender’s risk to re-offend (Kraus 2004; Kraus & Lee 2003; Krauss & Sales 2001), there is room for social theory to further contextualize the social setting in which past offenders might re-offend.

This discussion on sentencing procedures has revealed that certain offenders might be receiving inappropriate punishments. An inaccurate prediction of one’s criminal propensity might have long term effects on rehabilitation. Consequently, longer sentences for low-risk offenders might be more detrimental to their criminal rehabilitation and social reintegration. The supposed relationship between sentence length and recidivism has been investigated by numerous scholars (Gainey et al. 2000; Lin 2007a; Orsagh & Chen 1988). Within a discussion on the effectiveness of sentencing, Tittle and Rowe (1974) have named this notion of inappropriate or ineffective punishment as the “tipping effect.” The “tipping effect” refers to the instance where a punishment loses its potential deterrent effect and actually increases the risk of recidivism (Dick et al. 2004; Tittle & Rowe 1974). Therefore, judges and judicial members must navigate between the minimum and maximum sanctions in order to not exceed this supposed “tipping effect.” This phenomenon further emphasizes the importance of testing the rehabilitative potential of incarceration.
Within this thesis, the conceptualization of recidivism will go beyond the act of re-offending to include an examination of the offender’s social reintegration process. It is thus my intention to use multiple theories to extend the examination of recidivism from an individual cognitive decision to a broader examination of social interpretations, definitions, and relationships. An investigation of this process aims to offer insight into how law officials might improve judicial practices. Although this present discussion on sentencing outlines potential drawbacks in the assignment of punishment (i.e., who is given prison and who is given community), this thesis will concentrate its efforts on studying the linkages between punishment types and re-offending.

**Methodological Considerations of Recidivism Research**

Empirical research requires that we define an outcome variable in an accurate and informative manner so that viable questions can be answered. This study presents itself with a unique opportunity to indulge in a discussion of the neglected importance of defining recidivism.

Although the notion of recidivism is widely used within academia, a review of literature concerning this core concept reveals that the concept itself is in a constant state of reformulation. Moreover, there does not seem to be a universal interpretation of how this concept should be operationalized (Andrews, Bonta, & Wormith 2006; Bonta 1997). This is partly due to the fact that multiple studies have redefined recidivism according to the nature of the study. For example, some researchers use arrest data to account for re-offending (Schmidt & Witte 1988), others use anonymous personal offending surveys (Deng 1997:287), and some make use of incarceration or re-arrest data in survival models
to avoid static interpretations of recidivism (Escarela, Francis, & Soothill 2000; Patterson & Preston 2008). Consequently, there are a myriad of ways of calculating and conceptualizing recidivism. Reisig et al. (2006:393) summarized past interpretations of recidivism as follows:

The best way to measure recidivism is debatable. Some researchers argue that reincarceration is the most reliable measure of antisocial activity, and that rearrest is “too lenient” (Lowenkamp et al., 2001:561). Others claim, however, that less stringent criteria, such as technical violations of supervision conditions, are acceptable because they “serve to prevent new occurrences of criminal conduct” (Bonta et al., 1995:284). We operationalize recidivism using a combination of items.

Reisig et al. (2006) successfully outline the difficulties in accountability when it comes to researching recidivism and using it to test such things as judicial tools (i.e., LSI-R). They acknowledge the divergent ways in which one can go about studying recidivism. As a result, the authors discuss their own coding and conceptualization for recidivistic behaviour as one that involves multiple indicators including: (1) violations of supervision conditions, (2) re-arrests, (3) reconviction, and (4) revocation of community supervision (Reisig et al. 2006:394). By using multiple indicators for recidivistic behaviour, one could argue that the authors are moving toward a more inclusive study of recidivism.

Nevertheless, the inconsistent conceptualization of recidivism makes it difficult to compare findings across studies.

Common constraints found within most studies of recidivism are time management and finances. As a result, not all studies are able to engage in longitudinal research designs consisting of arduous surveillance schedules of research participants’ criminal activities. Patrick and Marsh (2005:59) conducted a three-year longitudinal study
in order to assess the recidivism rates of adolescents’ apprehended for first-time juvenile status offenses (i.e., tobacco and alcohol offenses). The longitudinal nature of their research permitted them to lengthen the time-frame of recidivism. This design offered a more accurate depiction of the effects of divergent treatment programs. As a result, Patrick and Marsh (2005:65) were able to conclude that there were little differences in recidivism rates across participants in the experimental groups who participated in the treatment programs and the control group who experienced a “pardon interview.”

Although Patrick and March (2005) were able to see a discrepancy in recidivistic behavior during a three-year period, other studies have lengthened their framework in hopes of improving their knowledge of longer time-frames. For instance, Krauss’s (2004:739) previously mentioned study on court sentencing processes implemented a six and ten-year time-frame in order to investigate the predictive potential of the “criminal history category” judicial tool. While the lengthy nature of this study permitted researchers to accurately assess sentencing procedures and recidivism, many research enterprises lack the financial resources to engage in a long duration study.

Deng’s (1997:289) research on first-time shoplifters differed from the previously mentioned studies because it assessed recidivism within a shorter time interval of six to twelve months. Interestingly, Deng’s (1997:290) research concluded that 79% of the participants did not recidivate within the time-frame for the study. The intention of Deng’s (1997) study was to examine immediate recidivistic behavior and therefore a short time-frame was appropriate. Nevertheless, the recidivistic rate found within Deng’s

5 The “pardon interview” consisted of a meeting where offenders were informed of their citation by court officials. Although they did not participate in traditional court procedures, they were required to view a short film entitled “Enough is Enough.” After the viewing, the offender was told that their citation would not be filed if she or he discontinued their criminal involvement for a period of one year (Patrick & Marsh 2005:65).
(1997) study might not paint an accurate picture of long-term recidivistic trends because there is no indication whether or not the individuals offended beyond this short time interval. Thus, the nature of recidivism within a particular study should not be regarded as an absolute indicator of re-offending patterns, but rather each study offers contextual knowledge regarding re-offending habits within a specific time-frame and setting.

In addition to the longitudinal nature of recidivism studies, some researchers have argued that there exist various levels of recidivism (Loza 2003:179). An offender who re-offends one day after release has often been considered similar to those who re-offend six months following release. A new found critique in recidivism research is the idea of a homogenization of offenders who recidivate. This implies that the time from release to re-offending has been overlooked and signals a distinctive element in offending patterns. More recent studies, such as Lin’s (2007b:3) study of youth court referrals and recidivistic behavior of adolescents in New York City, have attempted to examine recidivism within multiple time intervals (6, 12, and 18 months) in hopes of avoiding the homogenization of offenders. In addition to Lin’s (2007b) classification of recidivism across time periods, he also examines the types of recidivism and categorizes them according to the offense whether they are detained for “any arrest,” “felony arrest,” “violent arrest,” or a “violent felony” (Lin 2007a:158).

Although this particular issue of recidivism hierarchy is theoretically noteworthy, the methodological and financial demands in assessing this aspect of recidivism have been too strenuous for many studies (Kubrin et al. 2007; Orsagh & Chen 1988; Patrick & Marsh 2005; Schmidt & Witte 1988). As a result, smaller-scale research projects may only be able to measure one type of recidivism within one particular time-frame.
Projects with larger funds at their disposal to finance longitudinal studies will help to provide a more complete understanding of long-term recidivism time-frames (Lin 2007a; Schmidt & Witte 1988).

**Empirical Linkages Within Recidivism Research**

As previously mentioned, there are multiple ways in which researchers have attempted to understand re-offending patterns. While some researchers maintain that the investigation of first-time offending is more important than instances of repeat offending, academic techniques are being developed to empirically predict recidivism. For example, the combination of transcending variables (i.e., those which are present before and after offending) and variables following treatment has permitted us to better understand the factors that encourage longer-term criminal behavior.

Consequently, recidivism has predominantly been used in program evaluation research that aims to assess the rehabilitative potential of such criminal responses such as: drug treatment court (Banks & Gottfredson 2004; Brocato & Wagner 2008), religious programs (Johnson 2004), and even the controversial utilization of boot camps for adolescent youth (Bottcher & Ezell 2005). Evaluation research frequently considers various factors that come into play when attempting to understand motivations underlying recidivistic behavior. This type of research is unique in that is encapsulates multiple variables that are present before first offense and following treatment.

In an attempt to summarize factors relating to recidivism, I have categorized the variables, or rather concepts, into two subsets. The first subset contains concepts that are deemed more traditional. These concepts are commonly used in assessing criminal
behaviour among first-time offenders. The most frequently used variables in this type of research are personal attributes such as race and gender. Given that there remains considerable debate regarding whether personal attributes play a role in offending patterns, these variables are often used as control variables in order to avoid possible intervening relationships (Botchkovar & Tittle 2008; Brocato & Wagner 2008; Lin 2007a). Along side these variables are the investigations of family environments and deviant peers. These variables take into account the social networks of first-time offenders and examines whether these individuals were heavily influenced by conventional family environments and criminally-inclined colleagues.

Although the first subset of transcending variables can be examined throughout the criminal apprehension and consequent release of an offender, the second subset can only be examined following a release. I refer to these groups of variables as those that are related to the incarcerated experience and the labeling process (i.e., specifically, the role of shaming labels). It is my intention to offer an overview of the findings within past research that deals with both subsets of variables. This summary will allow me to construct a well-informed theoretical elaboration regarding criminal rehabilitation in the next chapter.

**Personal Attributes: Race and Recidivism**

An investigation on the recidivistic patterns of a given population usually warrants an examination of personal demographics and their potential effect on recidivism. Conversely, there remains considerable debate whether or not offenders’ characteristics play an integral role in their propensity to recidivate (Brewer & Heitzeg 2008; Feld
Within the literature on recidivistic patterns, some researchers find little difference in offenders’ personal characteristics (Patrick & Marsh 2005; Vermeiren et al. 2000). Nevertheless, interest in confirming or debunking claims relating to demographics and recidivistic behavior is still central to contemporary research.

A common risk in assessing theoretical linkages between personal demographics and recidivism is overlooking the presence of strong intervening variables that might create discrepancies between groups. For instance, recent attention on ethnicity/race and housing characteristics has highlighted a potential difference in the timing of recidivism. More specifically, Kubrin et al.’s (2007:27) study on neighborhoods and prisoner re-entry has yielded some interesting conclusions. In their examination of the prisoner re-entry process, Kubrin and colleagues (2007:12) emphasize the personal and social hardships most inmates must overcome such as: ridding themselves of deviant labels, seeking substance abuse programs, finding employment, and acquiring affordable housing.

One could assume that the quality and availability of these services depends heavily on the location where past offenders live following their detainment. Social disorganization theory suggests that residences in certain dilapidated areas will foster more deviant behavior than areas which are well kept and respected (Kubrin et al. 2007:15). Within their six-month investigation of 5,002 recently released inmates, Kubrin et al. (2007:27) encountered challenges interpreting their data. Although their examination had confronted some difficult hurdles, they still argued that African-American offenders were more likely to re-offend faster than other offenders upon returning to their own impoverished neighborhoods. Therefore, the social reintegration
process for African-American males and Caucasian males were significantly distinct from one another.

Reisig et al. (2007) also shifted their attention to social context in their examination of recidivism rates and race. Reisig et al.’s (2007:414) study consisted of an analysis of a large-scale recidivism research data set of 34,868 inmates released from state prisons between January 1999 and January 2001. The researchers attempted to analyze the effect of racial inequality within the social reintegration process. More specifically, they were interested to see if racial inequality had an effect on the recidivistic behavior of Caucasian and African-American offenders recently released from prison. It was hypothesized that recently released African-American males, who suffered large racial inequalities (i.e., greater poverty and economic disadvantages) within their social setting, would be more willing to participate in criminal behaviour (Reisig et al. 2007:413). Racial inequality was conceptualized as a catalyst for re-offending due to the potential social and psychological hardships that it might create.

Using a multivariate statistical model, Reisig et al. (2007:425) determined that racial inequality not only had a direct effect on the recidivism rates among released African-American inmates, it also amplified the effects of criminal history on reconviction or re-offending. Interestingly, racial inequality did not affect recidivism among other groups such as Caucasian males. This research not only proved itself useful to debunking claims of biological or personal differences amongst ethnicity/race. It also helped reinforce the importance of studying social context within recidivism research. Therefore, we can conclude that inmates are not released into a “social vacuum” (Reisig
et al. 2007:427) void of all social inequalities. It is thus important to study contextual differences among inmates.

**Personal Attributes: Gender and Recidivism**

A common critique of criminological research is that the theories are predominantly designed to examine male criminal behavior (Reisig et al. 2006:388). Consequently, some researchers postulate that traditional theories might not be useful in predicting female criminality. An emerging interest in gender and crime has led to studies that aim to specifically address females’ criminal and rehabilitative pathways (Chesney-Lind & Shelden 2003; Daly 1994; Martin et al. 2009; Reisig et al. 2006).

Prior research has concluded that there exists a gender gap with regards to criminal behaviour. Specifically, males are more frequently involved in offending than females (Heimer et al. 2009; Lauritsen et al. 2009). Many researchers have investigated reasons for a gender gap in offending (Heimer et al. 2009; Lauritsen et al. 2009; Steffensmeier et al. 2006). A recent study by Steffensmeier and colleagues (2006) used “Uniform Crime Reports” (UCR) to examine the frequency of criminal offending during the 1980 to 2003 time period. Official arrest data permitted them to see shifts in criminal propensity among female offenders (Steffensmeier et al. 2006:81). Although the reports demonstrated a general increase in female offending over the period, these were heavily due to less serious types of offending. As a result, females were consistently found to be

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6 For example, females were over-represented in offending categories labelled as “criminal assault” (Steffensmeier et al. 2006:89). An increase in policing and changes in official policies lead to an increase in female apprehension for such acts as “uttering threats” which are classified as assault (Steffensmeier et al. 2006:90). Although men still commit these criminal infractions, new policing strategies might target females for these types of offending (Steffensmeier et al. 2006:91).
under-represented in more serious types of offending that involved violence or sexually-oriented altercations (Steffensmeier et al. 2006:92).

Even though criminologists have acknowledged the existence of a gender gap in offending, some researchers offer contradicting interpretations to Steffensmeier et al.’s (2006) original observation. For example, Lauritsen et al. (2009) used “National Crime Survey” (NCS) data to examine recorded criminal behaviour between 1973 and 2005. Based on their examination of these self-report surveys, the researchers argued that the shifts in female criminality are more authentic than previously conceived (Lauritsen et al. 2009:388). More specifically, females were more heavily involved in serious criminal acts such as aggravated assault and robbery (Lauritsen et al. 2009: 380). This would imply that the male-female ratio in offending is actually decreasing over time.

With regard to recidivism, a decreasing gender gap in offending posits that women might have similar recidivism rates to men. Longitudinal research on desistance has, at times, revealed limited female criminal pathways (Smith & McAra 2006; Smith & McVie 2003). Although broad delinquency is common in the early stages of adolescents for both genders, more serious offending later in the life course is more typical of males (Smith & McAra 2006:8). Therefore, first-time deviance/offending might not be an accurate predictor for future offending among females.

In addition to re-offending patterns, certain rehabilitation programs might be more useful in deterring males than females and vice-versa. In England and Wales, there is a reported decrease in the completion of “General Offending Programs” (i.e., community-based rehabilitation programs) among female offenders (Martin et al. 2009:881). This observation suggests that men and women have different predictors for program
completion. A study conducted by Martin and his colleagues (2009:891) confirms this hypothesis, revealing that certain rehabilitation programs have gender-specific predictors for program completion. For instance, monetary concerns (i.e., employment and general finances) were only salient to male completion (2009:891). Conversely, unsuitable or unstable perceptions regarding accommodation hindered the completion rate for females (2009:890). The divergent factors affecting program completion demonstrate that a different approach to rehabilitating male and female offenders might be warranted.

A more in-depth discussion of gender and crime is needed to fully comprehend gender-specific rehabilitative pathways. The following sections (i.e., family environment, peer association, incarcerated experience, and shaming labels) will, at times, include discussions on gender discrepancy in offending. These particular findings will suggest that males might be more at risk to re-offend than females because of family dynamics, peer associations, and labeling processes. Although the examination of gendered-rehabilitative processes will not be explored in this study, I have included gender as a control variable in an attempt to acknowledge its relevance to recidivism research.

**Social Network Capital: Associations with Family Members and Peers**

The examination of offending patterns has, at times, warranted an investigation that goes beyond individuals’ personal attributes to examine offenders’ “social capital.” Traditionally, “social capital” has been riddled with ambiguities which makes it difficult for researchers to accurately define its theoretical parameters (Mouw 2006:79). As a result, this study will use a “network social capital” perspective similar to Mouw’s (2006)
work on social capital and behavioral causation. Mouw (2006:79) summarizes this variation of social capital by quoting Portes (1998) as follow:

The literature that I review focuses on what we might call “network” social capital, i.e., the effect of characteristics of friends, acquaintances, or groups on individual outcomes. Portes (1998) provides a useful definition of this form of social capital as “the ability of actors to secure benefits by virtue of their membership in social networks or other social structures,” stressing that whereas “economic capital is in people’s bank accounts and human capital is inside their heads, social capital inheres in the structure of their relationships.”

This particular interpretation of “network social capital” informs us that associations not only have the ability to influence individual behaviours but also grant certain benefits. These benefits can, at times, include increased access or restrictions to deviant opportunities. This would imply that associations with family members (Marcos, Bahr, & Johnson 1986), romantic partners (Benda 2005), and peers (Hartjen & Priyadarsini 2003) can affect one’s criminal propensity. More specifically, the nature of these relationships (i.e., conventional or deviant) will either deter or encourage criminal behaviour. As expected, there are theoretical peculiarities with regard to the linkages of family members and peers to criminal behavior. It is thus assumed that a combined examination of both social groups will encompass a more holistic representation of an offenders’ social capital.

**Family Members: Moderators of Informal Control**

The family environment has been the subject of study for various criminological inquiries. There has been much discussion on the supposed linkages between individuals’ criminal behavior and their relationships with family members. The relationship with
one’s family has traditionally been assumed to deter future offending which, in turn, would imply that family associations are conventional in nature. The role of conventional family members has, at times, acted as agents of informal control which monitor an individual’s behavior and discourage illegal activities (Laub & Sampson 2001:44).

Research on the potential of family associations in deterring deviant behaviour has yielded some interesting results regarding the effect of informal controls. Svensson’s (2003:302) research on adolescent drug use highlighted the importance of informal control by examining the effects of (1) parental monitoring, and (2) deviant peer associations. The notion of “parental monitoring” is borrowed from Hirschi’s (1969) original conception social control theory. Within this particular framework, an individual will perform deviant acts once his or her bond to society is weakened or broken (Hirsch 1969; Ingram et al. 2007). Moreover, some have argued that the strongest bond to society that young adolescents may have is represented through their relationship with their parents (Marcos et al. 1986; Svensson 2003). Thus there is an assumption that a good relationship with one’s parents represents a conventional bond to society that raises an individual’s stake in conformity.

Borrowing from both social control theory and differential association theory, Svensson (2003:383) created an integrated framework that aims to examine the “gender specific” effects of parental monitoring and deviant peer associations. Svensson (2003:308) collected his data from surveys distributed to two groups of students (i.e., 14-15 years of age and 17-18 years of age) in 20 classrooms in Falkenberg, Sweden. These self-report surveys contained questions regarding family dynamics, subjects’ exposure to fellow drug users, and inquired about subjects’ own drug consumption. The findings
revealed that adolescent females were more supervised than adolescent males and had less delinquent associations (Svensson 2003:320). Conversely, adolescent males were more likely to have a history of drug use. More importantly, Svensson’s (2003:321) findings highlighted the supposed linkages found amongst poor parental monitoring and association with deviant peers. This relationship indicated that young adolescents with poor parental monitoring had more delinquent associations. Consequently, one could assume that strong parental monitoring has an indirect effect on deviant behaviour by preventing young adolescents from associating with deviant peers.

Within the context of recidivism research, a favorable association with family members has traditionally been an indication of offenders’ successful rehabilitation. For example, Hepburn and Griffin (2004) conducted a study which examined the effects of social bonds on successful adjustment to probation. Within this particular framework, the researchers were interested to see if strong social attachments to family members and peers would result in a smooth transition to probation for convicted male child molesters (2004:51). Hepburn and Griffin (2004:50) specifically chose this type of offender since sex offenders, especially child molesters, traditionally avoid physical and social contact with others upon release. Hepburn and Griffin (2004:47) makes use of “life course theory of age-graded informal control” to assess the probationary period of the sampled child molesters. This specific model of life course theory stipulates that desistance among young adults is reinforced when they form strong conventional ties to the community (Hepburn & Griffin 2004:48). The researchers examined the probationary periods of 258 male child molesters during a period between January 1st 1997 and June 30th 1999 (Hepburn & Griffin 2004:51). As a result, Hepburn and Griffin (2004:69) found that
offenders who posed strong associations to friends and family members were more likely to complete their probationary periods without “regulation infractions” (i.e., misconduct) than those who reported more isolating social lives (i.e., limited contact with members of the community). Therefore, an association with family members enabled previously incarcerated offenders to have and maintain a smoother transition from prison to community.

Prison release programs, such as community probation programs (Hepburn & Griffin 2004:69) and half-way houses (Seiter & Kadela 2003:380), are designed to facilitate the re-introduction of offenders into their communities. A strong component within this reintegration process is the construction of conventional ties to members of the community (i.e., family, friends, or employment contacts). Interestingly, Visher and Travis (2003:96) argue that the strength of these relationships may vary according to the offender’s sentence length. More specifically, they argue that longer sentences have the capacity to weaken an inmate’s social capital by diminishing his or her ties to family and community members (2003:96). As a result, offenders with longer sentences will possess greater difficulty reintegrating themselves into the community upon release. Although Visher and Travis (2003:97) suggest that strong ties to family members during the incarceration period may raise an offender’s stake in conformity, there exist various restrictions regarding prisoner visitation rules that limit the ongoing fraternization with persons outside correctional institutions. Not surprisingly, there remains an ongoing debate on inmate contact with non-prison population. While Visher and Travis (2003) support ongoing associations during incarceration, followers of traditional retributive
justice philosophy would argue that isolation from society is an integral part of punishment.

Although associations with family members have traditionally been represented in a positive manner, there have been some arguments against the homogenization of family contacts as conventional. For instance, Benda (2005:337) explored this difference by implementing a life course perspective to examine the recidivistic patterns of men and women who underwent boot camps. Among the various findings found within the five-year longitudinal study, Benda (2005:337) emphasized that living with a criminal partner upon release was, not surprisingly, positively correlated with re-offending. Moreover, the deterrent effect of having conventional relationships (i.e., law abiding romantic partners, family, and having children) was stronger among females than males. Borrowing from sex-roles and feminist theories, Benda (2005:338) explains this finding by reiterating the hypothesis that women are more socially oriented and thus are more influenced by social relationships than are men. Similar to our discussion regarding recidivism rates and gender, one should be wary of homogenizing the effects of conventional and deviant family members on individual male/female behaviors.

**Deviant Peers: Partners in Crime**

The investigation of peer associations has garnered interesting insight regarding criminal propensities. While there remains considerable debate on the full extent to which deviant peers can incite criminal behavior, social learning theories have argued that close friendships with these types of youth can encourage deviant behavior. More specifically, Edwin Sutherland’s (1939) differential association theory stipulates that deviant behavior
is the result of a social learning process that involves the acquisition of techniques and favorable definitions to deviant behavior (Nofziger & Lee 2006:455). This perspective was originally conceived in an attempt to understand delinquent peers and their effect on other subjects (Williams & McShane 2004:79). Recent studies have attempted to reproduce Sutherland’s (1939) original findings by assessing a range of deviant and criminal behavior.

A recent study by Nozfiger and Lee (2006) used the social learning perspective in order to assess the prevalence of juvenile smoking (i.e., underage smoking) among adolescents. Although family members are regarded as the earliest role models for smoking behavior, Nofziger and Lee (2006:456) argue that peers have a stronger lasting impression. As a result, they chose to examine the effects of parents, siblings, best friends, and romantic partners on daily juvenile smoking (Nofziger & Lee 2006:460). They tested if these effects were consistent across same-sex models; hinting that gender composition in pairings might have an effect on smoking propensity. The researchers used the Full Court Press Project (conducted in Tuscon, Arizona) which included data on the smoking habits of students from grade 7 to 12 from 1996 to 2000. Amongst their findings, boys and girls were more likely to smoke if: (1) they had same sex friends who smoked, (2) had a romantic partner who smoked, and (3) had a best friend who smoked (Nofziger & Lee 2006:471). Nofziger and Lee (2006:469) also highlighted that the effect of romantic partners who smoked was significantly higher for girls (i.e., 453% increase) than boys (i.e., 284% increase). The researchers’ findings demonstrate that adolescents who engaged in juvenile smoking had frequent contact with peers who engaged in similar activities. Similar to Benda’s (2005) findings regarding gender-specific sources of
criminal deterrence, Nozfiger and Lee (2006:472) also suggest a possible discrepancy in the manner that deviant peers affect male and female adolescents.

The examination of gender differences in regard to peer influence is not uncommon in social learning research. For example, Neff and Waite’s (2007) recent research project attempted to decipher the gender differences found in offending patterns (i.e., serious substance abuse) of incarcerated juvenile offenders. Neff and Waite (2007:110) were interested to test the principles of general strain theory (i.e., the effect of personal strain on offending behaviour) and differential association theory (i.e., the effect of an association with deviant peers). The study utilized data on 4,846 males and 576 females from the *Youth Profile Database* between July 1st 1998 and June 30th 2003 (Neff & Waite 2007:114). Interestingly, Neff and Waite (2007:121) found that alcohol and marijuana use was similar across genders. However, adolescent girls had earlier onsets and stronger current involvement in more illicit drug use (Neff & Wait 2007:122). This particular observation would suggest that there are gendered sources of strain. Therefore, different types of strain affect males and females differently. Although general strain theory was useful in determining first delinquency, an association with peers involved in substance abuse was found to be a stronger indicator of subsequent criminal behavior. In addition, the effect of peers on substance abuse also seemed to be consistent across genders (Neff & Waite 2007:124). Therefore, this finding implies that peer influence is not mitigated by gender.

Contrary to Neff and Waite’s (2007) findings, other studies have concluded that males are more heavily influenced by deviant associations than females (Alarid, Burton, and Cullen 2000; Piquero et al. 2005). Of particular interest, Piquero et al. (2005)
conducted a study that explored gendered differences in offending with regard to
delinquent peer associations. Piquero and her colleagues (2005:255) were also eager to
see if the effect of deviant peers on crime was mediated by internal (i.e., moral beliefs)
and external constraints (legal sanctions). In an attempt to explore this dynamic, Piquero
et al. (2005:256) used survey data on 2,700 grade 10 students in 1981 as well as data
contained in 1,600 follow-up questionnaires. Among the self-reported surveys, males
were more likely to report criminal acts, such as shoplifting and vandalism, but males also
reported fewer proscriptions against these acts than female respondents (Piquero et al.
2005:268). Conversely, delinquent peers were found to be a weaker predictor for female
delinquency (Piquero et al. 2005:269). These results provided further evidence toward the
claim that males are more easily swayed by deviant peers than females. An interesting
pattern arose within the examination of internal and external constraints. While external
constraints seemed to be unaffected by delinquent peers for both genders (2005:269),
delinquent peers remained a strong predictor for criminal behaviour for both males and
females with high moral prohibitions (2005:270). Therefore, adolescents with strong
moral fiber remain susceptible to the effect of delinquent peers on criminal behaviour.

Although social learning research provides some interesting insights into peer
associations, this theory sometimes ignores the possibility of low social capital among its
research participants. In other words, there is a tendency to assume that all adolescents
have close friendships. Some researchers have addressed this issue by not only examining
deviant peer associations but also attempting to evaluate adolescents’ holdings of social
capital. A noteworthy study by Demuth (2004) examined the effect of deviant peers by

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7 Piquero et al. (2005:256) implicitly noted that the sample attrition was due to logistical problems (i.e.,
absent students, transitional study population, scheduling conflicts, etc) rather than more serious population
characteristics such as an abnormally elevated high school drop out rate.
studying the behaviours of “loners” and “non-loners.” The commonsensical interpretation of “loner” has traditionally been epitomized as an individual who has low social capital (i.e., no strong friendships and disconnection from family members). Demuth (2004:367) summarizes the academic history of the “loner” label and its evolving social meaning as follow:

Despite the ubiquity of friendships, there remains a small group of individuals who have limited ties with peers. Referred to in past studies as “nerds” (Giordano et al., 1986), the “low-accepted” child (Parker & Asher, 1987), or the “social isolate” (Adler & Adler, 1996), these individuals lack stable, healthy friendships and often become isolated or marginalized within larger peer networks…Furthermore, popular stereotypes of loners, reinforced by recent highly publicized episodes of extreme violence, provide unsettling images of loners as psychologically and emotionally unstable and capable of serious forms of delinquency possibly as a consequence of their socially isolated status.

This interpretation insinuates that individuals identified with the “loner” status are more dangerous than “non-loners” due to their lack of “healthy friendships” (i.e., ties to conventional people) and their subsequent personal strain (i.e., feeling marginalized). Given the volatile state of “loners,” one would assume that deviant associations would be more detrimental to “loners” than “non-loners” (Demuth 2004:373). With that in mind, Demuth (2004:374) used data from the National Youth Survey (NYS) of 1,237 young adolescents from the ages of 13 to 17 in 1976. Within his analysis, Demuth (2004:380) concluded that “loners” were actually less likely to engage in petty deviant activity than “non-loners.” It is thus assumed that by avoiding group activities, “loners” are unable to participate in these petty deviant activities. Although “loners” avoided group activities, they reported some weak associations with young adolescents who engaged in more
serious delinquent behaviour (i.e., drug use). In an attempt to decipher this finding, Demuth (2004:388) makes reference to Hotchstetler (2001) and states that:

Indeed, it is likely that although social interaction provides the opportunities for delinquency, interactional dynamics between peers significantly increase the likelihood that delinquency will occur (Hochstetler, 2001).

Therefore, the linkages between associations with delinquent peers and deviant behaviour may have some mediating factors. As outlined by Sutherland’s (1939) theory, an association with a single deviant peer might not be enough to promote favorable deviant associations (Williams & McShane 2004:81). Furthermore, the quality and frequency of these types of associations should also be assessed in order to see if these are strong associations (i.e., best friends or acquaintances).

To better understand the interactional dynamics found in peer associations, recent research has implemented friendship networks within their analysis (Haynie 2002; Weerman & Bijleveld 2007). This trend has, at times, been attributed to Haynie’s (2002) network construction technique in assessing peer delinquency (Weerman & Bijleveld 2007:358). According to Haynie (2002:105), friendship networks offer more accurate insights into peer associations. This is partly due to the manner in which these networks are constructed. Haynie (2002:102) used information gathered from direct (i.e., original respondent) as well as indirect (i.e., friend of original respondent) to accurately map out an individual’s social network. In her examination of youth delinquency, Haynie (2002:121) revealed that a high proportion of delinquent peers within friendship networks lead to higher risk of delinquent activity. As Sutherland (1939) outlined, it is the ratio of
favorable definitions that are acquired which is of particular interest (Williams & McShane 2004:80).

Friendship networks have also been useful to addressing critiques of differential association theory such as the “selection perspective” argument (Weerman & Bijleveld 2007:359). This particular critique proposes that deviant individuals simply choose deviant peers, thus dismissing the central tenets of Sutherland’s (1939) theory. In an attempt to address this concern, Weerman and Bijleveld (2007:363) mapped the friendship networks of 1730 non-delinquent, minor, and serious delinquent students from the Netherlands. Weerman and Bijleveld (2007:365) were interested in seeing if students would only associate with peers who shared similar delinquency levels. Interestingly, their findings demonstrated moderate support for the selection perspective as social networks were composed of a variety of students with various levels of delinquency (Weerman & Bijleveld 2007:376). This would indicate that delinquent students associate with all types of peers ranging from non-delinquent to serious delinquent. Although there was limited support for the selection perspective in regard to delinquency, the results did find evidence of gendered homogeneity (Weerman & Bijleveld 2007:377). In other words, young males and females were likely to report friends and best friends of their same gender.

The Incarcerated Experience: Examining Past Offender Rehabilitation

Similar to recidivism, the incarcerated experience is a concept that can be

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8 This observation might also help explain the discrepancy between male and female delinquency. As previously stated, certain studies have found that males are more easily swayed by delinquent peers than females (Alarid, Burton, and Cullen 2000; Piquero et al. 2005). In addition, Weerman and Bijleveld (2007:376) demonstrate that young males are more likely to associate with other young males. As a result, young males might be offending in groups more often than homogenized groups of females.
conceived and consequently examined within divergent theoretical frameworks (Holleran & Spohn 2004:213). Most notably, deterrence theory depicts incarceration as a viable solution for preventing criminal behavior and maintaining social order (Piquero & Blustein 2007:270). Moreover, this theory speculates that the incarcerated experience and the fear of returning to prison will deter past offenders from re-offending (Spohn 2007:32). Drawing on the work of Andenaes (1974) and Gibbs (1975), Pogarsky (2007:60) summarizes the central tenets of this theory by stating that: “Offending should relate negatively to the perceived certainty, severity, and celerity of the potential sanction(s).” Although most studies suggest certainty is more salient (Doob et al. 1995; Von Hirsh 2001), some researchers have argued that a punishment’s severity takes precedence over its certainty and celerity (Pogarsky 2007:60). With this in mind, the deterrent effect of a particular sentence would increase with sentence length.

Although theoretically relevant, the actual examination of deterrence theory has at times brought about inconsistent findings. At the height of the mass incarceration crisis in the late 80s and early 90s, Lynch (1999) challenged pre-conceived notions of incarceration by examining crime rates from 1972 to 1993. In brief, Lynch (1999) was interested in testing if increases in incarceration rates led to lower annual crime rates. He found no evidence of deterrence during the tumultuous years between 1972 and 1993 (Lynch 1999:359). The mass incarceration of offenders in the United States was found to be ineffective in lowering annual crime rates. Lynch (1999:347) refers to the search for empirical evidence supporting deterrence theory as “beating a dead horse.” This analogy, although tongue-in-cheek, reinforces the need to acknowledge prior research that
emphasizes imprisonment as an ineffective tool for crime prevention and offender rehabilitation.

A common approach in assessing deterrence theory has been to use an experimental research design that aims to compare the incarcerated experience to an alternative form of punishment. For example, Spohn’s (2007) work compared the recidivistic rates of offenders who received a prison sentence to those who received probation. Spohn (2007:33) was also interested in investigating if the deterrent effect of imprisonment is conditioned by one’s stake in conformity. Spohn’s (2007:34) data set was collected in Jackson Country Circuit Court in 1993 and contained the recidivistic histories of 1,077 offenders (i.e., 776 offenders who received probation and 301 who received prison terms). The findings revealed that offenders who were sent to prison were significantly more likely to re-offend than their parolee counterparts (2007:38). Moreover, the imprisoned offenders also failed (i.e., recidivated) quicker than probationers (2007:46). In the end, it was also confirmed that individuals with fewer stakes in conformity (i.e., unmarried, low educational attainment, unemployed etc.) were harder to deter with imprisonment. Needless to say, Spohn’s (2007) research did not find any supportive findings for deterrence theory.

Although deterrence theory remains a central tenet of incarceration research, recent research has focused its attention on examining the key components that shape “the incarcerated experience” in hopes of gaining a better understanding of its rehabilitative potential. This trend in incarceration research has prompted inquiries regarding the management style of correctional institutions and the environment it fosters for rehabilitation. One could assume that this shift in academic interest is partly due to recent
public inquiries regarding the quality of public and private prisons in the United States. Although there has been some progress in recent years, Bayer and Pozen (2005:551) highlight that:

For all the controversy engendered and for all the individuals affected by prison privatization over the last 2 decades, empirical analysis has lagged the public interest.

Even though research on privatized prisons may be incomplete, there are some notable studies within this area of research that provide important implications for public policy. These studies have at times challenged pre-conceived notions of retributive justice by assessing the rehabilitative potential of the incarcerated experience.

An American study conducted by Bales et al. (2005) examined the differences in recidivistic behaviors of recently released inmates from private and public prisons. Bales et al. (2005:58) challenged the claims that private institutions have better rehabilitative programs and thus have lower recidivistic rates than publicly funded institutions. These claims support retributive solutions by placing a tremendous importance on the incarcerated experience as the strongest component in the rehabilitation process. In hopes of investigating this claim, Bales et al. (2005:62) examined the recidivistic patterns of 81,737 Florida prison inmates that were released between July 1995 and June 2001. This large group of inmates contained representative sample populations of adult male, adult female, and youth male offenders (2005:61). In regards to their methodological framework, Bales et al (2005:63) defined recidivism as any criminal offense that was recorded by police within 60 months of the date of the inmates’ release. After examining the re-offending patterns of the 81,737 released inmates, it was concluded that there were...
no differences in the recidivistic patterns of privately and publicly incarcerated adult males (2005:69), females (2005:72), and adolescent males (2005:74). According to Bales et al. (2005:59), their study shared the theoretical orientation and academic inquiry of only three other studies at the time of publication. Needless to say, Bales et al. (2005:78) explicitly state that there is a need to broaden our knowledge of divergent incarcerated experiences in order to better regulate prisons.

Similar to Bales and colleagues (2005), Bayer and Pozen (2005) also conducted a study that examined the rehabilitative potential of public and private youth correctional institutions. Bayer and Pozen (2005:553) extended their analysis to include sub-types of public and private institutions which were labeled as: “private for-profit,” “private non-profit,” “public state-operated,” and “public country-operated.” The researchers assessed recidivistic behavior as any criminal or adjudicated charge given to the youths within one year of their respective release dates (2005:560). In addition to their interest in recidivistic rates, Bayer and Pozen (2005:558) also examined the financial costs of managing the distinct juvenile institutions. The data set consisted of 16,164 incarcerated youths, from 111 Florida institutions, who were released between July 1st 1997 and June 30th 1999 (Bayer & Pozen 2005:556). Within their survival analysis, the researchers noted that “private for-profit” management had a significant impact on increasing recidivism and daily hazard rates (2005:581) but was regarded as the most cost effective management style. These results stimulate interesting debates regarding the existence of privately funded “for-profit” institutions. In regard to the discussion on the incarcerated experience, Bayer and Pozen’s (2005) work effectively highlights the possible differences in the incarceration experience and its consequential effect on young offenders.
The Incarcerated Experience: Inmate Conduct and Prison Environments

Although past research on the incarcerated experience offers some insightful observations on official recidivism rates, there is a significant lack of research on prisoner’s personal experiences. This is not due to a lack of interest but rather an increase in security measures and ethical considerations for inmates. Moreover, there remains considerable debate on whether or not inmates should be classified as “vulnerable persons.” This recent classification attempts to stress the limited rights and freedoms inmates have as they are, at times, subjugated to several research studies. Conversely, some research institutions might refuse to let their employees gain access to the prison environment in fear of placing them in immediate danger.

Even though these recent developments have limited full access to prisons, some researchers have attempted to study this social setting from outside its walls. For instance, Windzio (2006:341) conducted a study which aimed to assess the impact of the “pains of imprisonment” on recidivism. The notion, “pains of imprisonment,” is an attempt to generalize the social deprivation of contact with important persons (i.e., family, partners, and friends) residing outside prison (2006:342). While Windzio (2006:345) uses multiple variables in assessing the incarcerated experience, he relies distinctively on recorded prisoner violations (i.e., fights with guards or other inmates, drug use, and other non-conforming behaviours) to measure inmates’ negative subjective experiences. This seems to have become a common practice amongst researchers since it does not require direct contact with inmates and has, in the past, been able to predict recidivistic behaviour (Bayer & Pozen 2005; Windzio 2006). In Windzio’s (2006) study, he examined the number of rule violations an inmate had received during his or her time in prison. The
study’s multivariate analysis demonstrated that “rule violations” (i.e., an indicator of non-conforming behavior) predicted future offending (Windzio 2006:347). Thus, it was concluded that inmates with a high number of violations were more likely to re-offend than others who had less or no infractions (Windzio 2006:346).

Although research on prison subculture is rare given the unique ethical considerations, Lahm (2008:120) was able to examine prison inmate violence thanks to some obliging inmates and supportive state officials. In this rare investigation of prison subculture, Lahm (2008) attempted to discover if inmate violence was the result of deplorable living conditions or simply the amalgamation of “violent” offenders living under one roof. Her discussion on inmate violence argues that the incarcerated experience is not always at the forefront of rehabilitative efforts but has, more predominantly, been saturated with inmate-on-inmate violence. According to Lahm (2008:121), prison inmate violence has been traditionally explained by the “deprivation theory” and the “importation theory.” Lahm (2008:121) describes the “deprivation theory” as follow:

Developed during the 1950s and 1960s, deprivation theory suggested that inmate socialization was a specific response to the losses suffered or pains of imprisonment experienced at a prison or total institution (Goffman, 1961; Sykes, 1958). In terms of prison violence, the deprivation model argued that prison life is degrading and stigmatizing and that, in response to the oppressive conditions within prison, inmates often acted out aggressively.

In this theory, individual factors play no role in perpetuating violent altercations since it is the environment which induces this type of violent behaviour. Conversely, “the importation theory” explicates that prison subculture and its consequential interactions are the result of inmates importing their own personalities and values systems within prison.
walls (Lahm 2008:122). In this instance, inmates’ past violent behaviours are the inevitable cause of prison violence. Lahm (2008:126) interviewed 1,054 inmates from 30 prisons located in Ohio, Kentucky, and Tennessee. Her multilevel analysis permitted a combined examination of individual (for example, race and age) and contextual factors (for example, overcrowded prison populations). Lahm (2008:133) concluded that age and aggression had the most significant impact on violent behavior. This suggests that institutions which detain violent offenders and have an overcrowded population of younger inmates (i.e., 25 years of age) foster more violence than other institutions. This provides some support for the deprivation theory which emphasizes the pains of imprisonment in explaining inmate violence. Interestingly, the mass incarceration crisis and the increasing prevalence of sentencing youths in adult court might give rise to more overcrowded institutions that will undoubtedly place younger offenders in harmful scenarios.

While the linkages between prison violence and recidivism cannot be examined within my own study, one could argue that the rehabilitative potential of the incarcerated experience might be hindered by such phenomena as prison violence. This would insinuate that violent environments and their experiential components (i.e., witnessing violence, being victimized, and isolation from conventional others) might, in fact, encourage subsequent criminal behaviour (Eitle & Turner 2002; Silverman & Caldwell 2008). In addition, the continual interactions with violent inmates might increase the criminal skill set of young offenders. The acquisition of new criminal skills might increase the likelihood that these individuals will re-engage in criminal activity once released. Although this study does not have the necessary data to test these hypotheses,
these depictions of the incarcerated experience are useful in a critique of deterrence theory.

**The Incarcerated Experience: The Effect of Sentence Length on Re-Offending**

Alongside the notion that inmate conduct can predict recidivism, some researchers have argued that the overall effect of incarceration on re-offending varies according to sentence length (Patterson & Preston 2008:34). A study by Orsagh and Chen (1988) on the recidivistic patterns of 1,425 released prisoners from North California revealed some important linkages between sentence length and re-offending. In an attempt to embrace various ideologies, Orsagh and Chen (1988:157) created an interdisciplinary theory that highlighted perspectives from sociology (i.e., Hirshi’s Control Theory), economics (i.e., Economist’s Rational Choice Theory), and psychology (i.e., Competing-Response Theory). This integrated perspective argued that time served affects recidivism on two fronts: (1) specific deterrence and (2) social bonding. Within the two-year examination of the inmates’ recidivistic behaviors, Orsagh and Chen (1988:167) concluded that “time served” affects recidivism but its direction varies according to offending type. Interestingly, they also proposed that the relationship between “time served” and recidivism represented a U-shaped function (1988:166). Therefore, a sentence can either be too short or too long to deter a specific individual.

The aforementioned relationship between time served and recidivism has been examined within various research designs. For example, research conducted by Gainey, Payne, and O’Toole (2000) expanded the intrigue of this relationship by also including an examination of time served on electronic monitoring. In regards to electronic monitoring,
some studies have shown that there is a time limit for program completion. As Gainey et al. (2000:738) highlight, one study by Roy (1997) demonstrated a decline in the rehabilitation potential of electronic monitoring after 6 months. In an attempt to further examine this occurrence, Gainey et al. (2000:740) used the National Crime Information Center (NCIC) to gather the records of 276 past offenders who served at least part of their sentence on electronic monitoring between September 1986 and July 1993. Moreover, these individuals’ criminal activities were followed for a period of 5 to 12 years following their release from electronic monitoring (Gainey et al. 2000:740).

Gainey et al.’s (2000:748) findings supported those of Orsagh and Chen (1988) by highlighting the relationship between time served and recidivism was at times U-shaped.9 As a result, less serious offenders were less likely to reoffend when time in jail was short and was followed with electronic monitoring (Gainey et al. 2000:749). Conversely, longer jail sentences for some offenders were linked to an increase in recidivism (2000:748). According to Gainey et al. (2000:749), the most important finding within their study was that time on electronic monitoring was linked to a decrease in recidivism rates. This would suggest that electronic monitoring is a key component in the reintegration of offenders back into society following jail time. Therefore, it could be suggested that a shorter time in jail coupled with social integration programs, such as electronic monitoring, is a more successful rehabilitation strategy for past offenders than longer sentences with no follow-up.

In retrospect, the incarcerated experience can account for a wide variety of occurrences that take place in prison that may potentially hinder the long term social and

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9 This was only apparent for certain types of offenders. For example, there was no criminogenic effect of prison for “naïve offenders” with no prior convictions (Gainey et al. 2000:747). This would indicate that specific sentence lengths might only be a successful deterrent for first-time offenders.
psychological rehabilitation of an offender. Having said that, there are inherent
limitations on the scope in which researchers can examine and structure the incarcerated
experience. Furthermore, the inclusion of new inmates and the departure of others make it
difficult to accurately depict a stable prison environment and population (Patterson &
Preston 2008:35). Nevertheless, research examining the linkages between incarceration
and recidivism has traditionally relied on prison conduct violations and time served as
reliable quantitative indicators (Lin 2007a; Patterson & Preston 2008). While these might
not encapsulate all experiences, they have demonstrated their worth in prior studies in
assessing future offending.

The Reintegration Process: Inheriting Deviant Labels

The incarceration experience is a large obstacle that most offenders must first
overcome before commencing their reintegration process (i.e., returning to the
community). Some argue that the personal trials and tribulations of this particular
experience are used as a reminder not to re-offend (Patterson & Preston 2008; Windzio
2006). Not surprisingly, the effect of the incarcerated experience goes beyond prison
walls and maintains a strong presence following an offender’s release. By virtue of being
imprisoned, the offender returns to their communities with a newly acquired deviant label
(Miethe et al. 2000; Murphy & Harris 2007; Pager 2003). This label can be experienced
as public perceptions of “ex-con” or can be more concrete with reference to official
criminal records (Pager 2003:941). In both instances, the labels remind the offender and
their communities that their character is primarily defined by their criminal past.
The process by which these labels are attributed to past offenders has been widely examined for various levels of delinquency and more serious offending. Traditionally, the examination of labels has been predominantly performed by scholars who use “labeling theory” (Adams et al. 2003; Sweeten 2006). In short, labeling is the result of a societal reaction to a particular act. The creation of deviant acts is rooted in the disapproval of a large social group. As consequence, those who perform acts that are deemed deviant are they themselves labeled deviant (Williams & McShane 2004:144). The creation of a deviant label can be detrimental to an individual in two ways: (1) it might limit participation in conventional lifestyles, and (2) it might encourage secondary deviance (i.e., a subsequent deviant act is performed in an effort to fulfill the social expectations of the deviant label). For young offenders, the labeling process can limit or hinder future opportunities linked to conventional lifestyles such as educational attainment (Sweeten 2006) and employment (Kouvonen & Kiviori 2001; Staff & Uggen 2003).

Traditionally, the examination of labels has been successful in determining first-time offenses (Adams et al. 2003; Sweeten 2006; Wilson et al. 2009). For example, Adams et al. (2003) tested labeling theory by examining the deviant labels and criminal activities of a small group of youths from Mississippi in 1992. According to Adams et al. (2003:173), a major obstacle in empirically testing labeling theory is assessing the self-concept variable in the theory’s secondary deviance hypothesis (i.e., self-fulfilling prophecy of acting deviant because one is labeled as such). This hypothesis relies heavily on the personal acceptance of a youth’s deviant label following the informal labeling process (i.e., social labels given to youth by family, peers, and community members). In an attempt to study this phenomenon, Adams et al. (2003:175) used questionnaires that
asked the respondents to rate their perception of labels given to them by family, peers and school officials. For example, respondents were asked if they thought their parents labeled them as obedient or disobedient (Adams et al. 2003:175). This self-realization process was then coupled with an examination of more concrete attributes (i.e., arrests, complaints, and school related infractions). The results indicated that youths’ perception of informal labels was largely related to most types of subsequent deviant behaviour (Adams et al. 2003:182). Of particular interest, there were no linkages between these self-concepts and drug-related offenses. Overall, youths who reported more deviant informal labels were more likely to re-offend (Adams et al. 2003:183). This provided some partial support for the secondary hypothesis found in traditional labeling theory.

The labeling perspective has also been used to assess the indirect effects on offending. In this instance, the influence of deviant labels affects conventional attributes which in turn might encourage deviant or criminal behaviour. Sweeten (2006) examined deviant labels by investigating the effect of first-time court appearances on educational attainment. It was hypothesized that attendance of court hearings during high school would further stigmatize a student and would result in lower educational attainment. This is relevant to a discussion of deviance since prior studies have demonstrated that educational attainment is a strong deterrent of criminal behaviour (Kethineni & Falcone 2007; Kruttschnitt et al. 2000; Miethe et al. 2000; Pager 2003). To test the linkages between labeling and educational attainment, Sweeten (2006:467) used data on 2501 youths (aged 12-17) collected for the 1997 National Youth Survey. He concluded that first-time arrest and court involvement were strong predictors of high school drop out rates (Sweeten 2006:473). More importantly, the analysis revealed that first-time
involvement in court was more detrimental to educational attainment than first-time arrest (Sweeten 2006:477). Therefore, Sweeten (2006) concluded that youths who underwent more public labeling processes (i.e., court appearances) were more likely to have difficulties retaining conventional lifestyles (i.e., maintaining acceptable grades and school attendance).

A study by Wilson et al. (2009) extended Sweeten’s (2006) analysis of labeling theory in youth courts by focusing on gender-specific dynamics. In their study, Wilson et al. (2009) used an experimental research design to randomly assign 168 youth cases to treatment (i.e., teen courts) and control (i.e., judicial alternative to teen courts) groups.10 The cases were originally collected from four distinct teen courts found in Maryland, DC (Wilson et al. 2009:23). The results revealed two important findings that further inform labeling theory. First, the findings revealed that more positive self-concepts (i.e., less deviant labels) were linked to lower re-offending frequencies (Wilson et al. 2009:25). Secondly, the labeling process featured in teen courts was more detrimental to males than females. This meant that young males who underwent teen court procedures were more likely to recidivate than their female counterparts (Wilson et al. 2009:26). These findings are consistent with the central tenets of labeling theory with regard to the stigmatizing effect of labels on secondary deviance.

Although labeling theory outlines the dangers of deviant labels, some theories have attempted to investigate the role of labels in criminal rehabilitation. More specifically, Braithwaite’s (1989) “reintegrative shaming theory” stipulates that labels can

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10 This random assignment to two distinct judicial processes was only possible because the offenders were apprehended for less serious crimes (Wilson et al. 2003:24). Also, the research had to adhere to specific government guidelines and regulations. Evidently, this type of random assignment is rare amongst more serious offenders.
be used productively as a shaming tool in order to incite personal responsibility and forgiveness. Although this perspective supports the relevance of labeling in criminal rehabilitation, it does acknowledge the linkages between stigmatizing labels and subsequent offending. As a result, Braithwaite (1989) argues that proper conditions must be met in order to use deviant labels to deter future offending. A distinction is made between disintegrative (i.e., stigmatizing) and reintegrative labeling processes (Ahmed & Braithwaite 2004; Hay 2001). Similar to labeling theory, the reintegrative shaming theory speculates that disintegrative labels (i.e., isolating an offender from the community) can lead to secondary deviance. Conversely, a reintegrative label avoids the stigmatization of an offender by focusing on repairing broken relationships through forgiveness (Braithwaite 1989:87).

Admittedly, this theory has been criticized within academic research for its lack of empirically based measures of shame (Botchkovar & Tittle 2008; Harris 2006; Hay 2001). A common empirical application of reintegrative shaming theory has been to assess the occurrence of bullying among adolescent peers (Ahmed & Braithwaite 2006; Morrison 2006; Ttofi & Farrington 2008). A recent study conducted by Ttofi and Farrington (2008) provided some empirical support for the reintegrative shaming perspective. In their study, they used questionnaires to assess the effect of parental shaming on the act of bullying. The questionnaires were distributed to 182 primary school students, between 11 and 12 years of age, attending sixth grade in Nicosia, Cyprus (Ttofi & Farrington 2008:353). Information on shame and shame management was gathered by including questions that outlined specific scenarios (i.e., for example, would you feel ashamed if you hurt someone else). These questions were paired with other inquiries
regarding youth-parent relationships. Among the findings, shame management was found to be directly related to sibling and peer bullying (Ttofi & Farrington 2008:361). This meant that youths who had reintegrative shame management (i.e., felt guilty for bullying) would be less likely to engage in subsequent bulling. Conversely, youths who had stigmatizing shame management (i.e., attitudes of defiance towards shame) were more likely to continue bullying. In addition to these findings, the researchers also found that mothers played a more important role in shaming than fathers. Moreover, it was revealed that the child-mother bond had a stronger deterrent effect for adolescent boys than on adolescent girls (Ttofi & Farrington 2008). These results might indicate that shame management is directly related to family dynamics (i.e., obedience, mutual respect, parental authority, and quality of relationship).

Another study by Losoncz and Tyson (2007) also provided some empirical support for the shaming perspective. In their study on 178 high school students in Australia Losoncz and Tyson (2007:173) found that stigmatization and reintegration labels were strong predictors of future offending. Furthermore, it was also revealed that parental shaming was directly related to other factors such as associations with deviant peers (Losoncz & Tyson 2007:174). This suggests that there are mitigating factors which might affect the potency of shaming in deterring future offending. Therefore, empirical tests of reintegrative shaming theory should incorporate more macro-level measures of shaming (i.e., peer associations found outside the family environment).

Although reintegrative shaming theory has been used to inform new restorative justice programs, there is a significant lack of research on the effect of shame on recidivism (Hay 2001:135). As a result, studies offer conflicting opinions regarding the
legitimacy of this theory in predicting re-offending. For example, Botchkovar and Tittle’s (2008) research attempted to expand the reintegrative shaming perspective by incorporating elements from other theories (i.e., social control, deterrence, and strain). This strategy permitted the researchers to examine the contingencies where shame might be more effective. Within their examination of 224 Russian adult offenders, the researchers found no evidence of reintegrative shaming theory (Botchkovar & Tittle 2008:708). That is to say, no linkages between shaming processes (i.e., stigmatizing or reintegrative labels) and subsequent offending were found. Consequently, it was suggested that future iterations of reintegrative shaming theory should question the sources of shame (i.e., parents, community members, and peers). It is assumed that non-conventional sources of shame (i.e., deviant peers) might encourage criminal behaviours as if it were a conventional norm (i.e., deviant acts may be normalized within deviant peer networks). The researchers concluded their study by arguing in favor of new revisions to the theory (Botchkovar & Tittle 2008).

As previously mentioned, a limitation found within the reintegrative shaming perspective is the lack of consensus with regard to measurement and the conception of shame. The reintegrative shaming theory involves micro (i.e., individual) and macro (i.e., community) concepts of shame (Ahmed & Braithwaite 2004; Hay 2001; Morrison 2006). While research efforts studying micro-level concepts of shame have found evidence of reintegrative shaming (see Morrison 2006; Ttofi & Farrington 2008), larger scale studies aimed at testing macro-level accounts of shame have encountered mixed results (see Botchkovar & Tittle 2008; Losoncz & Tyson 2007).
With that said, careful consideration is warranted when attempting to examine the labeling process. Supporters of Braithwaite’s (1989) reintegrative shaming theory have argued that the theory ameliorates and clarifies the role of labels originally discussed in traditional labeling theory. Although this new perspective offers a theoretical distinction in the role of labels (i.e., disintegrative and reintegrative), empirical investigations of shaming remain in its early stages of development. Despite this, reintegrative shaming theory represents a new direction in criminological research that might be useful in predicting recidivism.

Conclusion

This chapter has provided an overview of recent trends in recidivism research. Given the broad nature of recidivism, it was necessary to begin our discussion with a short overview of incarceration rates and court procedures. This discussion granted us permission to engage in a critique of retributive justice claims. In summary, prior research has not garnered much support for imprisonment as a rehabilitation tool (Bateman 2005; Lynch 1999). Furthermore, the increasing use of incarceration makes research on its rehabilitative potential not only relevant but necessary.

Although there seems to be an interest in studying recidivism patterns, the complex nature of recidivism as a predictable outcome has brought about certain limitations. For instance, the methodological considerations found within this type of research are not universally shared (Deng 1997; Escarela et al.2000; Schmidt & Witte 1988). Consequently, it is difficult to compare findings across various studies which examine different types of re-offending behaviour (Lin 2007a; Patterson & Preston 2008).
Unlike first-time offending, recidivistic behaviour is a much more complex subject of study that incorporates a transitional stage (i.e., punishment).

Finally, there was a discussion concerning possible predictors of recidivism. Specific attention was paid to empirically-based research and its contributions in developing a greater understanding of recidivism. Within the selection of empirical literature, recidivism was linked to: demographic factors (i.e., race and gender), conventional family environments (Laub & Sampson 2001; Svensson 2003), deviant peer associations (Demuth 2004; Neff & Waite 2007), sentence length (Spohn 2007; Patterson & Preston 2008), and shaming labels (Ahmed & Braithwaite 2004; Botchkovar & Tittle 2008). These results will be revisited in the next chapter where I will also outline this study’s theoretical framework. Although this literature review could not be a complete summary of current recidivism research, it was my intention to highlight key studies that have produced interesting findings and have inspired this study’s theoretical elaboration.
CHAPTER 3:
THEORETICAL FRAMEWORK AND HYPOTHESES

Introduction

As outlined in the previous chapter, literature on first-time offending has included many efforts to comprehend the effect of family, peers, punishment, and labels in an individual’s decision to offend. Recidivism research has, at times, attempted to combine these elements in order to offer a more complete interpretation of re-offending (Braithwaite 2001; Laub & Samson 2001; Lin 2007a). This integrative approach has become a staple in current research efforts because it argues that criminal behaviour cannot be explained by only one set of variables (Laub 2006; Piquero et al. 2005). Rather, offending is a more complex behaviour that includes multiple factors which encourage, condition or enables access to deviant and criminal behaviour.

In this study, I will attempt to predict the recidivistic patterns among a sample of re-offending youth in New York City. More specifically, I am interested in testing the effect of punishment (i.e., incarceration or community service) on recidivism. Similar to previous efforts of theory integration, this chapter will outline a theoretical elaboration that combines four distinct approaches in predicting criminal behaviour (i.e., life course theory, differential association theory, deterrence theory, and reintegrative shaming theory). This type of integration will help outline the important factors that may contribute to youths’ successful rehabilitation. Moreover, an integrative theory approach provides theoretical justifications for an empirically-based examination of the rehabilitation process. Following the elaboration of the theoretical integration, I will make reference to previous research on offending to create specific hypotheses regarding recidivism. These hypotheses will be presented within individual examinations of each
theory. Moreover, three interactional hypotheses will also be explored in order to assess the role of punishment across other variables.

**Theoretical Elaboration: Examining the Rehabilitation Process**

The theoretical integration outlined in this study was constructed as an analogy of an offender’s narrative regarding the rehabilitation process. That is to say, this theorizing attempts to account for various interpersonal and structural influences that may affect offending behaviour. Presser (2009:179) described the use of offender narratives as follow:

> A narrative (or self-narrative) is sometimes referred to as a life story or life history. But a narrative is not a report on one’s entire life so far. Rather, a narrative always draws electively upon lived experience…It must start and end somewhere; it must emphasize some event(s) and not others to make its point.

Although the present study does not involve the acquisition of offender narratives, I have structured my theoretical framework in such a way that it accounts for specific lived experiences. The selection of lived experiences and other important factors which shape the framework were based on existing criminological theories. As a result, the elaboration model requires time ordering as it represents the stages found in offending and re-offending patterns.

My theoretical framework begins with the examination of the family environment. This starting point is appropriate given that one of the strongest relationships for youth is found among family members (Marcos et al. 1986; Svensson 2003). Moreover, family members play an integral role in child rearing and may have an affect on a youth’s perception of social conformity. The life course theory perspective will be used to test the
effect of conventional family environments on recidivism. It is assumed that proper surveillance and an attachment to conventional members of society will be able to deter future offending (Laub 2006; Laub & Sampson 2001).

In addition to family members, I will also examine the effect of deviant peers on recidivism. The inclusion of peers within this study strengthens the representation of a youths’ network social capital (i.e., combination of social relationships that might influence individual behaviour). Differential association theory will be used to examine the effects of deviant peers and peer networks on re-offending. It is hypothesized that associations found outside the family environment also play a large role in structuring attitudes and perceptions of deviance (Neff & Waite 2007; Nofziger & Lee 2006; Piquero et al. 2005).

Following the examination of network social capital components (i.e., family environment and peers), I will offer some theoretical inquiries with regard to punishment. Within the examination of punishment, deterrence theory will be used to assess the effect of incarceration and community programs on re-offending trends. Restorative justice principles will also be referenced as a theoretical critique of traditional deterrence theory. As a result, it is hypothesized that community-based alternatives to imprisonment will be more successful in deterring future offending than a prison sentence.

Lastly, I will explore the potential aftermath of punishment through the effect of shaming labels on youth re-offending. Upon release from prison (or community program), youths receive a label that will either encourage or deter future offending (Ahmed & Braithwaite 2006; Braithwaite 1989, 2001). Braithwaite’s (1989) reintegrative shaming theory will be used to distinguish between disintegrative (i.e., stigmatizing) and
reintegrative shaming labels. Consequently, it will be argued that youths who experience reintegrative shaming (i.e., received reintegrative labels) will have more successful criminal rehabilitations than youths who are stigmatized (i.e., received disintegrative labels). 11

The combination of these four criminological theories will offer a more accurate depiction of the rehabilitation process. As a result, the following sections will engage in a more theoretically driven discussion pertaining to the contributions these theories provide in the examination of recidivism.

**Life Course Theory**

The previous chapter demonstrated that the role of the family environment is an important factor in any type of youth-oriented research. With regard to deviant youth, the family environment can help explain potential linkages between parental authority and offending. Traditional social control theory emphasized the examination of social bonds and their ability to tie youths to conventional norms (Ingram et al. 2007). Ingram and his colleagues (2007:381) summarize Hirschi’s (1969) original conception of social control theory as follows:

Social control theory posits that “delinquent acts result when an individual’s bond to society is weak or broken” (Hirschi, 1969, p. 16). Social bonds become weak or broken when a person fails to (a) form positive attachments to significant others (notably parents), (b) develop a stake in conformity to conventional norms, (c) engage in conventional activities, or (d) believe in society’s accepted norms (Hirschi, 1969;

11 As previously mentioned, a disintegrative label is stigmatizing as it is used to isolate an offender from conventional members of the community (Braithwaite 1989; 2001). Arguably, this stigmatization process makes an offender more likely to recidivate because of social expectations (i.e., fulfilling secondary deviance). The reintegrative label is more socially inclusive as it encourages community relationships. This reintegrative process uses shame to restore broken bonds and gives a past-offender a chance to be forgiven by his victims (Braithwaite 1989; 2001; Rodriguez 2007).
Rebellon, 2002; Toby, 1957)…As such, attachment acts as a buffer in which the child with strong bonds will consider potential negative impacts and not engage in delinquency.

The social control perspective argues that the presence of positive attachments within network social capital increases the likelihood that youths will have a stronger stake in conformity. In addition, the presence of conventional others will also help monitor a youth’s deviant behaviour. Hirschi’s (1969) unique emphasis on the role of parents in monitoring deviant behaviour remains an essential factor in many contemporary theories. Some theorists have argued that social control theory offers a more static interpretation of parental authority and rarely includes changes in a youth’s social life (Laub 2006; Massoglia & Uggen 2007). This particular limitation presents a problem for this study’s attempt to examine the effect of incarceration on re-offending.

Laub and Sampson’s (2001) life course theory builds upon the principles of social control theory by suggesting that acts of deviance during adolescence can help predict future offending patterns. More specifically, they acknowledged that the nature of relationships is more dynamic than previously contested in other theories. Laub (2006:243) outlines the strength of his theoretical approach as follow: “One of the themes of life-course research is the constancy of change. The basic assumption is that human development and aging are life-long processes.” This suggests that factors, such as parental authority/monitoring, are affected and consequently altered by subtle or more obvious events in the adolescents’ social life.

A subtype of Laub and Sampson (2001:1) life-course theory, entitled “life course theory of age-grade informal social control,” is particular useful in examining the effect of family environments on recidivism. This reiteration of the theory stresses the
importance of social bonds in deterring re-offending. The previously mentioned study by Hepburn and Griffin (2004) tested this theory and concluded that social bonds (i.e., ties to greater community and family members) helped past offenders successfully complete probation. In this instance, the past offenders’ family members acted as agents of informal controls which prevented re-offending through surveillance and provided a conventional association with the greater community. Hepburn and Griffin’s (2004) research emphasis on the effect of social bonds across particular life course events (i.e., probation) distinguishes it from more traditional social control studies.

Similar to previous studies regarding rehabilitation, this study will use the life course theory perspective in order to test the efficiency of informal controls in deterring future offending. In contrast to Hepburn and Griffin’s (2004) study of young adult child molesters, this study will examine recidivism among youths with less serious criminal backgrounds (i.e., minor violent, property, or drug offenses). Four hypotheses have been constructed in order to address the effect of informal controls on recidivism and to assess the conventional nature of family associations. The first family-related hypothesis (1a) states that:

**Hypothesis 1a:** Youths who have frequent disputes with their parents will recidivate more often than those who do not have any conflicts within the family environment.

The presence of disputes between youths and parents is intended to represent less stable family environments. It is assumed that informal controls such as parental monitoring cannot operate successfully in conditions that foster frequent and serious conflicts. This conception of conflict likely captures more severe dynamics than everyday
familial debates because these are conflicts that came to the attention of police and were recorded in official police reports (Lin 2007a:68). The parameters of these youth-parent conflicts will be examined more thoroughly in a discussion on data measures within the next chapter.

In addition to parent-child conflict, this study will use parental surveillance and general obedience as indicators of “informal controls.” Life course theory emphasizes the role of parents (i.e., conventional members of the community) in constructing social parameters (Laub 2006:242). This type of relationship is specifically relevant to young offending since parents maintain an authoritative role in regulating youths’ behaviour (Laub 2006:245). Moreover, past research has shown that associations with family members are a strong social bond capable of deterring offending (Hepburn & Griffin 2004; Kruttschnitt et al. 2000; Svensson 2003). The second hypothesis (1b) testing life course theory speculates that:

**Hypothesis 1b:** Youths who are heavily supervised and generally obedient to their parents will be less likely to re-offend than youths who have unclear boundaries and disobey parental authority.

This hypothesis predicts that strong surveillance (i.e., setting clear boundaries and being supervised) can help deter re-offending. Furthermore, obedience is regarded as a measure of respect to parental authority. This respect implies that a youth will be more likely to adhere to their parents’ behavioural guidelines and avoid engaging in criminal activity (Laub 2006; Laub & Sampson 2001).

With regard to the conventional nature of the family environment, two factors were chosen as conventional attributes: employment and no drug/alcohol problems. The
conventional nature of employment has been examined in various studies (Batiuk et al. 2005; Brocato & Wagner 2008; Hepburn & Griffin 2004; Kethineni & Falcone 2007). Many researchers have argued that successful employment can create a large stake in conformity and grants individuals’ access to conventional relationships with fellow employees (Hagan & McCarthy 1997; Hepburn & Griffin 2004; Kethineni & Falcone 2007). Although some studies have featured the importance of employment in deterring young offending (Orsagh & Chen 1988; Staff & Uggen 2003), this study will use employment status as an indicator of the conventionality of family environments. Therefore, I am not interested in the employment status of the youth in question but rather I wish examine the conventional ties found amongst family members. With that said, the third family-related hypothesis (1c) including employment status speculates that:

**Hypothesis 1c:** Youths who have unemployed family members will have less conventional ties to society and will be more at risk to recidivate than youths who have employed family members.

By examining the employment status of family members, I will test the assumption that all family associations are conventional. Successful employment would create a large stake in conformity among the family members that would be threatened by criminal involvement (Brocato & Wagner 2008:101). This implies that a parent’s gainful employment is an indicator that he or she is capable of being an agent of informal control. Conversely, unemployed family members are regarded as being ill-equipped to deter future offending because they lack important social ties with the greater community.

In addition to employment, a lack of substance abuse is also structured as an indicator of conventional lifestyles. This hypothesis assumes that family members
suffering from drug or alcohol problems create unwanted stress on the family environment. The prevalence of substance abuse among family members may weaken the capacity to deter youths from re-offending since the act itself is deviant (Benda 2005; Harrison 2001; Marcos et al. 1986). As a result, the final family-related hypothesis (1d) predicting recidivism reads:

**Hypothesis 1d:** Youths who currently have family members’ suffering from alcohol and drug abuse will be more at risk to re-offend than those with family members that have no history of substance abuse.

Although substance abuse is not a complete account of a family members’ criminal propensity, it represents a non-conventional attribute that might hinder proper surveillance and attachments to conventional others. Therefore, family environments with profound exposure to substance abuse are substantially more detrimental to a youth’s rehabilitation than more conventional family environments. As a result, parents’ abilities to act as agents of informal control are undermined when family members suffer from drug or alcohol problems.

The principles of social control are heavily discussed within the life course theory perspective as playing an integral role in regulating deviance. The present study’s emphasis on parental surveillance coupled with an assessment of conformity will provide vital information regarding the family environment. Furthermore, the dynamic effect of these factors on recidivism makes life course theory an appropriate approach in the examination of rehabilitation.
**Differential Association Theory**

The literature outlined in Chapter 2 demonstrated the importance of the differential association perspective in assessing first-time offending. It was mentioned that an association with deviant peers (or more specifically, deviant peer networks) is a strong predictor in determining first-time offending (Nofziger & Lee 2006; Piquero et al. 2005). I have opted to use this theoretical approach to assess the role of deviant peers on subsequent offending. The inclusion of deviant peers within this theoretical approach is essential since these types of associations have been known to be more influential than family in predicting deviance (Nofziger and Lee 2006:456). This study will offer a new contribution to studies discussed within the literature review -- it will also incorporate the rehabilitation process (i.e., community program versus prison). I have created two specific hypotheses regarding deviant peers and recidivism. The first hypothesis (2a) testing deviant associations states that:

**Hypothesis 2a:** Youths who report having associations with any negative peers and/or gang members will recidivate more frequently than those with more conventional peers.

This hypothesis attempts to predict a simplified version of differential association theory principles (i.e., acquisition of negative definitions and techniques from deviant peers). The content of the communications fostered within these associations is hypothesized to play a pivotal role in encouraging deviant behaviour (Williams & McShane 2004:83). In comparison to more conventional associations, deviant peers possess more favorable outlooks toward deviance and may even teach new deviant/criminal techniques (Bruinsma 1992; Williams & McShane 2004). This
hypothesis (2a) also predicts that the inclusion of conventional associations (i.e., “good” conventional friends) within greater peer networks is not capable of counteracting the criminogenic effect of deviant peers. This means that a relationship with even one deviant peer will raise the likelihood of re-offending.\footnote{It is important to emphasize that this is a simplified reiteration of Sutherland’s (1939) theory. Sutherland’s (1939) original conception argued that it was the \textit{ratio} of deviant definitions that would dictate offending. In other words, youths needed to have an overwhelming presence of deviant content within these communications to incite deviant or criminal behaviour.}

Some theorists have attempted to go beyond the traditional expectations of differential association and investigate entire peer networks (Haynie 2002; Weerman & Bijleveld 2007). As Demuth (2004:365) suggests, some groups (i.e., loners) are neglected within offending literature. Moreover, there is an assumption that all youths have large peer networks that include both conventional and deviant peers (Demuth 2004:368). Given the current interest in peer networks, this study will examine the effect of full deviant networks on subsequent offending. As a result, the second peer-related hypothesis (2b) predicts that:

**Hypothesis 2b:** Youths who have exclusively negative peer networks will have a higher risk to recidivate than youths who have any number of non-deviant associations within peer networks (i.e., neutral or conventional “good” peers).

Theoretically, the presence of exclusively negative peer networks could further limit a youth from conventional ties to society (Haynie 2002:102). Moreover, these youths would be more likely to acquire favorable definitions to deviant/criminal activities since there would be a lack of opposing perceptions amongst peers. With that said, negative peer networks would create an overwhelmingly negative presence in a youth’s network social capital that would undoubtedly encourage re-offending (Weerman &
Bijleveld 2007:360). Although this study cannot account for the varying levels of deviancy found among the members within specific peer networks, it does take into account the absence of conventional peers within greater social networks.

Differential association theory has remained a staple in offending literature but is relatively new in re-offending research. The examination of deviant peer associations in this study will provide more insights into the role that these relationships play in maintaining deviant and criminal lifestyles. It is assumed that the presence of deviant peers within the rehabilitation process will hinder the effect of punishment as youths might be more likely to maintain or create new negative associations. With that said, critiques of differential association theory such as the “selection perspective” (i.e., deviant youth choose deviant peers), are not a primary concern for this study (Weerman & Bijleveld 2007:359). This study’s primary interest in deviant peer associations is related to testing the effect of these associations in maintaining criminal behaviour (i.e., re-offending).

**Deterrence Theory**

An important element within the rehabilitation process is punishment. Incarceration was discussed in the previous chapter as a concept that can account for various personal experiences (Lahm 2008; Windzio 2006). A pivotal landmark within incarceration research has been to test the efficiency of deterrence theory. As previously mentioned, deterrence theory speculates that the fear of subsequent imprisonment will deter an offender (Piquero & Blustein 2007:270). Certainty of punishment has been identified as key to deterrence by numerous scholars (Doob et al. 1995; Von Hirsh 2001),
while some researchers contend severity of punishment may be most influential (Pogarsky 2007). Although deterrence theory has been used to justify current punitive strategies, past research has found little evidence to support this longstanding theory (Bales et al. 2005; Gainey et al. 2000; Lynch 1999). Some researchers have even gone so far as to argue that prison represents a “revolving door” for some offenders (Freeman 2003; Harrison 2001; Kathineni & Falcone 2007). This conception is attributed to the high re-offending rates and re-arrests of certain types of offenders within the American judicial system (Freeman 2003; Lynch 1999). Given the potential flaws found in deterrence theory, this study will attempt to disprove its central tenets by hypothesizing that imprisonment will actually raise the likelihood of re-offending (Hartman 2008:171). As a result, the first incarceration hypothesis (3a) predicts that:

**Hypothesis 3a:** Youths who receive incarceration as their sentence are more likely to recidivate than those who were sentenced to community programs (i.e., with zero days spent in prison).

This hypothesis implies that new restorative approaches to punishment (i.e., community programs) will have more success in deterring subsequent offending in young offenders. The theoretical rationale of this argument stems from restorative justice philosophies which emphasize the reparation of victim-offender relationships rather than retributive punishment (Rodriguez 2007:357). It is assumed that the reintegration of a past offender within the community will offer opportunities to make amends for their wrongdoings. These community programs also emphasize the adoption and maintenance of more conventional social attachments with community members (Braithwaite 2001; Rodriguez 2007). This hypothesis also speculates that incarcerated offenders suffer a
detachment from the community and will not fully comprehend the repercussions of their actions if they are sent to prison (Lovell et al. 2007; Rodriguez 2005). Admittedly, this type of rationale has its limitations as it is not suitable for more serious offenders accused of crimes involving more emotionally sensitive criminal acts (i.e., murder or rape).

In addition to the theoretical distinction between incarceration and community programs, this study will also attempt to replicate prior inquiries regarding sentence length. In the literature reviewed, it was mentioned that longer prison sentences might actually be more detrimental to rehabilitation than shorter sentences (Gainey et al. 2000; Patterson & Preston 2008; Tittle & Rowe 1974). This argument directly contradicts classical deterrence theory’s interpretation regarding severity of punishment (Pogarsky 2007:60). Arguably, the increased exposure to the hypothetical criminogenic environment found in prison would offer opportunities for offenders to experience the “pains of imprisonment” (Windzio 2006:342). This might include a potential weakening in conventional social bonds (Vischer & Travis 2003) and a prolonged exposure to a deviant peer subculture (Lahm 2008). It stands to reason that longer lengths of stay in prison would increase the likelihood of re-offending. A second incarceration hypothesis (3b) was created in order to address the effect of sentence length. It states that:

**Hypothesis 3b:** Youths who receive longer prison sentences will recidivate at a higher frequency than those who were given shorter sentences.

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13 Offenders who are sent to prison rarely confront their victims in a restorative setting. Recent research suggests that victim-offender meetings offer a chance for offenders to fully comprehend the repercussions of their criminal actions. Moreover, these meetings also permit the acquisition of forgiveness (Braithwaite 2001; Rodriguez 2007; Stubbs 2007).

14 Prior research has suggested that length of stay in prison and recidivism may have a U-shaped function (i.e., short and longer sentences are linked to re-offending) (Orsagh & Chen 1988; Tittle & Rowe 1974).
In order to test this hypothesis empirically, this study will assess the effects of varying sentence lengths on recidivism. It is assumed that longer stays in prison will be linked to higher rates of recidivism.

**Reintegration Shaming Theory**

The attribution of deviant labels is the final process within my theoretical account that might affect recidivism. In Chapter 2, it was mentioned that labels can either encourage subsequent deviant behaviour (i.e., classical labeling theory) or can be used to socially reintegrate a past-offender (i.e., reintegrative shaming theory).

With regard to this study, Braithwaite’s (1989) perception of the labeling process will be used to assess the affect of shaming on recidivism. As previously noted, this theory delineates two types of shaming: reintegrative and disintegrative (Braithwaite 1989:55). A reintegrative shaming process involves a public denouncement of an offender’s criminal act which is followed by forgiveness and public acceptance. Contrarily, a disintegrative shaming process involves the stigmatization of an offender for their criminal act (Braithwaite 1989:56). In this instance, stigmatized individuals create their own groups within greater communities and further limit their contacts with conventional members of the community (Braithwaite 1989; 2001). The disintegrative process also leads to the attribution of a deviant “master status” which encourages an individual to define oneself through their previous criminal acts (Braithwaite 1989:56).

Empirical examinations of reintegrative shaming theory have also distinguished between micro-level (i.e., individual) and macro-level (i.e., community) sources of shame. Unfortunately, this study’s data set will not permit a complete examination of the
shaming process. Therefore, I will replicate previous efforts in testing Braithwaite’s theory by examining micro-level sources of shame (Harris 2006; Losoncz & Tyson 2007; Ttofi & Farrington 2008).

The current research study will use a variable tapping “attitude towards personal responsibility” as a measurement of shame. Theoretical linkages are made between an offender’s willingness to accept responsibility and the attribution of shaming labels (Ahmed & Braithwaite 2004; Braithwaite 2000; Hosser et al. 2008). This study’s shaming hypothesis (4) predicts that:

**Hypothesis 4:** Youths who express responsibility for their actions will re-offend less than those who minimize or refuse to take responsibility.

This prediction suggests that youths who take responsibility for their actions will be more likely to be affected by shaming labels and be successfully reintegrated in a community (i.e., evidence of reintegrative shaming). In contrast, those who refute responsibility are assumed to be more confrontational of criminal labels and would be stigmatized by this process (i.e., evidence of disintegrative shaming). This stigmatization would lead to past-offenders isolating themselves from conventional members of society and perform subsequent criminal acts in defiance of the stigmatizing label (Ahmed & Braithwaite 2000; 2006; Hay 2001).

The theory suggests that the capacity to accept responsibility and opportunity to be granted forgiveness is essential for reintegration. Arguably, one cannot be forgiven if one does not deem oneself responsible for the criminal act (Braithwaite 1989:100).
Interactions found within the Theoretical Narrative

Within my theoretical elaboration, I argue that the rehabilitation process is affected by the family environment, peer associations, incarceration, and shame. In addition, it is assumed that the role of punishment within the rehabilitation process will not only have a direct influence on re-offending but will also affect other factors that may predict recidivistic behaviour. Therefore, I have designed three hypotheses that aim to address the potential linkages found between incarceration and the remaining concepts relevant to rehabilitation (i.e., family environment, peer associations, and shaming). The first interaction hypothesis (5a) states that:

**Hypothesis 5a:** The detrimental effects of unconventional family environments on recidivism will be strengthened for youths who receive prison sentences when compared to youths who undergo community programs.

This hypothesis predicts that imprisonment will further encourage re-offending behaviour because of its apparent affect on the family environment. Specifically, youths who are sent to prison might have weaker bonds with family members upon release (Visher & Travis 2003) and might be less susceptible to more informal types of controls (i.e., parental monitoring). It is assumed that the experience of incarceration is responsible for severing conventional ties to the community. Moreover, this experience might also empower youths’ resistance to less formal forms of authority. In comparison, community programs offer youths a chance to strengthen their ties to conventional others and reinforce their stake in conformity (i.e., making informal controls more successful).

The second interaction hypothesis (5b) predicts the combined effect of deviant peers and incarceration on future offending. It states that:
Hypothesis 5b: Youths with deviant peer associations and who spend time in prison will be more likely to recidivate than youths with deviant peers who undergo community programs.

Although time spent in incarceration is meant to isolate past-offenders from deviant relationships, this hypothesis assumes that youths will maintain deviant associations throughout the rehabilitation process. This implies that incarcerated youths will adopt new deviant peer associations within prison walls and these communications will offer more favorable exchanges with regard to deviance. While this study is not able to test the maintenance of deviant friendships, it assumes that the prison environment represents a new exclusively negative peer network that may influence future offending.

The third and final interaction hypothesis (5c) attempts to bridge the effects of shame and incarceration on recidivism. The shaming process is relatively distinct from the family and peer concepts as it is intrinsically linked to sentencing. That is to say, the shaming process commences after sentencing because it involves the social reintegration of a past-offender upon return to their community. The third interaction hypothesis (5c) predicts that:

Hypothesis 5c: Youths who refuse to take responsibility for their actions and receive incarceration are more at risk of re-offending than youths who have similar attitudes but receive community programs.

This hypothesis assumes that there is a discrepancy in the efficiency of shame across different types of punishment (i.e., prison or incarceration). As a result, the shaming process is predicted to be more successful in deterring recidivism when it is coupled with community programs. These alternatives to prison permit greater
community involvement in the construction of reintegration labels (i.e., using shame strategically in hopes of deterring future offending) and avoid the attribution of stigmatizing labels that come from ex-convict personas (i.e., stigmatizing labels that might lead to re-offending).

The primary goal of this research is to highlight the effect of incarceration on recidivism. These interactional hypotheses attempt to predict the far-reaching effect of punishment over various facets of a youth’s social life. Consequently, it is assumed that the incarcerated experience has an indirect effect on re-offending by shaping these important rehabilitative factors (i.e., conventional family environments, peer associations, and the shaming process).

Conclusion

It is, at times, difficult to create a theoretical integration due to the range of concepts and variety of predictors across several theories. The theoretical elaboration discussed in this chapter has potential drawbacks with regard to its union of theories. For example, Laub (2006) has been known to discredit the worth of traditional differential association theory in his efforts in promoting the life course theory perspective. According to Laub (2006:239), differential association theory assumes the existence of deviance before factual evidence is submitted. I have attempted to integrate perspectives by emphasizing the existence of peer associations as a maintenance tool for deviance. That is to say, deviant peer networks offers youth less opportunities to have more conventional associations. Although this is not a complete acknowledgement of Laub’s (2006) original critique, I have made efforts to examine various types of associations (i.e.,
any negative association, gang associations, and peer networks) to test the efficiency of
deterrence theory. These concessions, amongst others such as the limited measure of
shame, have permitted me to create a theoretical justification for the empirical
examination of recidivism.

This chapter has attempted to outline the rehabilitative process as one that
involves various actors (i.e., family members and peers) and experiences (i.e., punishment
and shaming). The importance of change was acknowledged within life course theory in
order to accurately depict the effect of informal controls on re-offending (Laub
2006:243). Further, differential association theory was used to expand the examination of
network social capital so that it may include important peer associations. Deterrence
theory was also used as a basis for an examination of punishment and its varying effects
on recidivism. Lastly, attempts were made to apply an extension of Braithwaite’s (1989)
reintegrative shaming theory in our examination of recidivism. Among these theories and
their predicted interactions (i.e., notably incarceration with family, peer, and shaming
concepts), thirteen hypotheses were proposed that attempt to predict the occurrence of re-
offending among youths. The fourth chapter will test these theoretical hypotheses through
statistical analyses -- specific attention will be paid to the creation of empirical measures
with regard to variables outlining life course, differential association, deterrence, and
reintegrative shaming theories.
CHAPTER 4:
DATA, METHODS AND RESULTS

Introduction

In this chapter, I outline the methodological steps that I have taken in order to test my hypotheses relating to recidivism. I use a recent secondary data set that served as the basis for a report published by the U.S. Department of Justice. The report was titled, *Impact of Institutional Placement on the Recidivism of Delinquent Youth in New York City 2000-2003*. I offer a detailed summary of the original data collection methods and outline variable recoding. This chapter also includes descriptive and multiple regression analyses as well as an examination of specific interaction terms.

I aim to uncover the explanatory process underlying recidivism among young offenders. Informed by sociological theories of crime, I have selected twenty-four variables from the original data set. These variables include offenders’: (1) family environment; (2) associations with deviant peers; (3) shaming process; and (4) experience of incarceration. In addition to predicting recidivism, this chapter will examine theoretical reasoning concerning rehabilitation and incarceration.

Data Collection and Sample

The data used in this study were originally gathered by a team of researchers at the *Vera Institute of Justice* located in New York City, N.Y. The data were collected during the period, 2000 to 2003 (Lin 2007b:1). Jeffrey Lin, a Ph.D. graduate student at the time, worked with the team of researchers in 2003 and was granted permission to use these data for the purpose of writing his doctorate dissertation at New York University. His dissertation had two important research goals: (1) to explore the impact of juvenile
incarceration on recidivism and (2) to explore family court decision-making (Lin 2007a:3). My study will use Lin’s (2007a) published data set in an attempt to replicate and expand on our understanding of recidivism. I obtained the data from the International Consortium of Political and Social Research (ICPSR) (reference 20347).

The Vera Institute of Justice researchers selected the study participants by using Family Court calendars from all five New York City boroughs: Brooklyn, Manhattan, Queens, Staten Island, and the Bronx (Lin 2007a:57). The researchers selected all youths between the ages of nine and seventeen who received a disposition during April, May, and June of 2000 (Lin 2007a:75). Originally, the researchers accumulated 837 youths but case files were only available for 736 of the original sample. Among the remaining 736 subjects, only 38 cases did not have a matching New York State Office of Children and Family Services (OCFS) incarceration record (Lin 2007a:63). These incarceration records contained valuable information regarding time spent incarcerated. Given the importance of this type of information in a research project aimed at studying recidivism patterns, the researchers decided to exclude these 38 cases that lacked full information. The final total sample consisted of 698 cases. These 698 cases include all available relevant legal and personal information recorded between 2000 and 2003.

The team of researchers developed and used their own standardized data collection instrument (Lin 2007c:3). This instrument, a detailed questionnaire, was then used by team members to extrapolate relevant information from official data records.15 Probation case files were used to gather information on the social (i.e., family, peers, and

15The team of researchers working for the Vera Institute of Justice all possessed a minimum of a bachelor’s degree in the social sciences (i.e., sociology, economics, criminology) and had prior training in statistical analyses (Lin 2007a:58). In addition, the data collection process consisted of various meetings and follow-ups which were conducted in order to assure coding accuracy.
education) and legal (i.e., number of arrests and time spent in placement) histories of juvenile delinquents. These case files consisted of information gathered from other official forms and reports such as: (1) probation investigation and recommendation reports; (2) probation intake reports; (3) mental health reports; (4) Juvenile Intensive Supervision Program (JISP) Assessments; (5) school records; (6) court petitions; and (7) New York Police Department (NYPD) arrest reports. These official forms provided the researchers with rich background of information on the personal characteristics of the youths.

In addition to the vivid information regarding personal demographics, the researchers also contacted other cities and agencies outside New York to gather information on incarcerated populations. The goal of extending their research outside New York was to gather information on youths who began their incarceration or community program in New York but had left the state following their release. Therefore, it was necessary to contact other official agencies to see if these youths had been re-arrested in districts other than New York. The researchers linked the original probationary case file identification number with other official agencies (i.e., placement facilities and regional police forces) in order to follow the rehabilitation process of the youths from the year 2000 until late in the year 2003. The three-year follow-up permitted the researchers to see whether those who had received incarceration in 2000 would recidivate at a different rate than those who received more probationary styled punishments. Although the research efforts collected information during this three-year period, youths’ processes of rehabilitation were only examined for a period of 18 months following their placement or community program.
Measures, Missing Values, and Descriptive Statistics

Considerable effort was invested throughout the research process to provide accurate measurement of variables. I will refer to the original measures of the variables and then outline my recoding of these variables in Table 1. Table 1 summarizes the descriptive statistics of all variables included in this study. The data set consists of 698 cases.

Dependent Variable

*Recidivism*: Lin’s (2007a) original data set assessed recidivism in various forms in order to account for different types of re-offending. In addition, recidivism was also recorded using specific time-frame to re-offending (i.e., six, twelve, and eighteen months). This approach permitted Lin (2007a) to examine the survival rate (i.e., probability and time to re-offend) of specific types of re-offending among youths who had been released from incarceration or community programs.

Originally Lin (2007a:90) coded recidivism into three dichotomous variables that accounted for distinct types of re-offending: (1) felony re-arrest, (2) violent offending re-arrest, and (3) violent felony offending re-arrest. The 698 youths in Lin’s (2007a) study were classified, based on their most serious charge, within one of these three categories. The state of New York’s legal definitions of these types of offenses includes various criminal activities. For instance, the felony category includes less serious charges such as drug and property offense which are classified as felony C/D/E (Lin 2007a:90).

Conversely, the violent offending category involve acts of violence with weapons. The last category, violent felony offending, accounts for all criminal acts that involved
<table>
<thead>
<tr>
<th>Variables</th>
<th>Coding</th>
<th>Mean</th>
<th>S.D.</th>
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<tr>
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<tr>
<td>Recidivism</td>
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</tr>
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<td>1 = white; 0 = else</td>
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<td>0.24</td>
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</tr>
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<tr>
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</tr>
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</tr>
<tr>
<td>Property</td>
<td>1 = property offense; 0 = else</td>
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</tr>
<tr>
<td>Drugs</td>
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</tr>
<tr>
<td>Other Offense</td>
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<tr>
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</tr>
<tr>
<td>Employed Family Member</td>
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<td>0.53</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>Peer Associations</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Any Negative Peers</td>
<td>1 = any negative peers; 0 = positive/neurtral/nobody</td>
<td>0.80</td>
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</tr>
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<td>Associates with Gang</td>
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</tr>
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<td>Negative Peers Exclusive</td>
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<td>0.50</td>
</tr>
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<td><strong>Reintegrative Shaming</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Attitude Toward Offense</td>
<td>1 = minimizes responsibility; 0 = takes some resp.</td>
<td>0.68</td>
<td>0.47</td>
</tr>
<tr>
<td><strong>Incarcerated Experience</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incarcerated</td>
<td>1 = incarcerated; 0 = community-based alternative</td>
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<td>0.50</td>
</tr>
<tr>
<td>Time Served</td>
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<td></td>
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</tr>
<tr>
<td>None</td>
<td>1 = 0 days; 0 = other length of stay</td>
<td>0.52</td>
<td>0.50</td>
</tr>
<tr>
<td>Low</td>
<td>1 = 1-179 days; 0 = other length of stay</td>
<td>0.04</td>
<td>0.20</td>
</tr>
<tr>
<td>Medium</td>
<td>1 = 180-359 days ; 0 = other length of stay</td>
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<td>0.41</td>
</tr>
<tr>
<td>High</td>
<td>1 = 360-539 days; 0 = other length of stay</td>
<td>0.15</td>
<td>0.36</td>
</tr>
<tr>
<td>Very High</td>
<td>1 = 540 or more days; 0 = other length of stay</td>
<td>0.07</td>
<td>0.26</td>
</tr>
</tbody>
</table>
violence and received a felony A/B charge (Lin 2007a:91).

Although the researchers used official arrest data and information from court hearings to create these variables, the subjects received charges based on New York state’s legal parameters. Therefore, not all subjects would have received similar charges in other states. To generalize the phenomenon of recidivism, Lin (2007a) also created another variable to account for all types of recidivism. This reiteration of the “general recidivism” variable was presented as a dichotomous variable and recorded if a subject had received “any re-arrest” or “had not been re-arrested.”

Therefore, a youth needed to be re-arrested to be classified within one of the recidivistic categories. This legal acknowledgment of recidivism is a common practice within recidivism research but has its limitations (Patrick & Marsh 2005; Patterson & Preston 2008; Reisig et al. 2006). For instance, subjects might have engaged in subsequent criminal behaviour following their release from placement but might not have been apprehended. Hence, it should be stressed that this variable only accounts for recidivistic behaviours that were detected and recorded through police records (i.e., re-arrests).

For this particular study, I will use the all inclusive “general recidivism” variable (i.e., “any re-arrest” and “no re-arrest”) that encompasses all types of re-offending (i.e., felony, violent, and violent felony) within 18 months of release. This variable was more appropriate for this study since certain variables outlining different types of re-offending were too small to yield valuable insight. Moreover, this study aims to examine the effect of incarceration on rehabilitation efforts for all types of recidivistic behaviour.
With regard to measurement, the “general recidivism” variable was originally coded with three categories. These categories outlined youths’ recidivistic behaviour for 18 months following release from placement or completion of community service. The categories were outlined as:

1. Youths who were not re-arrested within 18 months of release/completion were coded as 0;
2. Youths who were re-arrested within 18 months of release/completion were coded as 1;
3. Youths who did not complete 18 months community time and were not re-arrested were coded as -9 (Lin 2007b:2).

The original distribution amongst these three categories was as follow: (1) 352 not re-arrested in 18 months, (2) 323 re-arrested in 18 months, and (3) 23 cases did not complete 18 months of community time and were not re-arrested.

In his survival analysis, Lin (2007a) recoded the “general recidivism” variable into a dichotomous variable by combining the 0 and -9 categories (i.e., not re-arrested). As a result, the “general recidivism” variable accounted for all types of arrests by having two categories, coding youths as having received “any re-arrests” or “no re-arrest.”

For the purpose of this study, I have used this revised version of recidivism. As outlined in Table 1, recidivism is identified as the dependent variable and includes two categories: those who were not re-arrested were coded as 0 and those who were re-arrested were coded as 1. In total, forty-six percent of the sample were re-arrested within 18 months of release.

**Control Variables**

*Gender:* The gender variable was structured as a dichotomous variable. In this
study gender was coded 1 for male and 0 for female. Seventy-nine percent of the sample were men and twenty-one percent were women.

*Race:* The race variable was originally coded in four distinct categories. This original race variable identified the subjects as White, Black, Hispanic or other. These categories were coded from 1 to 4, respectively. I have recoded Lin’s (2007a) original race variable into four dummy variables while retaining the original labels (i.e., White, Black, Hispanic, and other). The “white” variable was coded 1 for white and 0 for everyone else. Only 6% of the sample population was classified as white. This variable will act as the comparison group among race variables in the multivariate regression analysis. The second race variable, “Black”, was coded 1 for Black and 0 for everyone else. Sixty-one percent of the entire sample identified themselves as Black. Although there is a high representation of Black youth in the sample, Lin (2007a) notes that this distribution is representative of incarceration populations among delinquent youths in New York City. The third race variable, “Hispanic” was coded 1 for Hispanic and 0 for everyone else. Within our sample, 28% of the youth were identified as Hispanic. The fourth race variable, “Other”, was coded 1 for youths who did not have White, Black, or Hispanic ethnic/racial backgrounds and 0 for being identified as one of the previously existing groups (i.e., White, Black or Hispanic). Only 5% of the sample was classified as having other ethnic/racial backgrounds. The “other” race variable accounted for three groupings of subjects. These groupings consisted of: (1) nine individuals who identified themselves as Asian, (2) twelve individuals who did not belong to the previously mentioned racial categories (including Asian), and (3) ten individuals with unknown

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16 This remains a common practice in social science research (Ingram et al. 2007; Rebellon 2006). However, recent critiques of this conceptualization of gender have brought attention to the exclusion of transgendered populations.
racial identities that were later classified as missing cases (Lin 2007a:64). Although there are nine individuals who share Asian ethnicity, the inclusion of missing cases and more distinct ethnicities makes it inaccurate to label this group Asian.

**Offense Type:** In addition of personal demographics, the offense type of each youth was also included as a control variable. The “offense type” variable was originally coded by Lin (2007b:40) as a discrete variable with four categories ranging from 1 to 4. These categories were labeled as violence, property, drugs, and other. According to Lin (2007a:101), some youths included in the sample were charged for more than one offense type. In order to successfully depict a youth’s range of criminal activity, Lin (2007b:40) categorized youths within the “offense type” variable according to their “top adjudicated charge” (i.e., most serious charge). For example, youths were classified within the violence category if their top charge was of a violent nature under criminal law. Although this does not outline the severity (i.e., felony or misdemeanor) of the crime, it does take into account the active participation of a youth’s involvement in certain types of crime.

For this particular study, I have opted to code Lin’s (2007a) original “offense type” variable into four dichotomous variables with similar labels. The first variable, “violence,” was coded 1 for youths whose top adjudicated charge was of a violent nature and 0 for youths who had other top charges. Forty-nine percent of the sampled youths had top charges involving violent offenses. The second variable, “property,” was coded as 1 for youths who had property offenses as their top charge and 0 for those who had any other top charges. Thirty-one percent of youths had this type of offense as their top adjudicated charge. The third variable, “drugs,” was coded 1 for youths who had drug related offenses as their top charge and 0 for all other charges. The mean indicated that
roughly 13% of youths had drug related offenses as their top adjudicated charge. The final variable, “Other Offense,” was coded 1 for youths apprehended for other offenses (i.e., non-violent, non-property, or non-drug related) and 0 for youths who had violent, property or drug offenses as their top charge. Not surprisingly, only 7% of the sample had other top adjudicated charges not relating to violent crime, property crime, or drug offenses.

**Independent Variables**

*Conflict with Parents:* The first of five variables depicting family environment is the “conflict with parents” variable. This variable attempts to capture the potentially volatile state of relationships between the adolescents and their parents. The team of researchers examined the probationary cases to see if there existed signs of conflict with parents. The presence of conflict may suggest an unstable relationship with one’s parents (Lin 2007a:68). Within reason, one could argue that all youths experience some conflict with their parents. However, not all types of conflict are likely to be recorded in official records. Therefore, we assume that the signs of conflict observed and recorded are likely more serious than everyday arguments with parents/guardians.

Cases which showed signs of conflict were coded as 1 and those with no evidence of significant conflict were coded as 0. The few missing cases with regard to conflict with parents were also categorized as 0. Only 25% of the sample showed signs of conflict. This is not surprising as these types of conflict would need to be detected by authorities.

*Disobedience to Parents:* The “disobedience to parents” variable attempts to assess the youth/parent relationship based on the youth’s disobedience to parental
authority. The measurement of obedience corresponds directly to respect toward parental authority. In other words, the team of researchers used their survey instrument to assess whether the youth respected their parents’ authority at home. Incidences such as missing curfew or, in more extreme cases, using the household for criminal activity (i.e., selling drugs) were recorded as a lack of respect toward parental authority (Lin 2007a:68). The researchers also constructed other variables that asked whether or not the parents requested placement for their child due to a lack of control over their child’s actions.

In this study, a child’s obedient behaviour provides evidence of successful informal control (i.e., parental authority). It is assumed that youths will adhere to the social behavioral parameters (i.e., rules and regulations) that are provided by the parents when informal control mechanisms are effective (Svensson 2003). It is hypothesized that strong obedience to informal forms of social control will help youths become more responsive to formal types of control found outside the household (Laub & Sampson 2001).

The “disobedience to parents” variable is coded such that individuals who were “less obedient” or “not obedient” were coded as 1 and individuals who were more obedient to their parents were coded as 0. Interestingly, there is a near equal distribution across the two categories. The mean average indicates that 51% of the sample was categorized as being either “less obedient” or “not obedient.”

*Low Parental Supervision:* In addition to examining youths’ conduct and obedience to parents, the data set included information on parental supervision. The measurement of parental supervision within criminology has, at times, been controversial. On occasion, it has been used within past research to blame criminal behaviour solely on
“bad” parents (Svensson 2003). Much like instances where officials may blame the victim for crimes, parents are an easy target for researchers. My interest in parental supervision is to examine the family environment and the restrictions imposed on youths within the household. Combined with other variables concerning family, it is my intention to assess the family environment by examining the behaviours of both parents and youths. This is intended to paint a more accurate picture of family dynamics.

In this study, the “low parental supervision” variable is a dichotomous variable. The variable was coded as 1 for all youths that possessed less than clear instructions on boundaries/supervision. The variable was coded 0 for youths who were given clear boundaries and strong supervision from their parents. Interestingly, unclear boundaries are prevalent in our sample. Seventy-five percent of the youths had less than clear perceptions of parental boundaries.

*Family Drug & Alcohol Problems:* In an attempt to further examine the conventional nature of the family environment, the data set also includes information on family members. The “family drug and alcohol problems” variable recorded all cases revealing problems with substance abuse in the current family. The researchers attributed a value of 1 to youths who had current family members with substance abuse problems and 0 to youths who had no family members suffering from these problems. Only a small portion of the sample (6%) had current family members engaged in substance abuse. Obviously, a youth’s case file might not contain all relevant information regarding family members. Moreover, the youth in question might not even be aware of some family members’ deviant or criminal practices.
Employed Family Member: A fifth variable outlining the family environment attempts to highlight the conventional nature of employment. Theoretically, it is assumed that employment offers some financial security, as well as a network of conventional ties. Further, employed family members serve as role models to youths (Hagan & McCarthy 1997; Hepburn & Griffin 2004; Kethineni & Falcone 2007). Cases involving youths who had employed family members were coded as 1 and those with no employed family members were coded 0. The mean value, 53%, indicates that a little over than half of the youths had family members who were employed.

Any Negative Peers: The “any negative peers” variable was originally constructed in an attempt to examine the social networks of the study subjects. Subjects who had any negative peers were coded as 1, while others who had strictly positive, neutral or had no other peers were coded as 0. This grouping raises some important questions regarding measurement. As previously discussed, an association with one deviant peer might not be enough to encourage an individual to commit deviant acts (Williams & McShane 2004: 81). Conversely, a subject who possesses various associations with deviant peers will, theoretically, be more exposed to definitions favorable to deviant behaviour. Having said this, the peer group variable does not take into account the number of deviant associations. Individuals who have one deviant peer and those who have more than one deviant peer are both coded as 1. Eighty percent of the sample had a negative peer association.

Associates with Gang: The “associates with gang” variable explicitly documents if a subject has had previous contact with a gang. Although there is limited information on the definition of a gang within the original study, the researchers from the Vera Institute
of Justice used official records to locate affiliations with known gangs within the New York City area. Unfortunately, there was no information on the type of gangs or their level of criminal involvement in the original report. However, Lin’s (2007c:14) questionnaire did include questions regarding a subject’s contact with gangs such as: “Has the subject been seen with other gang members? Does he/she belong to a gang? Does he/she have a family member in a gang?” Therefore, association with a gang is an indicator of a youth’s exposure to a specific deviant group. The “associated with gang” variable is dichotomous. Subjects who associated with gangs were coded 1, while those who did not associate with gangs were coded as 0. Only twenty-four percent of the sample population associated with gangs.

Negative Peers Exclusive: The “negative peers exclusive” variable examines the prevalence of deviant associations within a youth’s social network. This variable recorded subjects’ exposure to strictly negative (i.e., deviant) peers. Subjects who only associate with deviant peers are coded as 1 and those who do not associate exclusively with deviant peers are coded as 0. Nearly half, forty-nine percent, of the youths possess exclusively negative peers.

Attitude Toward Offense: The “attitude toward offense” variable was recorded by researchers in an effort to examine sentencing decisions. Lin (2007a:76) and the team of researchers examined probation investigation and recommendation reports to see if youths accepted responsibility for their criminal actions. This assessment of attitudes toward the offense was undertaken before sentencing. Therefore, as Lin (2007a:76) suggests, many youths tend to refute claims of culpability and attempt to minimize their

\[17\] It should be noted that taking responsibility did not necessarily imply a guilty plea. Instead, information on attitudes toward the offense was gathered in probationary reports and interviews prior to court hearings.
own involvement in the criminal acts. This stance could also have been the result of lawyers’ coaching as part of specific court strategies.

The present study will attempt to examine the acceptance of responsibility as an indicator of the shaming process. The notion of shame plays an integral role in testing Braithwaite’s (1989) reintegrative shaming theory. It is through the process of public shaming that an individual will be reminded of the consequences of their actions and will begin their rehabilitation (Braithwaite 1989; Sweeten 2006). A youth who accepts responsibility for their actions will be more susceptible to the shaming process than those who refute their involvement. Although this is an indirect measure and should be examined with caution, it does have some merit as some youth may have felt shameful of their actions upon expressing responsibility.

The team of researchers coded subjects who refuted claims or minimized their involvement as 1 and those who took responsibility for their actions as 0. Sixty-eight percent of the youths attempted to minimize their responsibility for their involvement. It should also be noted that this number also includes missing cases where the attitude toward the offense was not available.18 The remaining thirty-two percent accepted responsibility for their criminal offense.

Incarceration: All 698 cases within the sample received dispositions between 2000 and 2003 that resulted in either placement (i.e., incarceration) or community alternative (i.e., parole, community program, etc.). The variable of incarceration is coded as follows: subjects who were incarcerated were coded as 1 and those who received

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18 Unfortunately, the actual number of cases that were unavailable for this variable was not recorded in Lin’s (2007b:36) codebook.
community-based alternatives were coded as 0. Forty-eight percent of the sample was sentenced to prison and fifty-two percent received community alternatives.\(^\text{19}\)

*Time Served:* To test the effect of the experience of incarceration, I use the “time served” variable which details the number of days that a subject was held in *The New York State Office of Children and Family Services* (OCFS) placement. The time served in prison was based on the current disposition received during the 2000-2003 time period (Lin 2007b:30).

Rather than using a continuous variable, Lin (2007b:30) created a single categorical variable that outlined five distinct time periods. The five distinct categories were given coded values from 0 to 4. Although this proved to be an effective coding technique for Lin’s (2007a) survival analysis, I have recoded the “time served” variable into five dummy variables. The dichotomous nature of these new variables will be better suited to my logistic regression analysis. Having said that, I have labeled the five dummy variables as “none,” “low,” “medium,” “high,” and “very high.”

*Time Served – None:* The first dummy variable for time served is “none.” It was coded 1 for subjects who received zero days in incarceration and 0 for subjects had any other length of stay in prison. The mean value indicates that fifty two percent of the sample spent no time incarcerated. Because the first variable of time served (zero days) is collinear to the “incarceration” variable (i.e., the non-incarcerated category), I have opted to leave the “incarceration” variable out of the multivariate regression. The time served “zero days” variable will be used as the reference category for all “time served” variables.

\(^{19}\) This variable was not included within our statistical analyses (i.e., multivariate modeling process). Nevertheless, it was necessary to include it in the descriptive table as it provides some necessary context to this study’s examination of recidivism.
Time Served – Low: The “low” variable was coded 1 for youths who spent 1 to 179 days incarcerated and 0 for youths who received other sentences. Only 4% of the sample spent 1 to 179 days in prison.

Time Served – Medium: The “medium” variable was coded 1 for youths who spent 180 to 359 days incarcerated and 0 for those who received other sentences. Twenty-two percent of the sample spent 180 to 359 days incarcerated. The largest percent of cases received this duration of prison time. This is not surprising since medium sentences are believed to be more successful in rehabilitation than short or long sentences (Gainey, Payne & O’Toole 2000). It is hypothesized that a short sentence length is too dismissive (Andenaes 1974; Gibbs 1975) and a longer sentence might result in severing an inmate’s conventional ties to society (Spohn 2007; Visher & Travis 2003).

Time Served – High: The “high” dummy variable (for time served) was coded 1 for youths who spent 360 to 539 days in prison and 0 for youths who received other sentences. Fifteen percent of the sample spent approximately 360 to 539 days in prison.

Time Served – Very High: The final “time served” dummy variable, labeled as “very high,” was coded 1 for youths who spent 540 days or more incarcerated and 0 for those who received other sentences. Only seven percent of the sample spent the 540 or more days in prison.

Bivariate Relationships – Independent Variables on Recidivism

Prior to conducting the multivariate analysis, I examined the bivariate relationships between the independent variables and recidivism (i.e., dependent variable). The bivariate regression analysis permitted me to examine possible correlations that exist
between each of the independent variables and the outcome variable, recidivism. These correlations highlight each independent variable’s potential contribution to predicting recidivism. This is especially important as the effect of these variables on recidivism might be suppressed until, or proves spurious, once we control for other variables (i.e., controls, family, peers, shaming, and incarceration) within our models. Although bivariate regression results cannot be the sole test of this study’s hypotheses, the results will provide a basis for the discussion regarding the findings in the multivariate models.

Logistic regression was chosen based on its statistical properties that make it both appropriate and more accurate in the prediction of dichotomous variables (Mitchell & Gee 1996:445). The regression coefficients and the odds ratio values as well as their corresponding standard errors are presented in Table 2.

In Table 2, several variables were found to be strongly correlated with recidivistic behaviour. With regard to the control variables, five of the nine variables were correlated with recidivism. The strongest relationship amongst this set of variables was between gender and recidivism. The magnitude of the odds ratio (5.03) indicated that the effect of gender was not only positive but also very strong. This finding confirmed previous expectations regarding male re-offending patterns. In short, the results indicated that males are approximately four times more likely to recidivate than their female counterparts.

The race-related variables revealed two salient correlations with recidivism. The results indicated that Blacks were 44% more likely to recidivate than youths from other ethnicities. Moreover, the odds ratio (0.38) value of the “other” race-related variable demonstrated that youths from this category were 62% less likely to recidivate than
<table>
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<td><strong>Control Variables</strong></td>
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<td></td>
</tr>
<tr>
<td>Gender (male = 1)</td>
<td>1.61 (0.23)</td>
<td>5.03 (1.15)**</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>-0.61 (0.33)</td>
<td>0.54 (0.18)</td>
</tr>
<tr>
<td>Black</td>
<td>0.37 (0.16)</td>
<td>1.44 (0.23)*</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.05 (0.17)</td>
<td>0.95 (0.16)</td>
</tr>
<tr>
<td>Other</td>
<td>-0.96 (0.39)</td>
<td>0.38 (0.15)*</td>
</tr>
<tr>
<td><strong>Offense Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violence</td>
<td>-0.44 (0.15)</td>
<td>0.64 (0.09)**</td>
</tr>
<tr>
<td>Property</td>
<td>0.11 (0.16)</td>
<td>1.12 (0.18)</td>
</tr>
<tr>
<td>Drugs</td>
<td>0.71 (0.23)</td>
<td>2.03 (0.47)**</td>
</tr>
<tr>
<td>Other Offense</td>
<td>0.11 (0.31)</td>
<td>1.12 (0.35)</td>
</tr>
<tr>
<td><strong>Family Environment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict with Parents</td>
<td>0.31 (0.18)</td>
<td>1.36 (0.24)</td>
</tr>
<tr>
<td>Disobedience to Parents</td>
<td>0.29 (0.15)</td>
<td>1.34 (0.20)</td>
</tr>
<tr>
<td>Low Parental Supervision</td>
<td>0.41 (0.18)</td>
<td>1.51 (0.27)*</td>
</tr>
<tr>
<td>Family Drug/Alcohol Problem</td>
<td>0.26 (0.31)</td>
<td>1.29 (0.40)</td>
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<tr>
<td>Employed Family Member</td>
<td>-0.10 (0.15)</td>
<td>0.91 (0.13)</td>
</tr>
<tr>
<td><strong>Peer Associations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any Negative Peers</td>
<td>0.64 (0.20)</td>
<td>1.89 (0.37)**</td>
</tr>
<tr>
<td>Associates with Gang</td>
<td>0.48 (0.18)</td>
<td>1.62 (0.29)**</td>
</tr>
<tr>
<td>Negative Peers Exclusive</td>
<td>0.57 (0.15)</td>
<td>1.77 (0.27)**</td>
</tr>
<tr>
<td><strong>Reintegrative Shaming</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude Toward Offense</td>
<td>0.57 (0.17)</td>
<td>1.77 (0.29)**</td>
</tr>
<tr>
<td><strong>Incarcerated Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Served</td>
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<td></td>
</tr>
<tr>
<td>None (0 days = 1)</td>
<td>-0.76 (0.15)</td>
<td>0.47 (0.07)**</td>
</tr>
<tr>
<td>Low (1-179 days = 1)</td>
<td>0.02 (0.37)</td>
<td>1.02 (0.38)</td>
</tr>
<tr>
<td>Medium (180-359 days = 1)</td>
<td>0.65 (0.19)</td>
<td>1.92 (0.36)**</td>
</tr>
<tr>
<td>High (360-539 days = 1)</td>
<td>0.38 (0.21)</td>
<td>1.46 (0.31)</td>
</tr>
<tr>
<td>Very High (540 or more days = 1)</td>
<td>0.41 (0.29)</td>
<td>1.51 (0.44)</td>
</tr>
</tbody>
</table>

Levels of statistical significance: * p < 0.05; ** p < 0.01; *** p < 0.001
Standard error values are in brackets.
"Recidivism" (any re-arrest = 1; not re-arrested = 0) is the dep. variable.
White, Black, or Hispanic youths.

The last grouping of control variables, offense type, revealed two noteworthy correlations to recidivism. According to its odds ratio value (0.64), the "violence" variable revealed that youths whose top adjudicated charge was violence-related were 36% less likely to recidivate than youths committing other types of charges. The second variable, "drugs," indicated that youths who had committed drug-related offenses as their top charge were twice more likely to recidivate than youths who received other charges. The correlations found amongst offense types suggest an interesting recidivism dynamic. Although one could assume that drug-related offenses are often an introductory criminal activity and thus are more likely to lead to subsequent criminal behaviour, these correlations might be affected by external factors (i.e., policing strategies). The inclusion of other variables within the multivariate models will assure that this correlation is further investigated to provide more accurate conclusions.

Only one variable among the family environment variables was found to be correlated with recidivism. The bivariate results indicated that low family supervision is positively correlated with recidivism. More specifically, youths who have low parental supervision were approximately 51% more likely to recidivate than those who were regularly supervised by parents who set clear boundaries. This finding is consistent with the depiction of parental supervision as a social medium for informal control (Laub & Sampson 2001; Svensson 2003).

The three variables depicting the effect of peer associations were all found to be strong predictors of recidivism. The odds ratios (1.89) value of the "any negative peers" variable indicated youths who had any association with negative peers were 89% more
likely to recidivate than youths who had no such associations. Further, youths who associated with gangs were 62% more likely to recidivate than youths who were not gang affiliated. Lastly, youths who had social networks composed exclusively of negative peers were 77% more likely to recidivate than those who had conventional associations. The correlations found amongst these three variables provide insight into the predictive power of negative peer associations on recidivistic behaviour. As a result, an association with a negative peer seems to augment the chances that a past-offender will re-offend. The multivariate model will test if these correlations exist while controlling for other personal (i.e., gender and race), social (i.e., family and shaming), and legal factors (i.e., offense type and incarceration).

The shaming variable, “attitude toward offense,” demonstrated a strong positive correlation. That is to say, youths who minimized their personal responsibility regarding their actions (i.e., criminal offense) were approximately 77% more likely to recidivate than those who took some responsibility. This finding provides tentative support for Braithwaite’s (1989) reintegrative shaming theory that postulates that an acceptance of personal responsibility for one’s criminal actions will reduce future offending.

The incarcerated experience variables also provided some compelling findings. The time served “none” and “medium” variables were both found to be correlated with recidivism but showcased opposite directions within these correlations. First, the time served variable “none” had a negative correlation with recidivism. More specifically, youths who spent zero days in prison were 53% less likely to recidivate than those who served prison time. Conversely, the “medium” time served variable showcased a positive relationship with recidivism. That is to say, youths who spent between 180 and 359 days
in prison were 92% more likely to recidivate than youths who spent other periods of time in custody. Particular attention will be placed on the role of these variables in accurately predicting recidivism.

**Multivariate Regression Analysis**

Although the bivariate regression analysis revealed several interesting correlations, these relationships may be significantly altered with the inclusion of control variables. The multivariate statistical approach of this study aims to construct a modeling process that will explore the relative effects of several variables anticipated to be salient. The inclusion of variables is meant to approximate the more integrated theoretical model of recidivism. While some theories speculate that incarceration itself causes recidivistic behaviour, the effect of incarceration might be altered when variables that represent family environment, peers and shaming are included.

I have continued to use logistic regression as my statistical technique with this multivariate analysis. Nevertheless, it should be noted that three variables found to be related to recidivism in the bivariate analysis were not included in the multivariate analysis. First, the “white” race variable was excluded so that it could be used as a comparison group for the remaining race-related variables (Black, Hispanic, and other). Similar to the exclusion of the “white” variable, the time served “none” variable was also excluded from the multivariate analysis. The exclusion of the “none” variable makes it possible to interpret the remaining time served variables (i.e., “low”, medium”, “high” and “very high”) in comparison to zero days in prison. This study is aims to assess the effects of varying lengths of prison sentences on subsequent recidivism. Therefore, it was
necessary to exclude “incarceration” so that the time served variables could be properly assessed.

**Interpretation of Multivariate Logistical Results: Variables**

The first model constructed within our multivariate regression analysis includes the control variables: gender, race, and offense type (see Table 3). In Model 1, both gender and race were found to have significant effects on recidivism. With regard to gender, men were four times more likely than women to recidivate when taking into account racial background and type of offense. In addition, Black youths were almost 128% more likely to recidivate than White youths when controlling for gender and type of offense.

Model 2 was constructed in order to test the effect of the family environment variables on recidivism when controlling for race, gender, and offense type. Once again, gender (males) and race (African-American) were both found to have significant and positive effects on recidivism. Males were over four times (odds ratio=5.37) more likely to recidivate than females, while taking into account family environment, offense type, and racial background. With regard to the family-related variables, only “low parental supervision” was statistically significant. As a result, youths who did not have a clear set of boundaries from their parents (or guardians) were approximately 47% more likely to recidivate than those who were often supervised and received clear boundaries.

In Model 3, we explored the effect of peer associations on recidivism while taking into account the control variables. In comparison to our baseline model (i.e. control variables
Table 3. Multivariate Logistical Regression of Family, Peers, Shaming, and Incarceration on Recidivism (N = 698)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>Odds Ratio</td>
<td>b</td>
<td>Odds Ratio</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (male = 1)</td>
<td>1.62 (0.23)</td>
<td>5.03 (1.17)***</td>
<td>1.68 (0.24)</td>
<td>5.37 (1.28)***</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black(^a)</td>
<td>0.82 (0.35)</td>
<td>2.28 (0.81)*</td>
<td>0.83 (0.36)</td>
<td>2.29 (0.82)*</td>
</tr>
<tr>
<td>Hispanic(^a)</td>
<td>0.58 (0.37)</td>
<td>1.78 (0.66)</td>
<td>0.57 (0.37)</td>
<td>1.77 (0.66)</td>
</tr>
<tr>
<td>Other(^a)</td>
<td>-0.40 (0.52)</td>
<td>0.67 (0.35)</td>
<td>-0.42 (0.52)</td>
<td>0.66 (0.34)</td>
</tr>
<tr>
<td>Offense Type</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violence(^b)</td>
<td>-0.32 (0.34)</td>
<td>0.72 (0.24)</td>
<td>-0.30 (0.34)</td>
<td>0.74 (0.25)</td>
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<tr>
<td>Property(^b)</td>
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<td>0.96 (0.33)</td>
<td>-0.04 (0.35)</td>
<td>0.96 (0.33)</td>
</tr>
<tr>
<td>Drugs(^b)</td>
<td>0.40 (0.39)</td>
<td>1.49 (0.58)</td>
<td>0.37 (0.39)</td>
<td>1.44 (0.56)</td>
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<td><strong>Family Environment</strong></td>
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<tr>
<td>Conflict with Parents</td>
<td>0.40 (0.22)</td>
<td>1.49 (0.33)</td>
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<td></td>
</tr>
<tr>
<td>Disobedience to Parents</td>
<td>0.003 (0.19)</td>
<td>1.00 (0.19)</td>
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</tr>
<tr>
<td>Low Parental Supervision</td>
<td>0.39 (0.20)</td>
<td>1.47 (0.29)*</td>
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</tr>
<tr>
<td>Family Drug/Alcohol Problem</td>
<td>0.09 (0.34)</td>
<td>1.10 (0.37)</td>
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</tr>
<tr>
<td>Employed Family Member</td>
<td>-0.01 (0.16)</td>
<td>0.99 (0.16)</td>
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<tr>
<td><strong>Peer Associations</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Any Negative Peers</td>
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<td></td>
</tr>
<tr>
<td>Associates with Gang</td>
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<td></td>
</tr>
<tr>
<td>Negative Peers Exclusive</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Reintegrative Shaming</strong></td>
<td></td>
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<tr>
<td>Attitude Toward Offense</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Incarcerated Experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Served</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low (1-179 days = 1)(^c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium (180-359 days = 1)(^c)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High (360-539 days = 1)(^c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very High (540 or more days = 1)(^c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-2.00 (0.49)</td>
<td>-2.46 (0.54)</td>
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</tr>
<tr>
<td>LR (\chi^2)</td>
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<td>0.00</td>
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<td></td>
</tr>
<tr>
<td>Pseudo R(^*)</td>
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<td>0.10</td>
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</tr>
<tr>
<td>Bayesian Information Criterion</td>
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<td>-3615.68</td>
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<tr>
<td>Log-Likelihood</td>
<td>-439.86</td>
<td>-434.93</td>
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</tr>
</tbody>
</table>

Levels of statistical significance: * p < 0.05; ** p < 0.01; *** p < 0.001

\(^a\) Recidivism" is the dependant variable and standard error values are in brackets.

\(^b\) Comparison group is "other offense."

\(^c\) Comparison group is time served "none" (i.e., zero days incarcerated).
### Table 3. Continued - Models 3 and 4 (N = 698)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
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<td></td>
<td>b</td>
<td>Odds Ratio</td>
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<tr>
<td><strong>Control Variables</strong></td>
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<td></td>
</tr>
<tr>
<td>Gender (male = 1)</td>
<td>1.64 (0.24)</td>
<td>5.16 (1.22)**</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black(^a)</td>
<td>0.71 (0.36)</td>
<td>2.03 (0.73)*</td>
</tr>
<tr>
<td>Hispanic(^a)</td>
<td>0.44 (0.38)</td>
<td>1.56 (0.59)</td>
</tr>
<tr>
<td>Other(^a)</td>
<td>-0.48 (0.53)</td>
<td>0.62 (0.33)</td>
</tr>
<tr>
<td><strong>Offense Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violence(^b)</td>
<td>-0.32 (0.34)</td>
<td>0.73 (0.25)</td>
</tr>
<tr>
<td>Property(^b)</td>
<td>-0.05 (0.35)</td>
<td>0.95 (0.33)</td>
</tr>
<tr>
<td>Drugs(^b)</td>
<td>0.39 (0.39)</td>
<td>1.48 (0.58)</td>
</tr>
<tr>
<td><strong>Family Environment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict with Parents</td>
<td></td>
<td>0.30 (0.24)</td>
</tr>
<tr>
<td>Disobedience to Parents</td>
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<td>0.88 (0.17)</td>
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<tr>
<td>Family Drug/Alcohol Problem</td>
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<td>0.96 (0.33)</td>
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<tr>
<td>Employed Family Member</td>
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<td>0.97 (0.16)</td>
</tr>
<tr>
<td><strong>Peer Associations</strong></td>
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<td></td>
</tr>
<tr>
<td>Any Negative Peers</td>
<td>0.31 (0.24)</td>
<td>1.36 (0.33)</td>
</tr>
<tr>
<td>Associates with Gang</td>
<td>0.28 (0.20)</td>
<td>1.32 (0.27)</td>
</tr>
<tr>
<td>Negative Peers Exclusive</td>
<td>0.41 (0.19)</td>
<td>1.51 (0.29)*</td>
</tr>
<tr>
<td><strong>Reintegrative Shaming</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude Toward Offense</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Incarcerated Experience</strong></td>
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<td></td>
</tr>
<tr>
<td>Time Served</td>
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</tr>
<tr>
<td>Low (1-179 days = 1)(^c)</td>
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</tr>
<tr>
<td>Medium (180-359 days = 1)(^c)</td>
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<tr>
<td>High (360-539 days = 1)(^c)</td>
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<tr>
<td>Very High (540 or more days = 1)(^c)</td>
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</tr>
<tr>
<td>Constant</td>
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<td>-2.71 (0.56)</td>
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<tr>
<td>LR (\chi^2)</td>
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<tr>
<td>Log-Likelihood</td>
<td>-432.17</td>
<td>-428.49</td>
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</table>

Levels of statistical significance: * p < 0.05; ** p < 0.01; *** p < 0.001

"Recidivism" is the dependant variable and standard error values are in brackets.

\(\text{\(^a\) Comparison group is "white."} \)

\(\text{\(^b\) Comparison group is "other offense."} \)

\(\text{\(^c\) Comparison group is time served "none" (i.e., zero days incarcerated).} \)
Table 3. Continued - Models 5 and 6 (N = 698)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 5</th>
<th>Model 6</th>
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</thead>
<tbody>
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<td>b</td>
<td>Odds Ratio</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (male = 1)</td>
<td>1.68 (0.24)</td>
<td>5.36 (1.29)***</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black(^a)</td>
<td>0.62 (0.37)</td>
<td>1.86 (0.69)</td>
</tr>
<tr>
<td>Hispanic(^c)</td>
<td>0.39 (0.39)</td>
<td>1.48 (0.57)</td>
</tr>
<tr>
<td>Other(^d)</td>
<td>-0.54 (0.53)</td>
<td>0.58 (0.31)</td>
</tr>
<tr>
<td><strong>Offense Type</strong></td>
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<td></td>
</tr>
<tr>
<td>Violence(^b)</td>
<td>-0.38 (0.35)</td>
<td>0.69 (0.24)</td>
</tr>
<tr>
<td>Property(^b)</td>
<td>0.01 (0.36)</td>
<td>1.01 (0.36)</td>
</tr>
<tr>
<td>Drugs(^b)</td>
<td>0.39 (0.40)</td>
<td>1.48 (0.59)</td>
</tr>
<tr>
<td><strong>Family Environment</strong></td>
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<tr>
<td>Conflict with Parents</td>
<td>0.29 (0.22)</td>
<td>1.33 (0.30)</td>
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<tr>
<td>Disobedience to Parents</td>
<td>-0.15 (0.20)</td>
<td>0.86 (0.17)</td>
</tr>
<tr>
<td>Low Parental Supervision</td>
<td>0.30 (0.20)</td>
<td>1.35 (0.27)</td>
</tr>
<tr>
<td>Family Drug/Alcohol Problem</td>
<td>-0.10 (0.35)</td>
<td>0.90 (0.32)</td>
</tr>
<tr>
<td>Employed Family Member</td>
<td>0.001 (0.17)</td>
<td>1.00 (0.17)</td>
</tr>
<tr>
<td><strong>Peer Associations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any Negative Peers</td>
<td>0.26 (0.24)</td>
<td>1.30 (0.31)</td>
</tr>
<tr>
<td>Associates with Gang</td>
<td>0.31 (0.21)</td>
<td>1.37 (0.29)</td>
</tr>
<tr>
<td>Negative Peers Exclusive</td>
<td>0.40 (0.21)</td>
<td>1.49 (0.31)</td>
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<tr>
<td><strong>Reintegrative Shaming</strong></td>
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</tr>
<tr>
<td>Attitude Toward Offense</td>
<td>0.61 (0.19)</td>
<td>1.83 (0.34)**</td>
</tr>
<tr>
<td><strong>Incarcerated Experience</strong></td>
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</tr>
<tr>
<td>Time Served</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low (1-179 days = 1)(^c)</td>
<td>0.22 (0.43)</td>
<td>1.24 (0.54)</td>
</tr>
<tr>
<td>Medium (180-359 days = 1)(^c)</td>
<td>0.49 (0.24)</td>
<td>1.64 (0.39)*</td>
</tr>
<tr>
<td>High (360-539 days = 1)(^c)</td>
<td>0.16 (0.26)</td>
<td>1.17 (0.30)</td>
</tr>
<tr>
<td>Very High (540 or more days = 1)(^c)</td>
<td>0.27 (0.33)</td>
<td>1.31 (0.43)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.97 (0.57)</td>
<td>-2.91 (0.58)</td>
</tr>
<tr>
<td>LR χ'</td>
<td>117.45</td>
<td>121.93</td>
</tr>
<tr>
<td>Prob &gt; χ'</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Pseudo R'</td>
<td>0.12</td>
<td>0.13</td>
</tr>
<tr>
<td>Bayesian Information Criterion</td>
<td>-3613.03</td>
<td>-3591.32</td>
</tr>
<tr>
<td>Log-Likelihood</td>
<td>-423.15</td>
<td>-420.91</td>
</tr>
</tbody>
</table>

Levels of statistical significance: * p < 0.05; ** p < 0.01; *** p < 0.001
"Recidivism" is the dependant variable and standard error values are in brackets.
\(^a\) Comparison group is "white."
\(^b\) Comparison group is "other offense."
\(^c\) Comparison group is time served "none" (i.e., zero days incarcerated).
of gender, race, and offense type on recidivism), gender and race maintained their significant and positive effects on recidivism but the strength of these effects changed. The effect of gender increased slightly but maintained its approximate interpretation (i.e., males four times more likely to recidivate than females). Conversely, the inclusion of the peer variables weakened the effect of the “Black” race variable. This indicated that African-American youths were approximately 103% more likely to recidivate than White youths.

Surprisingly, only one peer-related variable was found to be significant. The “negative peers exclusive” variable indicates that youths who had peer networks composed exclusively of negative peers were 51% more likely to recidivate than youths who had mostly conventional peers. Although this particular finding has a similar direction with the correlation found in the bivariate analysis, the inclusion of the control variables has explained away the effect of the remaining two variables (i.e., “any negative peers” and “associates with gang”). This would suggest that a youth’s association with a gang and a few delinquent peers might not be enough to instill criminal behaviour. Consequently, the deviant composition of a youth’s entire peer network is a more noteworthy predictor of re-offending than individual deviant associations. This finding is consistent with differential association theory arguments regarding social networks. This theory suggests that a youth needs to be emerged in deviant associations to adopt the subsequent favorable deviant definitions (Demuth 2004).

Models 2 and 3 permit me to examine the effects of peers and family, respectively, while taking into account gender, race, and offense type. The fourth model was designed to see if these effects would remain significant after introducing the effects
of peers and family on recidivism. With regard to the control variables, we see a similar pattern in that males and Blacks were found to have greater likelihood of recidivating. The effect of gender has, once again, slightly increased so that males are over four times more likely to recidivate than female offenders. In comparison to our baseline model, the effect being Black on recidivism has decreased but maintains such that Black youths are 109% more likely to recidivate than white youths. Interestingly, there were no significant effects found amongst the family and peer-related variables. This would suggest that the effects of both parental supervision and negative peer networks on recidivism have been explained away by other more significant factors.

In model 5, we introduced the reintegrative shaming variable, “attitude toward offense,” to our model that included gender, race, offense type (as controls), family environment, and peer associations. The effect of being African-American on recidivism is reduced below statistical significance with the introduction of reintegrative shaming. A cross-tabulation of the race variables (i.e., White, Black, Hispanic, and Other) with the shaming variable (i.e., “attitude toward the offense”) revealed that youths from Black, Hispanic, and “Other” racial groups were more likely to refuse responsibility for their criminal actions. Those included within the “White” variable had an almost equal distribution across attitude to the offense.

A chi-squared test between the race and the shaming variables also revealed that only the “Black” variable had a statistically significant relationship with the shaming variable. The remaining race variables (i.e., “White”, “Hispanic”, and “Other”) all possessed small Pearson chi-square values. Therefore, I was unable to reject the null hypothesis of independence. Moreover, a cross-tabulation also revealed that a greater
percentage of the African-American youth within the sample chose to minimize/refuse to take responsibility for their actions. Seventy-three percent (i.e., 313 of 428) of African-American youths did not accept criminal responsibility during their dispositions. This observation helped explain why the statistical significance of being African-American (i.e., “Black” variable) on recidivism was explained away when introducing the shaming variable (i.e., “attitude toward offense”).

Once again, the family and peer-related variables had no statistically significant effects on recidivism while controlling for all other variables. Model 5 also indicated that shaming was in fact significant in predicting re-offending behaviour. More specifically, the odds ratio (1.83) stated that youths who minimized their responsibility regarding their offense were approximately 83% more likely to recidivate than those who accept some form of responsibility for their criminal acts. Although we already determined a correlation between shaming and recidivism in our bivariate results, this model demonstrates that shaming maintains its effect on recidivism while controlling for race, gender, offense type, family environment, and peer networks.

The final model, model 6, adds the incarcerated experience (i.e., time served). The inclusion of incarceration is meant to encapsulate the effect of this experience on recidivism. Gender maintains a strong effect on recidivism. Males are over four times more likely to recidivate than females while controlling for all other variables in the study, including duration of incarceration.

As for the family and peer-related variables, none were found to be significant within the final model. The inclusion of the incarceration experience did not unmask any underlining effects found amongst family environment and peer networks. The effect of
shaming on re-offending did not change dramatically with the inclusion of incarceration (i.e., “time served” variables). Although the effect of shaming was slightly weakened, the odds ratio (1.75) suggests that youths who minimized or refused to take responsibility for their actions at the time of court appearance were 75% more likely to recidivate than youths who accepted some form of responsibility. This again remains consistent with Braithwaite’s (1989) earlier predictions on the shaming process.

The final set of variables addressing time served in prison, revealed some interesting findings. Among the bivariate results, only two sentences were found to be correlated with recidivism. These included no time served (i.e., community service) and medium prison term (180 to 359 days). Recall that the time served “none” variable was excluded within the multivariate analysis as the comparison category. With regard to the multivariate regression model (see Model 6, Table 3), only the “medium” time sentence variable was found to have a significant effect on recidivism while taking into account all other variables. The odds ratio (1.64) indicated that youths who spent 180 to 359 days in prison were 64% more likely to recidivate than youths who received no prison time (i.e., community service).

The fact that this particular sentence length is more detrimental to rehabilitation is interesting. One might argue that this effect represents this type of sentence for specific offenses. I attempted to control for offense type by including the “offense type” variables (e.g., violence, property, drugs, and other offenses) within the models as control variables. I also conducted a cross-tabulation of the offense type variables with the time served variables in order to see if there was a discrepancy in sentence lengths across offense types. With the exception of the time served “none” variable (i.e., 52% of youths
from the entire sample received community alternatives to incarceration), the cross-tabulation revealed that the medium sentence length was the most common sentence for all four types of offenses. Forty-four percent of youths who received placement (i.e., 48% of total sample) during their dispositions were given sentences that were between 180 to 359 days. As a result, youths who commit violent, property, drug or other offenses have a higher probability of receiving a medium (180 to 359 days) sentence than low (1 to 179 days), high (360 to 539 days), or very high (540 or more days) sentences.

A chi-square test of mutual independence was also conducted to see if the two sets of variables were statistically independent of each other. The individual chi-square tests revealed that the various offense types were indeed independent from each of the time served variables. This would indicate that there was no actual relationship between the types of offense committed and the sentence categories.

Nevertheless, it is possible that there are other mitigating factors that may explain the high frequency of youths who receive medium prison sentences and their subsequent recidivistic behaviour. For instance, the severity (i.e., felony or misdemeanor) of the offense types might also have influenced juvenile probation officer (JPO) recommendations and subsequent dispositions. This would suggest that certain levels of severity across offense types would result in medium sentences. The severity of offending behaviour might also help explain why youths who receive medium sentences are more likely to recidivate than other youths who received different prison terms. I will explore this finding in more depth within the following chapter by relating these results to existing theories of recidivism and offender rehabilitation.
Interpretation of Multivariate Logistical Results: Model Fitness

In Table 3, six distinct models were used to predict the likelihood that youths will re-offend (i.e., recidivate). At the bottom of Table 3, the individual characteristics of each model are presented in order to offer more critical insight regarding their structure. All models were found to be highly significant in predicting the dependent variable (i.e., recidivism).

Although logistical regression provides a pseudo R-squared value, there has been much debate regarding the proper interpretation of this particular statistic (Fox 1997; Long 1997). In ordinal least squares (OLS) interpretation, the R-squared value represents the explanatory power of the entire model. While the pseudo R-squared value within our six logistical regression models cannot offer a direct translation of predictive accuracy, the models demonstrate a hypothetical trend in model fitness.

More specifically, the pseudo R-squared value of our baseline model (i.e., nested model) suggested that 9% of the variance in re-offending can be explained by our control variables. Although the significant effects of certain variables were explained away with the inclusion of new ones, the overall model fitness of each model was stronger than its predecessor. As a result, the addition of new variables within each model resulted in a steady increase of approximately one percent in explanatory power with each new model. The final model, model 6, revealed that thirteen percent of the variance in recidivism was explained by gender, race, offense type, family, peers, shaming, and incarceration.

In order to confirm the hypothetical interpretation of the pseudo R-squared value, I have also compared each model according to the Bayesian Information Criterion
This logistical alternative to pseudo R-squared value measures the fit and complexity of a particular model (Jaccard 2001; Stata 2009). When comparing the six models, the BIC evaluation indicated strong support for using more complex models (i.e., building upon the nested model). Also, the comparison of model 2 (i.e., controls and family) and model 3 (i.e., controls and peers) indicated a small increase in the predictive power for re-offending in model 3. This suggests that the addition of peer variables to the nested model is slightly more beneficial in explaining variance in recidivism than the inclusion of the family environment variables in model 2.

The overall increase in predictive power of each subsequent model is a strong argument in favor of a more integrative model of recidivism. Although some sets of variables were found to be insignificant, their presence provides more controls in determining the accuracy of other predictors. Therefore, recidivism should be predicted using multiple variables from distinct facets of social life.

**Interactions between Incarceration and Other Theoretically Relevant Variables**

A main component of this research study has been to examine the effect of incarceration on recidivism rates. In addition to this exploration, I have also examined other variables that may contribute to the successful rehabilitation of an offender (i.e., conventional family environment, positive/neutral peers, and reintegrative shaming). In an effort to acquire a more complete understanding of recidivistic behaviour, I have opted to examine the potential interactions between incarceration and all other variables within this study. This investigation will permit us to test the effect of incarceration on

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20 Even though there are various alternatives to pseudo R-squared that could have been examined to test the model efficacy, the Bayesian Information Criterion (BIC) was selected based on its reliable numerical interpretation.
recidivism across different characteristics pertaining to family, peers, and feelings of personal shame.

The multivariate analysis of our final model (i.e., including gender, race, offense type, family environment, peers, shaming, and incarceration) demonstrated the time served variable “medium” was the only incarceration variable found to have a significant effect on recidivism. Consequently, I have opted to use this representation of incarceration to test possible interactions with other variables. In an attempt to avoid misrepresentations, all variables were standardized before the creation of the interaction terms. Also, the interaction terms were added to model 6 one at a time so that their effect could be tested without interference from other interaction terms.

As Table 4 outlines, only one of the fifteen interaction terms was found to be significant. Not surprisingly, the interaction between gender (i.e., the strongest predictor of recidivism within our multivariate models) and the time served “medium” variable had a significant positive effect on recidivism. Given that our interaction terms consist of two dichotomous variables, the interpretation of the coefficients is rather limited (Bryman & Cramer 1990; Jaccard 2001). Nevertheless, the strong positive nature of the coefficients hints that males who are incarcerated for 180 to 359 days (i.e., gender = 1; time served “medium” = 1) are more likely to recidivate than any other combination (i.e., incarcerated female, non-incarcerated male, non-incarcerated female) within this interaction.

To supplement this statistical interpretation, I have also conducted an interaction test created by J. Scott Long and Jeremy Freese (2005). In a statistical package created for STATA (a statistics software program), entitled “spostado,” Long and Freese (2005)

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21 All variables were standardized using their respective means and standard deviation. The results were computed within STATA by using the “(x – mean)/SD” formula in order to avoid manual calculation errors.
## Table 4. Interactions Using the Time Served "Medium" Variable (N = 698)$^a$

<table>
<thead>
<tr>
<th>Variables</th>
<th>Interaction Models</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$</td>
</tr>
<tr>
<td><strong>Control Variable Interactions</strong></td>
<td></td>
</tr>
<tr>
<td>Time Served Medium*Gender</td>
<td>0.23 (0.11)*</td>
</tr>
<tr>
<td>Time Served Medium*Black$^b$</td>
<td>0.05 (0.09)</td>
</tr>
<tr>
<td>Time Served Medium*Hispanic$^b$</td>
<td>-0.04 (0.08)</td>
</tr>
<tr>
<td>Time Served Medium*Other Race$^b$</td>
<td>-0.06 (0.09)</td>
</tr>
<tr>
<td>Time Served Medium*Violent$^c$</td>
<td>-0.05 (0.08)</td>
</tr>
<tr>
<td>Time Served Medium*Property$^c$</td>
<td>0.0001 (0.09)</td>
</tr>
<tr>
<td>Time Served Medium*Drugs$^c$</td>
<td>-0.003 (0.08)</td>
</tr>
<tr>
<td><strong>Family Environment Interactions</strong></td>
<td></td>
</tr>
<tr>
<td>Time Served Medium*Conflict with Parents</td>
<td>0.02 (0.08)</td>
</tr>
<tr>
<td>Time Served Medium*Low Parental Supervision</td>
<td>-0.11 (0.10)</td>
</tr>
<tr>
<td>Time Served Medium*Family Drug/Alcohol Problems</td>
<td>0.01 (0.10)</td>
</tr>
<tr>
<td>Time Served Medium*Employed Family Member</td>
<td>-0.12 (0.08)</td>
</tr>
<tr>
<td><strong>Peer Association Interactions</strong></td>
<td></td>
</tr>
<tr>
<td>Time Served Medium*Any Negative Peers</td>
<td>0.04 (0.10)</td>
</tr>
<tr>
<td>Time Served Medium*Associates with Gang</td>
<td>-0.003 (0.08)</td>
</tr>
<tr>
<td>Time Served Medium*Negative Peers Exclusive</td>
<td>-0.11 (0.09)</td>
</tr>
<tr>
<td><strong>Reintegrative Shaming Interaction</strong></td>
<td></td>
</tr>
<tr>
<td>Time Served Medium*Attitude Toward Offense</td>
<td>0.05 (0.09)</td>
</tr>
</tbody>
</table>

Levels of statistical significance: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

"Recidivism" (any re-arrest = 1; not re-arrested = 0) is the dependant variable.

Standard error values are in brackets.

$^a$ Each interaction term added one at a time to model 6 from multivariate analysis in table 3. All individual variables were standardized before creating the interaction terms.

$^b$ Comparison group is "white."

$^c$ Comparison group is "other offense."
programmed the “prvalue” command. This command permits users to further investigate a specific regression model by calculating the predicted values of “Y” for individual cases with specific “X” values (Long & Freese 2005; Stata 2009). For this study, this test permitted me to calculate the predicted likelihood that an offender will re-offend based on their gender and whether or not they were incarcerated for a medium sentence.\textsuperscript{22}

The results featured in Table 5 confirm the previous interpretation of our gender and time served “medium” interaction term (see Table 4). More specifically, males who were incarcerated for 180 to 359 days had the highest risk to re-offend (i.e., 62% more likely to re-offend) across both genders and punishment types.

This specific statistical approach can help clarify some important findings within this specific interaction. For instance, males had a stronger risk to re-offend than females across the two types of punishment. This is most evident when comparing the average re-offending likelihood of 46% (see Table 1) to the predicted probabilities of re-offending

\begin{table}
\centering
\caption{Predicted Likelihood of Re-offending Across Incarceration and Gender (N = 698)\textsuperscript{a}}
\begin{tabular}{lrr}
\hline
\textbf{Variables} & \textbf{180-359 days in Prison} & \textbf{Community Program} \\
\hline
Gender & & \\
Male & 63\% & 51\% \\
Female & 24\% & 16\% \\
\hline
\end{tabular}
\end{table}

\textsuperscript{a} Results computed using the "prvalue" command in STATA developed by J. Scott Long and Jeremy Freese. This statistical tool, amongst others, can be found in their "spostado" statistical package for regression models with categorical and limited dependent variables.

\textsuperscript{22} Model 6 (see Table 3) was used as reference model in order to predict the various “Y” values across the gender and time served “medium” variables.
amongst males who were incarcerated (62%) and those who received community programs (51%). Moreover, incarceration for both genders seems to increase the likelihood that they will re-offend. Although the predicted likelihood of females who received medium sentences (24%) was almost three times weaker that of incarcerated males (62%), the incarceration experience did raise the risk of re-offending amongst females. The gender and time served “medium” interaction term provides more context to the examination of re-offending trends.

**Conclusion**

In this chapter, I have conducted various statistical analyses in order to test my hypotheses regarding predictors of recidivism. The descriptive statistics and bivariate results both helped provide an important first step prior to multivariate analyses. With regard to descriptive statistics, we discovered that this sample of youths is already riddled with factors that may contribute to deviant or criminal behaviour. More specifically, the information regarding family and peer associations paint the picture of a very high-risk re-offending environment. For instance, three-quarters of youths in the sample did not have parental supervision with clear boundaries. In addition, many youths had frequent exposure to deviant peers (i.e., deviant peers, affiliations with gangs). Most notably, half of the sample had exclusively deviant peer networks. The lack of informal controls and the prevalence of exclusively deviant peer networks remind us that this sample is relatively distinct from other studies (see Nozfiger and Lee 2006; Svensson 2003; Piquero et al. 2005). That is to say, this sample consists entirely of past-offenders with distinct
social attributes that may continue to contribute to subsequent criminal behaviour (see Spohn 2007 for a similar sample containing previously incarcerated research subjects).

The bivariate results also highlighted some important issues regarding predictors of recidivistic behaviour. These results enabled us to examine various correlations amongst the independent variables and recidivism. Although these correlations are not necessarily causes of recidivism, they provided interesting theoretical insight. Of particular interest, the peer-related variables were all found to be correlated with recidivism, but not all of these correlations remained significant when controlling for other factors. This simple observation reminds us that certain correlations might be explained by factors introduced in the multivariate analysis.

Although there are various ways in which one can conduct multivariate analysis, this study attempted to conduct a modeling process that would emulate our theoretical rationale. That is to say, we introduced new variables in such a way that it would resemble the actual time-line of youths’ rehabilitation process. We first began to examine the effect of our control variables which consisted of personal demographics (i.e., gender and race) and legal attributes (i.e., offense type). This model created an image of offenders’ personal characteristics and criminal range (i.e., top adjudicated charge). The addition of data (i.e., taken before incarceration or community service) regarding family environment and peer networks broadened the examination to include youths’ social network capital. The public shaming process which took place during the dispositions was also taken into account with our examination of offender attitudes. Finally, our last model incorporated the experience of incarceration in four distinct time-frames. This
approach enabled us to see the step-by-step transformation for all predictors by including new theoretically relevant variables.

Following the multivariate analysis, I attempted to test the potential interactions between incarceration and all other relevant variables. In order to do this, all variables were standardized and interaction terms were created using the time served “medium” variable. Although some interaction terms were theoretically relevant, the actual results indicated that only one interaction (i.e., between time served “medium” and “gender” variables) had an effect on recidivism. This further emphasized the importance of gender in the examination of re-offending trends.

With regard to our hypotheses, the multivariate and interaction term findings provided interesting insight to our different theories. Generally speaking, gender was a consistent factor in determining re-offending across all models. This was not surprising given that many theories have documented the gender difference with regard to criminal offending and rehabilitation (Chesney-Lind & Shelden 2003; Daly 1994; Reisig et al. 2006). The effect of family environment did not seem to play a large role in re-offending. This suggests that sources of informal controls might be more useful in deterring initial or early offending rather than subsequent or patterned offending.

Moreover, the presence of negative peers was reduced when controlling for incarceration. This finding might suggest that incarceration periods may not only sever conventional ties to society but also diminish the effects of prior deviant associations. A commonly overlooked factor, public shaming, proved to have a strong effect on recidivistic behaviour. This variable, though an approximate of Braithwaite’s (1989) reintegrative shaming theory, provides support for the theory.
Lastly, the introduction of the experience of incarceration demonstrated that only one type of sentence length (i.e., medium durations of 180 to 359 days) seemed to discourage rehabilitation. Whether this is due to Tittle and Rowe’s (1974) “tipping effect” (i.e., a sentence length should not be too short or too long in order to properly rehabilitate an offender) or caused by other mitigating factors remains to be seen. The following chapter will attempt to review these results by taking into account previous discussions with regard to theory.
CHAPTER 5: 
DISCUSSION AND CONCLUSION

Introduction

In this final chapter, I will attempt to bridge together the components found within this study’s examination of recidivism. First, I will reiterate the findings discussed in Chapter 4 by specifically addressing the theoretical narrative outlined in Chapter 3. Moreover, I will formally address the twelve research hypotheses posed at the start of this thesis. Specific attention will be paid to the lack of significance of certain relationships in predicting recidivism and the relevance for future theorizing.

In addition, this chapter will also include discussion pertaining to this study’s research design. As a result, I will address the limitations of secondary research. Suggestions toward improving future research within this particular field of study will be discussed.

Finally, I will end the chapter by offering some concluding remarks regarding the role of recidivism research in public policy. This discussion will include previous arguments concerning restorative justice and its influence on current punitive trends. A final plea for more recidivism research is issued to challenge archaic penal philosophies and inform new correctional treatments programs.

Discussion

This subsection will use the statistical analysis in the previous chapter in order to address the theoretical hypotheses discussed in Chapter 3. I will also expand on these assumptions with reference to previous findings. In addition to the hypotheses, I will also explore the statistical results found among the control variables. Although I did not pose
specific hypotheses related to these variables, their inclusion provided context to this study’s theoretical integration.

**Control Variables: Gender, Race, and Offense Type**

The control variables selected for this study were gender, race, and offense type. Gender and race were considered to be important personal demographic factors in predicting recidivism due to their proven significance within past literature (Chesney-Lind & Shelden 2003; Daly 1994; Reisig et al. 2006). Past research demonstrates that males have a higher chance to re-offend than females (Kowalski & Caputo 1999; Piquero et al. 2005). In addition, past research also notes that African-Americans are highly over-represented within prison populations and official arrest data (Lin 2007a; Reisig et al. 2007). It came as no surprise that gender remained a consistent factor in predicting recidivism across all models (see Table 3). Although the importance of gender was slightly altered with the addition of new variables, the results conformed to previous expectations of male criminality. Males were consistently more at risk to re-offend than females. An examination of the actual frequency distribution also revealed that males are more heavily involved in criminality (or rather, are caught more often than females). Further, gender maintained its relevance when combined with the “time served” variables.

Although gender did not play a large role in my theoretical narrative, some studies have highlighted distinct gendered criminal pathways (Chesney-Lind & Shelden 2003; Daly 1994). Moreover, some factors might be more important for males than females and vice versa. For example, deviant peers might have had a stronger effect in influencing
male criminality than females (Piquero et al. 2005:269). Also, the informal controls maintained through conventional family environments might be more successful in deterring young females than males (Laub & Sampson 2001; Svensson 2003). The role of gender in the shaming process also has had mixed results (Ahmed & Braiwaite 2006; Braithwaite 2000; Hay 2001). The supposed insignificance of family and peer-related variables within our more advanced models made it difficult to test the divergent effects of these variables across gender. Moreover, a small portion of our sample consisted of females (see Table 1). Although males are commonly over-represented in official arrest data (Kowalski & Caputo 1999; Reisig et al. 2007), the lack of a comparable sample population of females in this study prevents more extensive analyses.

The race composition within Lin’s (2007a) original sample was consistent with other studies studying offending or re-offending patterns in the U.S. (Kubrin et al. 2007; Reisig et al. 2007; Spohn 2007). Specifically, official arrest data show that African-Americans are more often apprehended for criminal behaviour than other ethnic groups (Lin 2007a; Spohn 2007). This study’s early models indicated that being African-American had a significant impact on recidivism (see Table 3, Models 1-4). African-Americans were more at risk to recidivate than White youths (i.e., comparison group). There are various reasons as to why this relationship might exist. Some research has argued that some ethnic groups might have higher re-offending rates because its members suffer from greater social inequalities (Kubrin et al. 2007; Lin 2007a). This distinction might be evidence of strain theory which suggests that individuals facing greater levels of strain will be more likely to engage in criminal acts (Hirschi 1969; Laub & Sampson 2001; Williams & McShane 2004). The distinction in social environment might also help
explain why some youths are more likely to recidivate (Kubrin et al. 2007; Lin 2007a). That is to say, youths might return to more criminally inclined environments (i.e., vandalized streets and property, limited policing, lack of conventional social programs). Lin (2007a) attempted to explore this dynamic by testing the principles of social disorganization theory against property crimes. His research did not provide support for this particular theory (Lin 2007a:169). Although these considerations are worthwhile, my original intention was to examine the specific effect of incarceration on recidivism. Therefore, I did not further explore community characteristics and economic deprivation.

The inclusion of offense type was meant to account for varying types of criminality (i.e., violence, property, drugs, other). It was assumed that by including the types of offenses committed by youths, the overall model fitness would be increased and thus offer a more reliable prediction of recidivism. In the final model, the time served “medium” sentence was found to be a significant predictor of recidivism (see Table 3). In other words, youths who spent 180-359 days in prison were more likely to recidivate than youths who received other sentences. A cross-tabulation and chi-square test revealed that all types of offenses were statistically independent from sentence lengths. Although the medium sentence was the most common sentence for youths within this study’s sample, this was not attributed to offending type (i.e., certain types of offenses warrant specific sentences).

Apart from offense type, there are other factors to consider which are involved in sentencing. As previously mentioned in Chapter 2, the American criminal justice system has many judicial tools that heavily influence a judge’s decision-making process. Although frequently used, these empirical tools (i.e., such as criminal history score or
LSI) have been critiqued (Krauss 2004; Loza 2003). Moreover, judges also rely on juvenile probation officer (JPO) recommendations which, according to Lin (2007a:91), heavily influence a judge’s decision. During a trial, a judge will be bombarded by various types of information regarding a specific case. The multiple factors involved in the decision-making process makes it difficult to weigh each individual influence. The inclusion of offense type within my model offers only limited information on possible distinctions in sentencing. Although it would have been interesting to include an investigation of the actual decision-making process, this examination would have overaken the focus of my original research design (see Lin 2007a for a larger examination of recidivism rates and sentencing procedures).

**Family Environment: Informal Controls and Conventional Relationships**

The examination of family environment in this study was structured as an empirical test of informal controls (i.e., parental supervision/monitoring). The life course theory perspective is unique because of its emphasis on less static interpretations of informal controls and family environment. This theory considers transitional periods (i.e., undergoing a prison sentence or community program) and is fitting to examine the rehabilitation process.

In life course theory, parental figures (i.e., step parents, biological parents, foster parents, or legal guardians) are regarded as agents of informal control that monitor the deviant involvement of youths (Laub 2006; Laub & Sampson 2001). It is assumed that these agents of informal control have the capacity to limit youths’ exposure to deviant/criminal activity by offering constant surveillance (Hepburn & Griffin 2004:48).
There is an inherent assumption that parental figures have conventional ties to society and represent positive associations for troubled youth (Benda 2005; Laub & Sampson 2001).

The descriptive statistics of the sample demonstrated that the family environment was not typical of more traditional research studies on first-time offenders (see Laub & Sampson 2001; Svensson 2003). For instance, 75% of the sample had less than clear boundaries from their parents. Moreover, half of the youths were less obedient or not obedient to their parents (see Table 1). According to the life course theory perspective, the lack of boundaries and obedience to parents would represent a volatile family environment which might be unsuccessful in deterring future offending (Williams & McShane 2004:281).

With regard to my hypotheses, the statistical analysis revealed that the family environment does not play a large role in predicting recidivism. My hypotheses relating to family environment discussed in Chapter 3 were as follow:

**Hypothesis 1a:** Youths who have frequent disputes with their parents will recidivate more often than those who do not have any conflicts within the family environment.

**Hypothesis 1b:** Youths who are heavily supervised and generally obedient to their parents will be less likely to re-offend than youths who have unclear boundaries and disobey parental authority.

**Hypothesis 1c:** Youths who have unemployed family members will have less conventional ties to society and will be more at risk to recidivate than youths who have employed family members.

**Hypothesis 1d:** Youths who currently have family members’ suffering from alcohol and drug abuse will be more at risk to re-offend than those with family members that have no history of substance abuse.
The first hypothesis (1a) was meant to predict the effect of unstable family environments. It was believed that a rebellious attitude toward agents of informal control (i.e., parental figures) would be an indication of more serious future conflicts with official controls (i.e., laws). The second hypothesis (1b) specifically addressed the effect of parental monitoring on recidivism. It was argued that youths who are heavily supervised at home and obey the “house rules” (i.e., set of behavioural parameters outlined by conventional parents) would have fewer opportunities to offend outside the household.

The third (1c) and fourth (1d) hypotheses were meant to test the conventional nature of the youths’ family environment. Prior studies have demonstrated that associations with family members (Marcos et al. 1986) and romantic partners (Benda 2005) can actually encourage subsequent offending. Within this study, successful employment and no drug/alcohol problems amongst immediate family members were regarded as conventional attributes (Brocato & Wagner 2008; Harrison 2001; Staff & Uggen 2003). It was assumed that family members who did not struggle with substance abuse and were gainfully employed would act as conventional ties to society for the youths. The conventional nature of these family members would suggest that they are legitimate agents of informal control capable of monitoring and deterring re-offending.

At the bivariate level, only low parental supervision was found to be correlated with recidivism. The initial multivariate regression models also demonstrated that low parental supervision has a significant effect on predicting recidivism. However, this effect existed only in model 2 (see Table 3) when taking into account race, gender, offense type, and family environment variables. This effect was explained away when the peer-related variables were added. A distinction between the model fitness (i.e., BIC value) of model 2
(i.e., family and controls) and model 3 (i.e., peers and controls) suggested that peers have a stronger effect in predicting recidivism than the family environment. The insignificance of the family-related variables in our final model supports life course theory and its emphasis on broader informal controls in preventing recidivism.

Although the family environment has been successful in predicting first-time offending trends (Hepburn & Griffin 2004; Marcos et al. 1986; Svensson 2003), it would seem that its significance is lowered when predicting re-offending. There are various reasons as to why this might occur. Most notably, one could argue that these youths do not share the same attributes as first-time offenders. Some of the youths included in this study have detailed criminal histories and have even been incarcerated prior to this study. The deterring capacity of informal controls might therefore be ineffective for those who have violated official controls (i.e., law) on several occasions. More serious infractions might alter a youth’s perception of obedience within the home. As a result, they would be less willing to respect parental authority. Needless to say, this rationale contradicts the life course theory perspective which emphasizes the importance of adolescence deviance (i.e., first-time offending) in predicting adult criminal behaviour (i.e., re-offending).

Another potential explanation for the weak support of life course theory is related to the linkages found between the theory and the variables employed in this study. The life course theory perspective emphasizes that the “criminal experience is a dynamic one” (Williams & McShane 2004:280). This theory takes into account change over time and acknowledges that certain experiences will help shape a particular criminal pathway.

The variables examined in this study were static inferences of the family environment. That is to say, the information was collected before the youths’ placement
or community programs. Hypothetically, one could argue that the family environment may change during the period of incarceration. For example, Visher and Travis’s (2003:96) research suggested that family ties are weakened during incarceration. The isolation from family might alter the authoritative dynamic found between youth and parents. Moreover, the family environment for youths who receive community programs might also be altered following punishment. The lack of a follow-up on the family dynamic did not permit the depiction of potential changes in youths’ home environments. It would have been interesting to see if the sentence (i.e., prison or community program) had an effect on the stability or nature of the family environment variables (i.e., increased/decreased conflict, supervision, and obedience). These supposed changes might explain why these variables were found to be insignificant in our final model including incarceration.

Peer Associations: Deviant Peers, Gangs, and Negative Peer Networks

Past research has suggested that differential association theory is successful in predicting first-time offending trends (Demuth 2004; Neff & Waite 2006; Nozfiger & Lee 2006). This study included three variables which attempted to distinguish between three different types of deviant associations (i.e., associations with any negative peer, association with an official gang, and exclusively negative peer networks). The hypotheses relating to peer associations were:

**Hypothesis 2a:** Youths who report having associations with any negative peers and/or gang members will recidivate more frequently than those with more conventional peers.
**Hypothesis 2b:** Youths who have exclusively negative peer networks will have a higher risk to recidivate than youths who have any number of non-deviant associations within peer networks (i.e., neutral or conventional “good” peers).

The first hypothesis on deviant peers (2a) was meant to predict the effect of having any number of negative peers as well as having ties to official gangs. This hypothesis predicted that any association with a deviant peer and/or gang would heighten the probability that a youth would recidivate. This is especially relevant for associations with gangs as gang membership has been proven to be a strong relationship for young offenders (Gordon et al. 2004:57).

The second hypothesis on deviant peers (2b) was constructed in order to test the relevance of peer networks in differential association theory. The recent trend in examining entire peer networks (Haynie 2002; Weerman & Bijleveld 2007) urged me to include a variable that outlined youths’ entire peer networks. As previously noted, the variable labeled “negative peers exclusive” incorporated exclusive associations with strictly negative peers. Interestingly, almost fifty percent of the sample had exclusively deviant peer networks (see Table 1).

With regard to the regression results, the peer-related variables had an interesting dynamic with recidivism. At the bivariate level, all three peer-related variables were found to have significant correlations with recidivism. However, only the “negative peers exclusive” variable was found to be a significant predictor of recidivism when taking into account gender, race, offense type, and the remaining peer variables (see Table 3, Model 3). This finding might suggest that the examination of entire peer networks might be more
fruitful in predicting re-offending than simple associations to deviant peers or gang membership.

Interestingly, the effect of deviant peer associations on recidivism vanished with the addition of other variables (see Table 3, Model 4). The final model (i.e., including gender, race, offense type, family, peer, shaming, and incarceration) provided no support for differential association theory in predicting recidivism. Although both hypotheses 2a and 2b were unconfirmed in the later models, the relevance of peer networks cannot be overlooked. Similar to family environment, one might speculate that deviant peer associations are more important in predicting first-time offense rather than maintaining criminal careers.

Moreover, the effect of the peer associations might not be consistent throughout the rehabilitation process. For instance, the incarceration of an offender might weaken their ties to deviant peers. This echoes Visher and Travis (2003:96) previous argument concerning associations with conventional family members. The limited contact with deviant peers would seem to be a strong argument in favor of incarceration as a preventative measure for re-offending. Alternatively, one might argue that the introduction of a youth to a prison might heighten their associations with new deviant peers (Lahm 2008; Spohn 2007). The prison environment offers more criminally inclined contacts (i.e., inmates with expansive criminal histories) that might reinforce criminal behaviour (Eitle & Turner 2002; Silverman & Caldwell 2008). Although these arguments are interesting, they remain speculation because this study could not include an examination of deviant associations during incarceration or community programs. That is
to say, the peer-related variables were static inferences taken from official reports prior to a youth’s sentencing outcome.

The Incarcerated Experience: Time Served in Prison and Community

As previously mentioned in Chapter 2, an empirical test of the incarceration experience is rather difficult. There have been various ways that researchers have attempted to measure the possible detrimental effects of incarceration (Bales et al. 2005; Bayer & Pozen 2005; Windzio 2006). For this study, I used time served variables in order to test the effect of various sentence lengths on recidivism. The hypotheses relating to the incarceration experience are informed by past literature and critique the central tenets of deterrence theory. The incarceration hypotheses outlined in Chapter 3 were:

**Hypothesis 3a:** Youths who receive incarceration as their sentence are more likely to recidivate than those who were sentenced to community programs (i.e., with zero days spent in prison).

**Hypothesis 3b:** Youths who receive longer prison sentences will recidivate at a higher frequency than those who were given shorter sentences.

The first incarceration hypothesis (3a) is a more general statement which aims to disprove the traditional conception of deterrence theory. It is thus assumed that incarceration for certain offenders is more detrimental to their rehabilitation than community programs (Rodriguez 2003; Stubbs 2007; Sweeten & Apel 2007). The reasons for this discrepancy lies within the argument that prison environments foster more deviant peer associations (Lahm 2008) and have the ability to sever conventional ties to society (Visher & Travis 2003). General support for deterrence theory has at times been sparse within the academic community (Bayer & Pozen 2005; Lynch 1999; Spohn 2007). The
second incarceration hypothesis (3b) attempted to address previous literature on incarceration trends and speculates that long-time exposure to criminally-inclined populations found in prisons will raise the risk of re-offending (Gainey et al. 2000; Orsagh & Chen 1988; Tittle & Rowe 1974).

This study’s findings provided some interesting observations with regard to sentence length. The bivariate results indicated that community programs (i.e., time served “none”) and sentence lengths of 180 to 359 days (i.e., time served “medium”) were both correlated with recidivism (see Table 2). The negative correlation found between community programs and recidivism suggested that these programs could potentially lower re-offending rates. Moreover, medium sentence length was positively correlated with recidivism, indicating an increase in recidivistic behaviour for those who received prison time (i.e., more specifically, youths who spent 180 to 359 days in prison).

Multivariate regression results provided some support for the first incarceration hypothesis (3a) by indicating that youths who received a medium sentence were, in fact, more likely to recidivate than those who received community programs (see Table 3). This relationship between incarceration and recidivism was maintained in my final model which included gender, race, offense type, family environment, peers, and shaming. Nevertheless, it should be emphasized that this relationship existed only for youths who received a medium sentence.

The multivariate regression results also revealed that the “high” (360 to 539 days) and “very high” (540 or more days) sentence lengths were insignificant predictors of recidivism. These findings do not support the claim featured in the second incarceration
hypothesis (3b). Specifically, that longer stays in prison would lead to higher rates of re-offending (Gainey et al. 2000; Tittle & Rowe 1974).

It is difficult to ascertain why the medium sentence length is more detrimental to rehabilitation than any other. Many researchers have commented on the supposed U-shaped function of prison length which suggests that short and long sentences have both been associated with recidivism (Lynch 1999; Orsagh & Chen 1988; Spohn 2007). The “tipping point” stated by Tittle and Rowe (1974) summarizes this observation by reiterating the at times unpredictable nature of punishment. That is to say, some sentences can be either too short or too long to successfully deter future offending. Although the findings discredit deterrence theory and offer some support for our first incarceration hypothesis (3a), it was not possible to address more complex inquiries regarding the relationship between actual sentence length and recidivism.

**Reintegrative Shaming: Attitude toward the Offense**

The theoretical importance of shaming within the rehabilitation process is often neglected and overlooked. In this study, I attempted to use Lin’s (2007a) original variable on attitudes as an indication of the shaming process. This variable outlined whether youths took responsibility for their actions or attempted to minimize their involvement in the criminal act. Consistent with Braithwaite’s (1989) conception of shaming, my hypothesis on offender attitudes speculated that:

**Hypothesis 4:** Youths who express responsibility for their actions will re-offend less than those who minimize or refuse to take responsibility.
The shaming hypothesis (4) attempted to link feelings of responsibility with the creation of reintegrative shaming labels. It was hypothesized that those who took full responsibility for their actions would be more susceptible to the shaming process. This process entails the creation of shaming labels through societal reactions of disapproval and the deliverance of forgiveness from conventionally “good” people (Ahmed & Braithwaite 2006; Braithwaite 1989). It was hypothesized that youths who minimized their responsibility for criminal acts would be less affected by the restorative nature of reintegrative shaming labels. This is not to say that they cannot feel shame but rather that the shaming label would stigmatize (i.e., isolate) the youth instead of restoring their place within the community.

This study’s findings provided strong support for this unique conception of Braithwaite’s (1989) reintegrative shaming theory. In the descriptive statistics it was mentioned that 68% of youths within the sample minimized or refused to take responsibility for their actions (see Table 1). The bivariate analysis also revealed that attitude toward the offense was positively correlated with recidivism (see Table 2). In the multivariate regression model, the shaming variable maintained its effect on recidivism while taking into account: gender, race, offense type, family environment, peer associations, and incarceration (see Table 3, Model 6).

The shaming variable also had some interesting relationships with other variables. For instance, the inclusion of the shaming variable explained away the significance of being African-American on recidivism (see Table 3, Model 5). A number of tests of mutual independence were conducted and it was revealed that a high proportion of African-Americans (both male and female) minimized or refused to take responsibility
for their behaviour. This large proportion of African-Americans might have influenced
the significance of the shaming variable as being African-American was a predictor of re-
offending. The reason as to why this specific group would be more likely to refuse
responsibility is rather difficult to ascertain. An examination of shaming processes across
race would be warranted to further test the authenticity of this relationship.

As previously mentioned, Braithwaite’s (1989) shaming process begins with the
re-introduction of a past offender into society following their punishment (i.e., prison or
community program). The theory is an attempt to highlight the positive application of
labels and their ability to change behavioural expectations (i.e., using shame to deter
future offending). The shaming variable used in this study was acquired during the
youth’s disposition. Given that this study uses a shaming variable that is an extension of a
youth’s shaming process, there might be hidden factors affecting a youth’s decisions to
minimize their responsibility. For instance, youths who might have been wrongfully
arrested or wrongfully accused will most likely minimize their responsibility for their
actions. Moreover, legal counsels might have convinced some youth to minimize their
actions as a legal strategy during dispositions. Although the shaming variable had some
inherent limitations, its significance in predicting recidivism remains an interesting
observation.

Possible Interactions

Within this study, I attempted to offer a more integrative interpretation of
recidivism by exploring particular interactions between incarceration and
family/peer/shaming variables. My primary interest in doing so was to see if the
incarceration experience would alter the effect of other variables on re-offending. The interaction hypotheses were outlined in Chapter 3 as follow:

**Hypothesis 5a:** The detrimental effects of unconventional family environments on recidivism will be strengthened for youths who receive prison sentences when compared to youths who undergo community programs.

**Hypothesis 5b:** Youths with deviant peer associations and who spend time in prison will be more likely to recidivate than youths with deviant peers who undergo community programs.

**Hypothesis 5c:** Youths who refuse to take responsibility for their actions and receive incarceration are more at risk of re-offending than youths who have similar attitudes but receive community programs.

The findings did not support the three interaction hypotheses (see Table 5). This is especially surprising for our third interaction hypothesis (5c) which included the shaming variable. As previously mentioned, the shaming variable was found to have a significant affect on recidivism in our most complex model (see Table 3, Model 6). Although both variables were able to predict recidivism, their combined interactions did not offer any new insights. This might indicate that shaming, like family environment and peer networks, does not have a varying effect on recidivism across types of punishment (i.e., prison sentence of 180 to 359 days or community programs). As a result, the shaming process might be similar for those who are incarcerated and those who receive community programs.

With regard to the control variables, an interaction was found between gender and the time served “medium” variable. Although I did not have any official gender-related hypotheses relating to recidivism, the literature discussed in Chapter 2 briefly discussed
the relevance of gender in offending research. Findings from prior research outlined that males were more at risk to offend and re-offend than females (Kowalski & Caputo 1999; Piquero et al. 2005). It was also determined that the experience of incarceration had the same effect on recidivism across gender. That is to say, adolescent males and females who spent a medium sentence in prison were more likely to recidivate than males and females who had received community programs (see Table 5).

Although this study was unsuccessful in finding potential interactions between incarceration and family/peer/shaming factors, the multivariate regression model did provide some insight into the inter-relationships between variables. Further examination of the incarceration experience is needed to fully comprehend its interactional properties with other relevant factors such as family environments, association with deviant peers, and feelings of personal responsibility (i.e., shaming).

**Limitations of the Present Study**

Recidivism research has many methodological considerations that might encumber researchers’ efforts to explore re-offending patterns. Of particular interest, the complexity of the recidivism concept makes it difficult to construct reliable measures in research projects. As a result, there are certain limitations within this study’s research design that should be acknowledged before we conclude this discussion.

The first limitation found within this study (and recidivism research in general) was its reliance on secondary data. The longitudinal nature of recidivism research makes it an arduous task to conduct new research projects. This thesis used Lin’s (2007a) three-year data set in order to further examine the original study’s exploration of recidivism. It
was assumed that a smaller scale modeling process, new integrative theoretical approach, and different statistical approach would lead to a more focused examination of recidivism patterns. The selection of variables, however, was rather limited and concessions had to be made in order to test new theories. As a result, the information provided for some variables was considered only a proximate of certain theoretical concepts. For instance, the shaming variable did not represent the actual shaming process but was rather an account of attitudes of personal responsibility. Moreover, the family and peer-related variables consisted of static inferences and did not account for the dynamic shifts in these relationships (i.e., relationships might be restructured because a youth is sent to prison or undergoes community programs). Lastly, a variable outlining sentence length was the only available information used to tap the experience of incarceration.

Another limitation within this study was the theoretical assumption that all youths were relatively similar with regard to criminal propensity before receiving punishment. The reality of recidivism research is that we cannot freely and blindly assign subjects to incarceration or community programs. The inability to randomly distribute subjects to control (i.e., prison) and experimental (i.e., alternatives programs to prison) groups limits the accuracy when comparing both groups. This pre-selection approach creates an initial discrepancy in re-offending traits between both sets of subjects. As a result, one could easily argue that youths were given prison sentences (rather than community programs) because the judge deemed them to be at higher risks to re-offend. Moreover, Kowalski and Caputo (1999:80) argue that young men are more likely to receive incarceration in

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Nevertheless, some researchers have been able to compare traditional incarceration to new judicial tools such as drug courts (Bank & Gottfredson 2004; Miethe et al. 2000) or electronic monitoring (Gainey et al. 2000). In these instances, participants have less extensive criminal backgrounds and are assigned to different groups with a judge’s approval.
open court than their female counterparts. These judicial factors create a sampling discrepancy that weakens the accuracy of criminogenic arguments concerning prison. This makes it difficult to make accurate conclusions regarding the relationship between the incarcerated experience and re-offending.

A final consideration regarding the limitations of recidivism research relies on the implementation of statistics to test theoretical concepts. Although statistics have been widely used within criminological research, there remains debate as to accuracy in testing certain theories (Loza 2003; Lynch 1999; Reisig et al. 2006). With regard to this study, the incarceration experience was examined through empirical means by classifying each subject according to their sentence length. This does not account for many subjective experiences such as: inmate violence (Lahm 2008), active participation in prison rehabilitation programs (Bayer & Pozen 2005; Bales et al. 2005; Johnson 2004), prisoner misconduct (Schmidt & Witte 1988; Windzio 2006), or stability of prisoner-family relations (Visher & Travis 2003). As mentioned in Chapter 2, Windzio (2006) stated that there is a need to test the “pains of imprisonment” and prison’s effect on rehabilitation. Past research has done so by conducting in-depth interviews with inmates and past offenders (Lahm 2008:122). Although it would have been interesting to supplement this study’s examination of the experience of incarceration by including personal accounts (i.e., interviews with youths, family members or peers), this was impossible as Lin’s (2007a) data collection method did not incorporate research subjects interviews. In this particular instance, the over-reliance of official data empirical measures limited the exploratory range of certain concepts.
Directions for Further Research

Future research regarding recidivism should try to address the inherent limitations found within this particular study and offer more complete measures of theoretical concepts. Specifically, a more accurate depiction of the experience of incarceration is needed to fully comprehend the effects on re-offending. Moreover, future research should attempt to assess the long term effect of punishment on family environments and peer-associations. A more complete assessment of these relationships could be possible through follow-up interviews with research subjects upon completion of their community program or prison sentence.

In addition, future research is needed to more fully understand the relationship between sentence length and re-offending. Added measures with regard to sentencing (i.e., severity of offense and offenders’ criminal histories) might provide a more accurate depiction of the effects of varying sentences on specific types of offenders.

The role of gender in re-offending should also be examined in order to see if there is a discrepancy across genders with regard to successful rehabilitation. Although this study noted that incarceration raised the likelihood of re-offending among males and females, further inquiry is needed to establish gendered rehabilitative pathways. Research efforts should make sure to have an adequate ratio of male to female subjects within their samples.

Shaming and its subsequent effect on recidivism should also be examined with reference to divergent types of punishment. It is possible that the shaming reintegration process varies across sentence length and rehabilitation program. This would suggest that there might be a “tipping effect” with regard to the effect of shaming. In other words, the
successful use of shaming might be rendered ineffective if a particular process is too lengthy (i.e., long prison sentence or extended community program). Moreover, the shaming process should not be assumed to be homogenous across all types of offenders. As revealed in this study, certain groups of offenders might be more susceptible to or have stronger resistance against public shame. A proper investigation of reintegrative shaming theory should therefore involve a separate examination of how shame is managed (Ahmed & Braithwaite 2004; Braithwaite 2001; Morrison 2006; Murphy & Harris 2007).

Finally, future research should consider the use of smaller scale statistical models when examining particular aspects of recidivism. Although this is difficult due to the holistic interpretation of the rehabilitation process, some variables might be overlooked in larger scale models. The modeling process within this study was useful to outline an integrated theoretical account that gave us insight into dwindling effects of some concepts (i.e., for example, the effect of exclusively negative peer networks was explained away with the addition of the family-related variables). Of specific interest, this study revealed potential linkages between medium sentence lengths and recidivism that could have been easily overlooked in a more complex (less parsimonious) model (see Lin 2007a). Given the complexity of the rehabilitation process, recidivism research should also attempt to use a diverse range of statistical approaches to examine relevant concepts.

**Policy Implications of Recidivism Research**

This particular research project has contributed some interesting findings to the area of recidivism research. While some theories were proven to play limited roles in
predicting re-offending patterns, this study did provide some critiques of deterrence theory. As a result, this thesis supplemented ongoing inquiries regarding appropriate rehabilitative approaches to criminal behaviour.

Recidivism research, in general, has much to offer to academic inquiries regarding philosophies of sentencing and punishment. Past literature has attempted to remind us that incarceration has been linked to greater risks in re-offending (Andenaes 1974; Bateman 2005; Gibbs 1975; Lahm 1999; Pogarsky 2007; Tittle & Rowe 1974). Moreover, the mass incarceration crisis witnessed in the American judicial system is evidence of an over-reliance on incarceration and highlights the lack of alternative programs to prison (Downes 2001; Lynch 1999).

Although academia has acknowledged the limitations found within deterrence theory, this outlook has met some resistance within greater social networks. For example, Canadian public opinion polls conducted in 2005 concluded that approximately seventy-four percent of Canadians believed criminal sanctions were too lenient (Roberts et al. 2007). These retributive-oriented opinions found amongst the general public might limit the application of recidivism research within the Canadian judicial system. Consequently, there is a need to increase the awareness of present research efforts that test empirically the efficacy of imprisonment.

According to Bateman (2005), there remains a need to shift systemic biases in order to acknowledge the limitations of incarceration. It is important to shift the emphasis of punishment so that it places greater importance on successful rehabilitation rather than retributive punishment. The increasing presence of restorative principles in New Zealand
and Australian legal systems has prompted Canada to adopt similar outlooks on criminal
treatment (Braithwaite 2001; Correctional Services of Canada 2008).

With regard to the emergence of restorative justice principles, the role of
recidivism research is clear. The ongoing inquiry of recidivism research will help predict
factors that may contribute to an offender’s decision to reoffend. This type of research
will help to identify more accurate predictors of re-offending. In order to do this,
academia must close the gap between criminology and public policy regarding proper
correctional treatment (Cullen, Wright, & Andrews 2003). An informed outlook on
potential predictors of recidivism could better direct new rehabilitation processes and help
to improve the efficacy of current correctional programs. The implementation of
appropriate responses to first-time offending might in turn prevent many individuals from
pursuing extensive criminal careers after serving their sentence.
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